

# *Personal Account Retirement Plans: An Analysis of the Survey of Consumer Finances*

by Craig Copeland, EBRI, and Jack VanDerhei,  
Temple University and EBRI Fellow

**EBRI**

**EMPLOYEE**

**BENEFIT**

**RESEARCH**

**INSTITUTE®**

*Issue Brief*

This report is based on data from the Federal Reserve Board's triennial Survey of Consumer Finances (SCF), which provides the most comprehensive data available on the wealth of American households. The most recent SCF data are for 1998, and this report tracks information from the 1992, 1995, and 1998 surveys.

- The percentage of families with a participant in a pension plan from a current job increased from 38.8 percent to 41.0 percent over this six-year period. If one focuses exclusively on those families with a worker and in which the head is under age 65, the percentage for 1998 increases to 56.8 percent.
- The previously documented trend toward defined contribution plans was confirmed and the significance of 401(k)-type plans for those families participating in a pension plan more than doubled, from 31.6 percent in 1992 to 64.3 percent in 1998.
- The percentage of family heads eligible to participate in a defined contribution plan that did so increased from 73.8 percent in 1995 to 77.3 percent in 1998. Of those families choosing not to participate in a defined contribution plan, 40.3 percent were already participating in a defined benefit plan.
- Overall, "personal account plans" represented nearly one-half (49.5 percent) of all the financial assets for those families with either a defined contribution plan account, IRA, or Keogh, in 1998. This was a significant increase from 43.6 percent in 1992. The average total account balance in personal account plans for families with a plan in 1998 was \$78,417, an increase of 54 percent in real terms over the 1992 balance of \$50,914 (expressed in 1998 dollars).
- For families participating in a defined contribution plan, IRA, or Keogh in 1998, 52 percent of the overall average was attributed to IRA/Keogh balances (43 percent from IRAs alone), and 44 percent of the average was from account balances in defined contribution plans with the current employer.
- There is a marked tendency for lower-income families to have larger percentages of their total personal account plan retirement portfolio in IRAs, although this trend appears to be fading with time.
- The impact of rollovers on the average total account balance for all individual account balances appears to be quite large: \$152,451 for those with at least one rollover, versus \$78,471 for all families participating in at least one personal account plan, regardless of whether they have had a rollover. The vast majority of the rollovers would appear to be going to IRAs, as opposed to a defined contribution plan with a new employer.

Craig Copeland of EBRI and Jack VanDerhei, EBRI Fellow, of Temple University, wrote this *Issue Brief* with assistance from the Institute's research and editorial staffs. Any views expressed in this report are those of the authors and should not be ascribed to the officers, trustees, or other sponsors of EBRI, EBRI-ERF, or their staffs. Neither EBRI nor EBRI-ERF lobbies or takes positions on specific policy proposals. EBRI invites comment on this research.

## Table of Contents

### Text

Introduction .....	3
Definitions .....	4–5
Trends in Participation .....	7
Pension Participation—All Families .....	7
Pension Participation—Families With a Head Under Age 65 and a Worker .....	9
Defined Contribution Plan Participation Rates of Family Heads .....	9
IRA/Keogh Coverage—All Families .....	9
Retirement Plan Coverage From Any Source—All Families .....	11
Account Balances .....	13
Median Value of Defined Contribution Accounts for Current Job Participants—All Families .....	13
Median Values of IRA/Keogh Plans .....	13
Percentage of Financial Assets From Defined Contribution and IRA/Keogh Plans .....	15
Relative Importance of IRAs vs. Employment-Based Individual Account Plans .....	15
The Impact of Rollovers on the Relative Value of IRAs .....	20
Conclusion .....	22
References .....	24

### Tables and Chart

Table 1, Percentage of Families With a Pension Plan, by Various Demographic Categories, 1992, 1995, and 1998 .....	8
--	---

Table 2, Percentage of Families With Head Under Age 65 and a Worker With a Pension Plan, by Various Demographic Categories, 1992, 1995, and 1998 .....	10
Table 3, Participation Rates of Family Heads Eligible for Defined Contribution Plans, 1995 and 1998 .....	11
Table 4, Percentage of Families With an IRA/Keogh, by Various Demographic Categories, 1992, 1995, and 1998 .....	12
Table 5, Percentage of All Families With a Retirement Plan from Current and Previous Employer or IRA/Keogh Plan, 1992, 1995, and 1998 .....	13
Table 6, Median Values of Defined Contribution Plans for Families With a DC Pension Plan, by Various Demographic Categories, 1992, 1995, and 1998 .....	14
Table 7, Percentage of Financial Assets in Defined Contribution Plans and Individual Retirement Accounts for All Families With Assets, by Various Demographic/Economic Categories, 1992, 1995, and 1998 .....	16
Table 8, (Panel A): Mean Balances for All Families With a Defined Contribution Retirement Plan or Individual Retirement Account, 1992; (Panel B): Mean Balances for All Families With a Defined Contribution Retirement Plan or Individual Retirement Account, 1998 .....	17–18
Table 9: Defined Contribution and IRA/Keogh Mean Balances for Families With a Rollover, 1998 .....	20
Table 10, Ratio of Defined Contribution and IRA/Keogh Mean Balances for Families With a Rollover, 1998 .....	21
Chart 1, Type of Retirement Plan Coverage for Families With a Retirement Plan .....	9

---

## Introduction

More than a quarter-century ago, Congress enacted the landmark law that still governs employment-

based retirement plans in the United States. The Employee Retirement Income Security Act of 1974 (ERISA), after more than two decades of amendments and regulatory embellishments, remains the basis of the federal government's approach to retirement plan regulation. Widely praised for achieving its goal of greater retirement security for those American workers who have pensions, it is simultaneously criticized for contributing to the demise of the traditional defined benefit corporate pensions that it was created to secure and encourage. The number of these traditional pension plans paying life annuities at retirement has sharply declined, while new forms of defined benefit plans have increased their position of dominance (Blakely, 2000). These new plans include cash balance plans,<sup>1</sup> which are technically defined benefit plans but are often more readily understood by employees as a result of their use of "individual accounts" and "lump-sum distributions," and defined contribution plans, which are typified by the 401(k).

The decline in traditional defined benefit plans has been well documented and is continuing. Olsen and VanDerhei (1997) provide a detailed analysis of these trends from 1985 to 1993. This *Issue Brief* updates that analysis and finds that the percentage of families with a pension plan who have defined benefit coverage has decreased from 62.5 percent in 1992 to 43.1 percent in 1998. Several reasons for the decline of defined benefit plans have been suggested (Ippolito, 2000): the change in the industrial patterns of employment in America favoring the small service industry; administrative costs of operating defined benefit plans, which have been especially burdensome for small and medium-size plans; competition from 401(k) salary deferral plans, which are

easier for employees to understand and which came along just as the cost and complexity of defined benefit plans began to skyrocket; and tax policy that has restricted funding of defined benefit plans.

One of the major public policy concerns about defined contribution plans is whether workers will keep their assets in a tax-deferred account when they change jobs, or "cash out" their savings for some nonretirement use. Recent research by Fidelity Investments (DeStefano, 2000) shows an increasing number of terminated employees and other persons are eligible to take distributions from their defined contribution plans. With the average worker changing jobs several times during his or her career,<sup>2</sup> most workers will repeatedly face the question of what to do with accumulated retirement assets, for which they have the following four distribution options:

- Leave the assets in the former employer's plan (although this option may be limited to those having at least \$5,000 in assets).
- Roll the assets over to an individual retirement account (IRA).
- Move the assets into the new employer's retirement plan.
- Cash out the assets (typically as a lump-sum distribution), pay any applicable taxes and use them for nonretirement purposes.

Based on EBRI tabulations of the Survey of Consumer Finances (SCF, see definitions box, pgs. 4–5), the combined value of *personal account plans* (defined contribution retirement plans, IRAs, and Keoghs) was \$3.99 trillion as of 1998. This represented a (non-inflation adjusted) increase of 53 percent from the \$2.61 trillion value in 1995, and an increase of 126 percent from \$1.76 trillion in 1992. IRA balances rose by \$1.03 trillion during that period, while defined contribution

---

<sup>1</sup> VanDerhei (1999) and Quick (1999) provide detailed information on cash balance plans.

<sup>2</sup> See Yakoboski (1999a) for details on average tenure by age.

## Definitions

**Defined Benefit Retirement Plans:** The so-called “traditional” pension plans typically financed entirely by the employer, often calculated on a formula based on a worker’s highest salary and length of employment, which pays a life annuity at retirement.

**Defined Contribution Retirement Plans:** Unlike defined *benefit* plans, defined *contribution* plans typically specify how employer contributions are determined (e.g., as a percentage of compensation or as a percentage match of employee contributions). Benefits are often taken in the form of a lump-sum distribution or a rollover to an IRA or another qualified plan. The account balance will typically be a function of the employee’s choices with respect to asset allocation (and perhaps contribution level) as well as the performance of the financial markets.

**ERISA (The Employee Retirement Income Security Act of 1974):** The primary federal law that governs private retirement plans in the United States.

**Fiduciary Responsibilities:** Fiduciaries are broadly defined as those who exercise control or discretion in managing benefit plan assets; those who render investment advice to the plan for direct or indirect compensation or have authority to do so; and those who have discretionary authority in administering the plan. They may include individual employers and officers and will include trustees and plan administrators. In fulfilling their responsibilities, fiduciaries must act in the exclusive interest of plan participants and plan beneficiaries, diversify the plan’s assets to minimize risk of large losses, and act in accordance with documents that govern the plan. Fiduciaries must act with the care, skill, prudence, and diligence under the circumstances then prevailing that a “prudent man” acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. This standard is frequently referred to as ERISA’s “prudent man rule.” Because the performance standard is so high, the prudent man rule is often referred to as the prudent expert rule. Fiduciaries must meet this test in performing any aspects of plan operation for which they are responsible—from selecting the individual or institution that will handle plan asset investments to setting investment objectives.

**Financial Assets:** As defined by the SCF, financial assets include transaction accounts (checking accounts, savings accounts, money market accounts, and call accounts at brokerages), certificates of deposit, mutual funds, stocks, bonds, quasi-liquid retirement accounts (IRAs and thrift-type accounts), savings bonds, cash value of whole life insurance, other managed assets (trusts, annuities and managed investment accounts), and other financial assets (loans, future proceeds, royalties, futures, nonpublic stock, deferred compensation, oil/gas/mineral investments, and cash. This excludes vehicles, real estate including primary residence, and businesses.

**401(k) Plan:** A type of defined contribution retirement plan that may be designed to allow an employee to contribute pretax earnings to an individual account. Participants can invest their accounts in stock funds, bond funds, or other instruments allowed by the plan. Some employers match a portion of workers’ contributions, although nonelective employer contributions are also provided in some plans. Taxes are usually paid on contributions and earnings when the assets are withdrawn, although some plans will also allow employee after-tax contributions

**Individual Retirement Accounts (IRAs):** Through enactment of ERISA, Congress established IRAs to provide workers who did not have employment-based pensions an opportunity to save for retirement on a tax-deferred basis. U.S. tax law has substantially changed the eligibility and deduction rules for IRAs since then. The Economic Recovery Tax Act of 1981 (ERTA) extended the availability of IRAs to all workers, including those with pension coverage. The Tax Reform Act of 1986 (TRA ’86) retained tax-deductible IRAs for those families in which neither spouse was covered by an employment-based pension but restricted the tax deduction among those with pension coverage to families with incomes below specified levels. In addition, TRA ’86 added two new categories of IRA contributions: nondeductible contributions (which accumulate tax-free until distributed), and partially deductible contributions (which are deductible up to a maximum amount less than the \$2,000 maximum otherwise allowable).

With the recently enacted Taxpayer Relief Act of 1997 (TRA ’97) IRAs can now be used to fund first-time home purchase and college expenses without incurring the 10 percent penalty tax cur-

## Definitions (continued)

rently applied to distributions made to individuals younger than age 59½. TRA '97 expanded eligibility for currently existing deductible IRAs and allowed the accumulated funds to be used for purposes other than retirement without penalty. It also created a new, nondeductible and nontaxed IRA—the Roth IRA, which can also be used to save for retirement, first-time home purchase, and college expenses. More individuals will be eligible for the Roth IRA than for deductible IRAs. Finally, TRA '97 created a nondeductible education IRA.

**Deductible IRA Contributions:** The maximum contribution to current-law IRAs is \$2,000 per year. Subject to eligibility, contributions are deductible when made, earnings accrue tax-deferred, and taxes are paid on withdrawal (on earnings and deductible contributions) as ordinary income. Regardless of income, if a worker (and his or her spouse) is not an active participant in an employment-based retirement plan, then he or she is eligible to make a fully deductible IRA contribution of up to \$2,000 annually (and the spouse is eligible for an equal deductible contribution). In addition, if a worker (and/or his or her spouse) is an active participant in an employment-based retirement plan but has an adjusted gross income (AGI) of \$32,000 or less for a single filer (or \$52,000 or less for joint filers) in 2000 (indexed to inflation), he or she is eligible for a fully deductible IRA contribution of up to \$2,000 (and the spouse is eligible for an equal contribution). Eligibility for deductible contributions phases out between AGIs of \$32,000–\$42,000 for single filers and \$52,000–\$62,000 for joint filers participating in an employment-based retirement plan. This means that only a portion of IRA contributions for workers within these income levels is deductible, with the proportion deductible based on the worker's income level. However, even workers participating in an employment-based plan, and with incomes exceeding \$42,000 for single filers and \$62,000 for joint filers, can establish nondeductible IRAs. (Special limits apply to married individuals filing separate returns.)

**Keogh Plan:** A tax-qualified employer plan set up by a self-employed individual is sometimes called a Keogh or HR-10 plan.

**Personal Account Plans:** Plans that are based on a separate account for each worker. These include

defined contribution retirement plans, IRAs, and Keoghs. Also called individual account retirement plans.

**Rollover vs. Lump-Sum Distribution:** Opposite choices for taking a retirement distribution from a tax-qualified retirement plan, such as a 401(k): "Rolling over" the retirement assets into another tax-qualified plan, or an IRA, or taking a "lump-sum distribution" (LSD) in cash, paying any applicable tax penalties, and using the assets for nonretirement purposes.

**Survey of Consumer Finances (SCF):** The Federal Reserve Board's triennial Survey of Consumer Finances provides the most comprehensive data available on the wealth of American households. The latest survey data, for the year 1998, were released in January 2000. The Federal Reserve Board interviewed a nationally representative sample of more than 2,000 households, along with a supplemental sample of wealthy households because they control the most assets. The survey is designed to provide detailed information on U.S. families' balance sheets and their use of financial services, as well as on their pensions, labor force participation, and demographic characteristics as of the time of the interview. Because only minor changes have been made in the wording of the questionnaire since 1989, the underlying measurements are highly comparable over time. Weights are used to combine information from the two samples to make estimates for the full population.

**UCAA '92:** The Unemployment Compensation Amendments Act (UCAA) of 1992 affects qualified pension plan distributions. Effective Jan. 1, 1993, UCAA imposed mandatory 20 percent income tax withholding on eligible rollover distributions that are not transferred as directed rollovers.

**Withdrawal Restrictions for Defined Contribution Plans:** A common provision in many profit-sharing and savings plans is one that permits an employee to make a withdrawal of some part of the vested account balance while still actively employed. Sometimes, this withdrawal right is limited to certain specified hardship situations; more often than not, however, a withdrawal can be made for any reason and is typically subject to some period of suspension from plan participation. In the case of a 401(k) plan, the ability to make in-service withdrawals is severely limited.

*The “retirement” in “IRA” has become somewhat misleading, since IRAs can now be used to fund first-time home purchase and college expenses.*

balances increased by \$1.07 trillion.

The IRA balances include both regular contributions and rollovers from other tax-qualified retirement plans, such as 401(k) accounts from previous employers. It is particularly difficult to quantify the total value of rollovers, but estimates by Sablehaus (1999) suggest that approximately 39 percent of the increase in IRA balances from 1992 to 1997 was attributable to rollovers, while only 4.3 percent was due to deductible contributions. The Investment Company Institute (1999) estimates that 36 percent of traditional IRA households had traditional IRA accounts that included rollovers from employment-based retirement plans.

Previous EBRI publications (Yakoboski, 1994 and 1997) have provided extensive documentation with respect to the incidence of rollovers and the utilization of lump-sum distributions (LSDs), as well as annual updates on the aggregate size of the IRA market (Yakoboski, 2000b) and a recent projection of the level of IRA assets in the year 2008.<sup>3</sup> However, the extant literature does not appear to include any evaluation of how these IRA assets have accumulated for various segments of the population and, perhaps even more importantly, what percentage of the total *personal account plan* retirement portfolio is comprised of IRAs, as opposed to employment-based defined contribution plans.

Although it is likely that many retirement plan

participants may view personal account plans as fungible, there are important public policy considerations with respect to the overall composition of their retirement portfolios.<sup>4</sup> For example, the Taxpayer Relief Act of 1997 (TRA '97) changed the landscape of IRAs dramatically by, among other things, opening the penalty-free use of IRA assets for nonretirement purposes. In fact, the “retirement” in “IRA” has become somewhat misleading, since IRAs can now be used to fund first-time home purchase and college expenses without incurring the 10 percent penalty tax typically applied to distributions occurring before age 59½.<sup>5</sup> In contrast, employees participating in defined contribution plans may be exposed to withdrawal restrictions, especially those in 401(k) plans.

Another important distinction between the two types of retirement plans is that the IRA environment provides individuals with a virtually unlimited selection of investment choices, whereas defined contribution participants (whether current or former employees) will typically face a more limited set of investment options.<sup>6</sup> Even though some defined contribution retirement plans have provided a vastly expanded array of investment opportunities via brokerage windows,<sup>7</sup> employees may still benefit from the plan sponsor’s fiduciary responsibilities with respect to initial selection and continuing monitoring of these investment alternatives. Moreover, defined contribution sponsors appear to be much more

<sup>3</sup> Sablehaus (1999) estimates that IRA aggregate balances will reach \$4.7 trillion in 2008.

<sup>4</sup> Another major policy question is the impact of tax-qualified retirement saving plans (i.e., IRAs and 401(k) plans) on personal saving rates. Empirical analysis of this issue is extremely challenging and the findings have been contradictory. See Yakoboski (2000a) for a detailed discussion of the research in this area.

<sup>5</sup> In addition to expanding eligibility for deductible IRAs and allowing accumulated funds to be used for nonretirement purposes without penalty, TRA '97 also created a new, nondeductible IRA with a “backloaded” tax break—the Roth IRA—which can also be used to save for retirement, first-time home purchase, and college. More individuals will be eligible for the Roth IRA than for deductible IRAs. Finally, a nondeductible education IRA was created. See Yakoboski (2000b) for more detail.

<sup>6</sup> In 1999, the average number of options was 11, up from eight in 1997 (Hewitt, 1999).

<sup>7</sup> This approach has been made available by some entities for a significant period of time. However, with the increasing utilization of the Internet for personal financial planning, its availability has expanded considerably in recent years (Hoffman, 2000).

<sup>8</sup> Interpretive Bulletin 96-1 Relating to Participant Investment Education (IB 96-1) sets forth the DOL’s interpretation of ERISA’s “investment advice” fiduciary definition under 29 CFR 2510.3-21(c), as it applies to the provision of investment-related educational information to participants and beneficiaries in participant-directed individual account plans. In general, IB 96-1 identifies four categories of information and materials (safe harbors) regarding participant-directed plans that will not constitute “investment advice” under ERISA’s fiduciary definition.

---

likely to offer their participants investment education in the wake of the Department of Labor's (DOL) IB 96-1,<sup>8</sup> whereas IRA owners typically must depend on themselves for investment education (although for those with Internet access, obtaining education with minimal effort has become easier).

This analysis focuses on individual account retirement plan information available from the 1992, 1995, and 1998 SCF. We chose this time series since information prior to 1992 is likely to be of limited relevance, given the provisions of UCAA 92, and that the 1998 SCF data are the most recent information available.

## Trends in Participation

This section examines the percentage of families participating in a pension plan from a current

job as well as the percentage of families having an IRA or a Keogh plan. The results for pensions are considered for two family types—(1) all families, and (2) all families with a family head under 65 years old and a worker (head and/or spouse) in the family. Trends in pension and IRA participation, along with various demographic and economic categories, are presented from these data. In addition, for defined contribution pension plans and IRAs, the median values both across years and across the categories are calculated. Because the SCF is conducted at the family-unit level, all percentages are in terms of families.

The remainder of this section discusses pension participation for all families, then for families with a family head under 65 years old with a worker. For further background on pension participation and wealth, breakdowns are presented of pension participation and the percentage of families' financial assets that are from a defined contribution plan and/or an IRA plan. Lastly, IRA participation is explored.

## Pension Participation—All Families

In 1998, 41.0 per-cent of all families included a participant in a pension plan from a current job (table 1). This was up from 38.8 percent in 1992 and 39.1 percent in 1995. Of those families participating in a plan in 1998, 20.7 percent were in a defined benefit plan exclusively, 57.0 percent were in a defined contribution plan exclusively, and 22.4 percent were in both (chart 1). In 1992, by comparison, 40.0 percent were in a defined benefit plan only, 37.5 percent in a defined contribution plan only, and 22.5 percent were in both. Consequently, there was a significant movement away from defined benefit plan participation and to defined contribution participation. In addition, participation in Sec. 401(k)-type plans<sup>9</sup> experienced a significant increase, as 31.6 percent of families participating in a pension plan in a 1992 had a 401(k)-type plan, and this number more than doubled to 64.3 percent in 1998.<sup>10</sup>

In examining family income and pension participation, participation rates increase with income and level off at the highest income levels. Only 4.5 percent of families with annual income below \$10,000 participated in a pension plan in 1998, compared with 68.4 percent of families with incomes between \$25,000 and \$50,000. Net worth and pension participation also follow a similar pattern of increasing pension participation as net worth levels rise, then falling at the highest net worth category. Along the same lines, families who own their home are almost twice as likely to be covered by a pension plan as those who rent their home.

Pension participation in 1998 was the highest for families with a family head between the ages of

---

<sup>9</sup> Technically, SCF combines Sec. 401(k) plans with Sec. 403(b) plans and Supplemental Retirement Annuities. For easier reading, these plans will be referred to as 401(k)-type plans in the remainder of this Issue Brief. See Chapter 15 of *Employee Benefit Research Institute (1997)* for an explanation of these plans.

<sup>10</sup> See Gale, Papke, and VanDerhei (forthcoming) for additional time series evidence on this phenomenon.

Table 1  
**Percentage of Families With a Pension Plan, by Various Demographic Categories, 1992, 1995, and 1998**

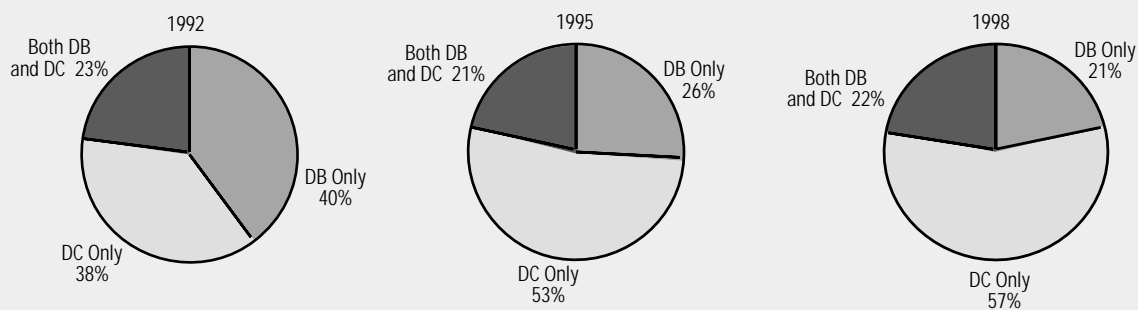
Category	1992 — Of Those Participating in a Plan				1995 — Of Those Participating in a Plan				1998 — Of Those Participating in a Plan										
	Both DB and DC only		Of those with 401(k)-type plan <sup>a</sup> with DB		Both DB and DC only		Of those with 401(k)-type plan <sup>a</sup> with DB		Both DB and DC only		Of those with 401(k)-type plan <sup>a</sup> with DB								
	DB only	DC only	401(k)-type plan <sup>a</sup>	with DB	DB only	DC only	401(k)-type plan <sup>a</sup>	with DB	DB only	DC only	401(k)-type plan <sup>a</sup>	with DB							
Total	38.8%	40.0%	37.5%	22.5%	31.6%	39.2%	39.1%	26.1%	52.5%	21.4%	50.7%	26.8%	41.0%	20.7%	57.0%	22.4%	64.3%	27.3%	
Family Income per Year																			
<\$10,000	3.0	57.8	42.2	0.0	11.9	0.0	3.4	26.6	64.0	9.3	46.6	2.7	4.5	23.9	72.4	3.7	56.5	6.6	
\$10,000–\$25,000	19.0	50.0	45.5	4.4	15.1	8.2	16.3	32.0	59.8	8.2	43.3	11.9	15.7	22.6	67.4	10.1	63.7	9.7	
\$25,000–\$50,000	48.1	47.0	37.7	15.3	27.9	27.8	48.2	28.8	54.0	17.2	47.1	21.9	47.3	21.6	61.5	16.9	63.0	21.7	
\$50,000–\$100,000	66.8	35.0	34.0	31.0	36.0	46.9	68.0	23.1	51.3	25.6	54.9	30.7	68.4	20.9	49.6	29.5	64.4	36.6	
\$100,000 +	66.3	22.4	38.2	39.4	48.7	52.5	67.3	22.1	44.0	33.9	55.6	39.7	66.6	16.1	59.5	24.3	68.2	26.3	
Age of Head																			
<35 years	39.3	37.0	47.7	15.3	36.2	26.4	43.2	18.2	65.0	16.8	59.7	19.5	41.6	16.9	64.9	18.2	71.3	20.9	
35–44 years	55.8	39.5	35.8	24.7	32.4	40.3	54.8	26.6	53.1	20.3	49.8	27.1	57.9	15.3	59.9	24.8	69.0	28.6	
45–54 years	58.9	40.1	31.8	28.2	28.2	53.3	57.3	28.2	46.5	25.4	47.2	32.0	56.7	25.5	51.5	23.0	57.7	29.8	
55–64 years	40.8	43.8	33.4	22.8	29.2	44.4	35.6	34.7	35.8	29.5	43.1	38.9	43.9	25.5	49.2	25.3	59.4	33.6	
65–74 years	7.6	57.9	30.7	11.5	22.6	20.4	8.1	44.6	47.9	7.5	38.3	17.6	11.2	44.4	44.5	11.1	40.6	19.0	
75 + years	0.3	1.4	98.3	0.4	0.4	100.0	1.0	55.6	22.1	22.2	7.0	0.0	0.9	0.3	99.7	0.0	44.4	0.0	
Education of Head																			
Below high school	14.3	51.0	37.0	12.0	21.1	20.6	16.4	36.6	51.9	11.5	40.6	24.5	15.7	17.7	71.3	11.0	62.2	15.5	
High school diploma	36.2	43.6	37.2	19.2	26.1	35.2	37.8	29.5	52.3	18.1	47.8	23.2	37.3	22.1	58.0	19.9	64.7	23.6	
Some college	41.3	38.5	39.8	21.7	27.8	45.5	40.5	24.8	51.0	24.2	51.3	29.1	44.0	22.0	54.2	23.8	62.0	31.2	
College degree	55.5	36.7	36.8	26.6	38.3	40.7	53.1	22.3	53.3	24.3	54.3	28.4	55.5	19.5	55.6	24.9	65.3	29.6	
Race																			
White non-Hispanic	41.3	37.9	37.6	24.4	34.8	40.0	40.4	24.8	53.3	21.9	52.6	27.1	43.3	19.9	57.3	22.8	65.3	28.1	
Nonwhite	31.1	48.5	37.0	14.6	19.0	33.1	34.5	31.5	49.0	19.5	42.6	25.2	33.1	24.2	55.5	20.3	59.6	23.4	
Working Status of Head																			
For someone else	61.4	39.4	37.2	23.4	32.8	39.2	60.7	25.3	52.3	22.4	52.0	27.9	60.8	19.1	56.6	24.3	66.7	28.9	
Self-employed	30.4	40.5	43.9	15.7	27.8	46.2	20.7	32.1	58.3	9.6	40.6	10.4	30.6	26.4	64.6	8.9	51.4	11.9	
Retired	4.6	66.0	18.6	15.3	10.4	51.2	5.2	40.8	46.7	12.5	26.3	9.2	4.5	50.1	41.7	8.2	38.2	14.2	
Other nonwork	7.3	26.6	51.9	21.6	29.6	3.4	4.5	23.1	56.4	20.5	65.3	31.4	9.1	30.3	65.5	4.2	36.7	0.0	
Housing Status																			
Own	44.8	37.6	35.9	26.5	34.1	44.6	45.3	26.0	51.1	22.9	50.7	28.6	47.7	20.6	54.2	25.2	64.4	31.3	
Rent	28.1	46.8	42.1	11.1	24.8	18.1	27.6	26.6	56.6	16.8	50.7	21.5	27.9	20.8	66.2	13.0	63.9	13.8	
Net Worth Percentile																			
Bottom 25%	21.2	46.4	46.8	6.9	21.2	12.4	20.3	30.6	53.4	16.0	42.6	19.1	21.1	26.0	63.2	10.7	55.5	10.4	
25%–49.9%	41.4	45.3	36.9	17.9	26.4	33.1	45.5	25.1	57.7	17.2	49.1	20.2	45.4	21.2	61.1	17.7	65.9	21.3	
50%–74.9%	47.5	39.9	35.7	24.4	33.8	38.7	48.0	28.4	53.7	17.9	52.4	23.8	50.4	19.1	54.0	27.0	65.8	32.0	
75%–89.9%	48.4	37.1	33.2	29.7	37.3	46.5	42.3	25.0	42.4	32.6	55.8	40.1	50.0	20.3	51.5	28.2	65.5	35.3	
Top 10%	40.2	23.7	40.1	36.2	42.4	56.3	42.4	18.8	48.9	32.3	52.0	38.3	43.0	18.0	56.9	25.1	64.5	33.0	

Source: EBRI estimates from Federal Reserve Board, 1992, 1995, and 1998 Survey of Consumer Finances.

Note: All income values are in 1998 dollars.

<sup>a</sup>SCF combines Sec. 401(k) plans with Sec. 403(b) plans and Supplemental Retirement Annuities. Thus, these plans are referred to as 401(k)-type plans.

Chart 1  
Type of Retirement Plan Coverage for Families With a Retirement Plan



Source: EBRI estimates from Federal Reserve Board, 1992, 1995, and 1998 Survey of Consumer Finances.

35 and 44, and steadily declines for those families with family heads older than age 44. Pension participation also increases with the educational level of the family head. Lastly, families with a white, non-Hispanic family head have higher pension coverage rates than families with a nonwhite family head.

The economic and demographic trends from 1998 were similar to trends in 1992 and 1995, with the exception that the highest pension coverage rate among the age-breaks during those years is reached at 45–54 years old for family heads, instead of the younger age-break in 1998. From 1992–1998, the pension coverage rates among the different economic and demographic categories were stable or experienced small increases; however, some notable trends do emerge. Families in all net worth categories had increases in pension coverage rates from 1992 to 1998, except for the lowest net worth category, which remained unchanged. In addition, families with a family head between ages 45 and 54 experienced a decrease in their pension coverage rate, while coverage in all other age categories increased.

### Pension Participation—Families With a Head Under Age 65 and a Worker

In 1998, 56.8 percent of families with a family head under age 65 and a worker had pension coverage from a current job (table 2). This is slightly less than in 1992, when 57.1 percent of the same family types had pension coverage. Most of the same trends emerge as those that existed in the all-family analysis. However, the highest pension coverage rate among the age categories was in the 45–54-year-old category, compared with the 35–44-year-old category in the all-family analysis. Again, the trends across years and among the breakdowns were consistent with the all-family analysis.

### Defined Contribution Plan Participation Rates of Family Heads

Many defined contribution plans are voluntary. Consequently, some individuals who are eligible to participate choose not to.<sup>11</sup> In 1995, 73.8 percent of the family heads eligible to participate in a defined contribution plan actually did so. This number increased to 77.3 percent in 1998 (table 3). However, among those family heads *not participating* in 1998, 40.3 percent were covered by a defined benefit plan. This was down from 1995, when 45.0 percent of nonparticipating family heads were covered by a defined benefit plan.

These defined contribution participation rates are strongly correlated with family income. In 1998, 38.1 percent of family heads in a family with income of less than \$10,000 a year participated in a defined contribution plan when eligible. In contrast, 88.6 percent of family heads in families with incomes of \$100,000 or more participated when eligible. Furthermore, for those family heads who did not participate, the percentage covered by a defined benefit plan increased significantly with income. Approximately 7 percent of family heads with family incomes less than \$10,000 that were eligible for a defined contribution plan but did not participate were covered by a defined benefit plan, compared with 78.1 percent for family heads with family incomes of \$100,000 or more.

### IRA/Keogh Coverage—All Families

The percentage of families with an IRA/Keogh plan increased from 26.1 percent in 1992 to 28.4 percent in 1998 (table 4). Among the economic and demographic

<sup>11</sup> Variables describing those who are eligible but not participating in a pension plan were not added to the SCF until the 1995 survey.

Table 2  
**Percentage of Families With Head Under Age 65 and a Worker With a Pension Plan,  
 by Various Demographic Categories, 1992, 1995, and 1998**

Category	1992 — Of Those Participating in a Plan					1995 — Of Those Participating in a Plan					1998 — Of Those Participating in a Plan							
	DB only		DC only		Both DB and DC	DB only		DC only		Both DB and DC	DB only		DC only		Both DB and DC			
	Any Plan	Of those with 401(k)-type plan <sup>a</sup> with DB	Any Plan	Of those with 401(k)-type plan <sup>a</sup> with DB		Any Plan	Of those with 401(k)-type plan <sup>a</sup> with DB	Any Plan	Of those with 401(k)-type plan <sup>a</sup> with DB		Any Plan	Of those with 401(k)-type plan <sup>a</sup> with DB	Any Plan	Of those with 401(k)-type plan <sup>a</sup> with DB				
Total	57.1%	39.6%	37.6%	22.8%	31.9%	39.5%	55.7%	25.6%	52.7%	21.8%	51.1%	27.0%	56.8%	19.9%	57.3%	22.8%	65.1%	27.5%
Family Income per Year																		
<\$10,000	10.4	57.8	42.2	0.0	11.9	0.0	9.9	25.1	65.4	9.5	47.5	2.7	13.2	24.7	71.4	3.9	58.4	6.6
\$10,000–\$25,000	33.1	49.2	46.1	4.7	15.2	8.6	28.2	29.4	61.9	8.7	44.6	12.3	27.0	21.8	67.8	10.4	64.6	9.9
\$25,000–\$50,000	61.7	46.6	38.1	15.3	28.4	28.1	60.7	28.1	54.5	17.4	47.7	21.9	58.8	21.2	61.6	17.1	63.8	21.7
\$50,000–\$100,000	75.0	34.9	33.7	31.4	35.8	47.6	74.7	22.8	51.3	25.8	55.3	30.8	75.4	19.9	49.9	30.2	64.9	37.0
\$100,000 +	75.0	21.9	38.6	39.5	48.8	52.0	75.4	22.9	41.9	35.2	55.0	41.4	76.0	15.1	60.3	24.6	69.9	26.8
Age of Head																		
<35 years	45.8	37.0	47.7	15.3	36.2	26.4	47.7	18.2	65.0	16.8	59.7	19.5	45.9	16.9	64.9	18.2	71.3	20.9
35–44 years	62.0	39.5	35.8	24.7	32.4	40.3	60.2	26.6	53.1	20.3	49.8	27.1	61.9	15.3	59.9	24.8	69.0	28.6
45–54 years	65.1	40.1	31.8	28.2	28.2	53.3	62.6	28.2	46.5	25.4	47.2	32.0	63.0	25.5	51.5	23.0	57.7	29.8
55–64 years	60.6	43.8	33.4	22.8	29.2	44.4	52.0	34.7	35.8	29.5	43.1	38.9	57.6	25.5	49.2	25.3	59.4	33.6
Education of Head																		
Below high school	34.8	50.3	37.8	11.9	21.6	21.8	37.5	34.7	52.6	12.7	41.9	26.3	32.6	13.8	74.4	11.8	64.7	16.0
High school diploma	52.6	43.6	36.8	19.7	25.9	36.2	52.5	28.6	52.8	18.6	48.7	23.3	52.5	21.7	58.0	20.4	66.1	23.5
Some college	57.2	38.3	39.9	21.8	28.0	45.5	54.4	23.8	51.6	24.5	52.0	29.2	55.8	21.2	54.4	24.4	62.4	31.7
College degree	67.2	36.1	37.1	26.8	38.7	40.6	64.6	22.7	53.1	24.3	54.0	28.5	67.4	19.1	55.8	25.1	65.7	29.8
Race																		
White non-Hispanic	60.5	37.4	37.8	24.8	35.0	40.4	57.8	24.3	53.5	22.2	53.0	27.4	60.4	19.1	57.6	23.2	66.2	28.2
Nonwhite	46.6	48.5	36.9	14.5	19.5	33.1	48.4	30.8	49.3	19.9	43.5	25.2	44.6	23.6	55.7	20.8	59.9	23.9
Housing Status																		
Own	66.5	37.0	35.9	27.0	34.4	45.2	64.6	25.4	51.2	23.4	51.1	28.9	66.2	19.6	54.6	25.8	65.5	31.5
Rent	41.0	46.7	42.3	11.0	25.1	18.1	39.6	26.0	57.1	16.9	51.1	21.5	38.8	20.9	66.0	13.1	63.7	14.0
Net Worth Percentile																		
Bottom 25%	34.4	46.6	46.4	7.0	20.6	12.5	31.0	30.6	53.9	15.5	42.5	18.6	29.5	25.7	63.5	10.8	55.6	10.3
25%–49.9%	55.0	45.6	36.5	17.9	26.7	33.7	58.2	24.9	57.7	17.3	48.7	19.7	58.8	21.4	61.4	17.2	66.4	21.2
50%–74.9%	70.4	39.5	35.7	24.8	34.1	39.5	68.0	26.5	56.2	17.4	53.4	22.6	69.4	17.8	54.2	28.0	67.0	32.4
75%–89.9%	73.5	36.3	33.5	30.2	37.4	46.4	68.1	25.2	42.5	32.3	55.9	40.0	72.1	19.9	52.9	27.2	65.7	33.8
Top 10%	61.4	22.4	40.8	36.8	43.2	55.1	61.5	19.0	46.3	34.7	53.1	40.9	65.3	16.0	56.5	27.5	66.9	34.3

Source: EBRI estimates from Federal Reserve Board, 1992, 1995, and 1998 Survey of Consumer Finances.

Note: All income values are in 1998 dollars.

<sup>a</sup>SCF combines Sec. 401(k) plans with Sec. 403(b) plans and Supplemental Retirement Annuities. Thus, these plans are referred to as 401(k)-type plans.

Table 3  
**Participation Rates of Family Heads Eligible for  
 Defined Contribution Plans, 1995 and 1998**

Category	1995		1998	
	Percentage participating	Percentage of those not participating in a DC plan who are covered by a DB plan	Percentage participating	Percentage of those not participating in a DC plan who are covered by a DB plan
Total	73.8%	45.0%	77.3%	40.3%
Family Income per Year				
< \$10,000	44.8	9.3	38.1	7.4
\$10,000–\$25,000	58.4	20.6	60.6	20.8
\$25,000–\$50,000	72.9	56.9	75.1	37.6
\$50,000–\$100,000	78.8	48.5	83.5	58.8
\$100,000 +	84.1	60.9	88.6	78.1
Age of Head				
< 35 years	72.4	30.8	71.6	18.9
35–44 years	74.6	44.2	79.1	39.1
45–54 years	73.6	56.4	78.1	63.4
55–64 years	82.4	60.3	83.6	66.2
65–74 years	55.0	81.6	68.8	33.2
75+ years	26.1	14.9	99.6	18.0
Education of Head				
Below high school	62.1	46.0	71.0	15.4
High school diploma	67.9	39.4	75.5	30.5
Some college	73.9	49.1	69.9	43.6
College degree	79.7	48.2	82.8	52.2
Race				
White non-Hispanic	75.5	44.7	79.0	44.0
Nonwhite	67.5	45.6	69.6	28.8
Working Status of Head				
For someone else	73.4	44.9	76.7	40.1
Self-employed	97.6	100.0	96.2	76.7
Housing Status				
Own	76.9	50.7	82.9	53.9
Rent	66.3	35.3	63.2	24.4
Net Worth Percentile				
Bottom 25%	56.9	27.6	53.7	20.7
25%–49.9%	72.6	52.0	76.5	42.5
50%–74.9%	74.9	50.8	84.2	45.6
75%–89.9%	82.7	55.0	83.0	75.1
Top 10%	88.3	39.7	91.7	64.3

Source: EBRI estimates from Federal Reserve Board, Survey of Consumer Finances, 1995 and 1998.

Note: All income values are in 1998 dollars.

categories in 1998, IRA/Keogh coverage increased with income, net worth, education, and age (except for the oldest age group). Those families who owned their home and had a white family head were also more likely to have an IRA/Keogh plan. These trends within the economic/demographic categories were also consistent for 1992 and 1995.

Across years, IRA/Keogh plan participation rates increased for lower income groups (groups earning less than \$50,000 a year), while the higher income groups

experienced a decline in their participation rates. This is consistent with an increase in IRA/Keogh participation rates among families with less-educated family heads, compared with rates that held steady for those most educated. Families with a nonwhite family head had a larger increase in IRA/Keogh participation rates relative to families with a white family head, although the rates for families with a nonwhite head were still considerably lower than those for families with a white head in 1998. Lastly, the 65–74 year-old age group experienced a significant increase in IRA participation from 1992 to 1998 (33.7 to 42.7 percent), to become the age group with the highest participation rate.

Overall, the lower income groups, lower net worth categories, less educated groups, and minorities had some of the larger increases in participation rates in IRA/Keogh plans, but these groups still experienced significantly lower participation rates relative to their comparison groups.

## Retirement Plan Coverage From Any Source—All Families

Table 5 shows the increase of the percentage of families with a retirement plan from one of four sources: defined contribution/benefit plan with the *current* employer, defined contribution/benefit plan with a *previous* employer, IRA, and/or Keogh. The percentage of families with an account balance in at least one of these four entities increased from 53.2 percent in 1992 to 56.3 percent in 1998.

The percentage of families in the lowest income group (less than \$10,000 annually) with a retirement plan balance increased from 7.8 percent to 9.5 percent during the six-year period from 1992 to 1998; however, the next-lowest income group (\$10,000–\$25,000) decreased from 32.0 percent to 30.7 percent over the period.

Dramatic increases in retirement plan or personal account plan coverage were experienced for

Table 4  
**Percentage of Families With an Individual Retirement Account (IRA)/Keogh,  
 by Various Demographic Categories, 1992, 1995, and 1998**

Category	Percentage With IRA/Keogh			Median Balance of Those With IRA/Keogh		
	1992	1995	1998	1992	1995	1998
Total	26.1%	26.2%	28.4%	\$17,126	\$16,995	\$20,000
Family Income per Year						
< \$10,000	4.1	4.3	4.1	10,275	5,311	20,000
\$10,000–\$25,000	12.6	14.3	14.7	9,134	12,746	11,000
\$25,000–\$50,000	23.5	26.4	26.9	11,417	10,622	12,000
\$50,000–\$100,000	46.5	41.0	43.2	18,267	18,057	20,000
\$100,000 +	70.9	68.0	64.9	36,534	40,364	70,000
Age of Head						
< 35 years	13.1	13.4	14.5	5,823	5,311	5,200
35–44 years	27.8	27.4	27.9	12,559	10,622	13,000
45–54 years	34.1	33.8	34.8	19,980	24,431	22,000
55–64 years	44.5	37.7	42.1	38,589	30,804	35,000
65–74 years	33.7	35.3	42.7	22,834	26,555	38,000
75+ years	6.8	15.9	15.8	31,968	22,306	30,000
Education of Head						
Below high school	7.6	9.9	10.3	9,134	10,622	10,000
High school diploma	19.7	21.1	21.2	14,842	12,746	16,000
Some college	26.1	22.6	28.9	13,700	18,057	15,000
College degree	43.8	43.4	43.9	20,551	21,244	26,300
Race						
White non-Hispanic	31.1	30.7	32.5	17,126	18,057	22,000
Nonwhite	10.8	10.7	13.9	9,704	12,746	9,000
Working Status of Head						
For someone else	27.5	25.9	27.4	13,700	12,746	14,000
Self-employed	42.9	44.2	45.0	25,117	24,431	42,000
Retired	22.3	23.5	27.5	19,409	27,617	34,200
Other nonworker	8.5	10.9	8.8	10,275	12,746	10,000
Housing Status						
Own	34.7	34.5	36.5	18,267	19,226	24,000
Rent	10.7	11.0	12.4	9,362	7,435	8,500
Net Worth Percentile						
Bottom 25%	2.4	2.9	5.5	2,626	1,275	2,000
25%–49.9%	12.9	14.6	15.6	4,567	4,249	5,500
50%–74.9%	29.5	28.4	30.8	11,417	10,622	14,000
75%–89.9%	52.5	50.3	53.7	20,551	21,244	27,700
Top 10%	69.8	71.7	73.4	45,668	53,110	75,000

Source: EBRI estimates from Federal Reserve Board, 1992, 1995, and 1998 Survey of Consumer Finances.  
 Note: All income values are in 1998 dollars.

families with older heads of households. Coverage rates for those between the ages of 65 and 74 increased from 37.9 percent to 49.8 percent from 1992 to 1998, while coverage for those 75 and older increased from 6.8 percent to 16.7 percent.

Retirement plan coverage increased for both race classifications during the 1992–1998 period: from 58.0 percent to 60.9 percent for white, non-Hispanic families, and from 38.8 percent to 40.3 percent for nonwhite families. Families owning their own house had

a larger increase (62.5 percent to 66.1 percent) than those who rented (36.8 percent to 37.2 percent).

The disparity in these coverage rates as a function of net worth continued to widen during this time period. The percentage of families in the bottom quarter of the net worth distribution who had some type of personal account plan balance increased from 25.4 percent to 27.1 percent, while the top 10 percent increased their coverage from 76.8 percent to 85.1 percent.

## Account Balances

### Median Value of Defined Contribution Accounts for Current Job Participants—All Families

In 1998, the median value of defined contribution plans for families with a defined contribution plan was \$15,000<sup>12</sup> (table 6). This is a 64 percent increase from the 1992 median value of \$9,134 (expressed in 1998 dollars). These median values increased with age, income, net worth, and education.

One interesting finding is the higher median account balance of families with a defined contribution plan *and* a defined benefit plan, relative to those families with *just* a defined contribution plan. In 1998, the median account balance for families with both a defined contribution and benefit plan was \$21,000, compared with \$13,000 for families with only a defined contribution plan. This difference was even larger when the defined contribution plan was a 401(k)-type plan. When examining all family income categories for those with a 401(k) plan, all income groups but the lowest experienced this difference. This would suggest that those families who participate in both types of plans (a defined benefit and a 401(k) plan) tend to either (1) be more highly compensated and are therefore more able to save, or (2) have a more generous defined contribution plan.

<sup>12</sup> The median values for families with a family head under age 65 and a worker are virtually identical to these results. Consequently, they are not presented.

Table 5  
Percentage of All Families With a Retirement Plan from Current and Previous Employer or Individual Retirement Account (IRA)/Keogh Plan, 1992, 1995, and 1998

Category	1992	1995	1998
Total	53.2%	55.5%	56.3%
Family Income per Year			
< \$10,000	7.8	10.5	9.5
\$10,000–\$25,000	32.0	32.3	30.7
\$25,000–\$50,000	64.3	67.3	64.5
\$50,000–\$100,000	84.0	84.7	83.8
\$100,000 +	90.1	92.4	91.5
Age of Head			
< 35 years	47.2	50.7	48.2
35–44 years	68.1	68.5	68.4
45–54 years	72.0	71.6	69.6
55–64 years	63.7	62.2	66.5
65–74 years	37.9	41.5	49.8
75+ years	6.8	16.5	16.7
Education of Head			
Below high school	21.7	25.8	25.3
High school diploma	50.0	53.7	50.0
Some college	56.6	56.6	59.8
College degree	74.6	74.5	75.9
Race			
White non-Hispanic	58.0	58.9	60.9
Nonwhite	38.8	43.8	40.3
Working Status of Head			
For someone else	70.5	70.9	69.0
Self-employed	57.5	55.9	59.9
Retired	26.8	29.0	31.9
Other nonworker	18.1	18.4	19.4
Housing Status			
Own	62.5	65.2	66.1
Rent	36.8	37.8	37.2
Net Worth Percentile			
Bottom 25%	25.4	27.1	27.1
25%–49.9%	51.7	54.4	54.4
50%–74.9%	61.2	64.7	63.7
75%–89.9%	73.3	71.7	77.0
Top 10%	76.8	82.1	85.1

Source: EBRI estimates from Federal Reserve Board, 1992, 1995, and 1998 Survey of Consumer Finances.  
Note: All income values are in 1998 dollars.

### Median Values of IRA/Keogh Plans

For those families with an IRA/Keogh plan, the median value of these plans was \$20,000 in 1998, an increase of almost \$3,000 (in 1998 dollars) from 1992 (table 4). There was a slight decline in the median value of IRAs between 1992 and 1995, before increasing in 1998. The IRA balances follow patterns similar to the defined contribution plan balances, with the exception that IRA balances continue to increase for those with the highest net worth as well as for those with highest family income. IRA balances also increase with age up to the 75-and-over age category, in which individuals are more

Table 6  
**Median Values of Defined Contribution (DC) Plans for Families With a DC Pension Plan,  
 by Various Demographic Categories, 1992, 1995, and 1998**

Category	1992				1995				1998								
	Any DC plan	DC only	Both DB and DC	401(k)-type plan <sup>a</sup> with DB	Any DC plan	DC only	Both DB and DC	401(k)-type plan <sup>a</sup> with DB	Any DC plan	DC only	Both DB and DC	401(k)-type plan <sup>a</sup> with DB	401(k)-type plan <sup>a</sup> only				
Total	\$9,134	\$6,850	\$14,842	\$11,417	\$20,551	\$7,992	\$10,622	\$8,710	\$13,278	\$10,622	\$20,182	\$8,498	\$15,000	\$21,000	\$13,000	\$25,000	\$12,000
Family Income per Year																	
<\$10,000	b	b	b	b	b	b	722	690	b	531	b	531	1,200	b	1,300	b	1,400
\$10,000–\$25,000	1,941	1,827	4,567	1,142	b	3,425	3,187	3,187	3,187	2,337	b	2,549	2,100	1,500	2,000	1,100	2,000
\$25,000–\$50,000	5,594	4,567	6,850	5,709	7,992	4,567	5,417	5,311	7,435	6,373	8,498	5,364	8,000	7,000	8,000	10,000	7,500
\$50,000–\$100,000	15,984	15,984	15,984	18,267	22,834	15,984	15,933	15,933	16,570	16,996	23,900	12,746	25,000	22,000	25,000	26,000	22,000
\$100,000 +	45,668	34,251	51,377	51,377	62,794	45,668	53,110	47,799	56,297	57,359	91,349	44,612	69,000	60,000	70,000	75,000	68,000
Age of Head																	
< 35 years	3,996	3,083	6,850	5,709	9,134	4,567	3,930	4,249	2,974	3,930	3,399	4,249	5,000	6,500	4,400	7,000	4,500
35–44 years	6,850	5,709	9,134	7,992	13,700	6,279	10,622	10,622	10,622	13,384	16,995	11,844	15,000	20,000	15,000	21,000	15,000
45–54 years	22,834	15,984	31,968	31,968	41,101	18,267	21,244	18,057	32,928	25,493	47,799	14,871	25,000	25,000	27,000	30,000	25,000
55–64 years	21,692	13,700	34,251	25,117	43,385	11,074	22,306	15,933	33,990	15,933	40,364	12,746	28,000	21,000	40,000	40,000	22,000
65–74 years	6,850	6,279	b	5,709	b	b31,866	26,555	b	32,928	b	31,866	11,000	11,000	11,000	9,000	11,000	b
75+ years	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b
Education of Head																	
Below high school	3,653	3,083	13,700	10,275	b	2,968	3,187	3,187	b	3,187	b	3,187	10,000	b	11,000	b	10,000
High school diploma	6,279	5,709	6,850	6,850	9,134	5,709	9,029	8,498	10,622	9,029	11,684	8,498	11,000	20,000	11,000	22,000	10,000
Some college	7,992	5,709	11,417	14,842	15,984	7,193	8,498	8,498	9,560	10,622	15,933	9,560	13,000	16,400	12,000	18,700	10,000
College degree	15,413	10,161	23,976	15,984	30,826	9,134	15,933	11,153	23,368	15,933	31,866	10,622	20,000	25,000	21,000	30,000	18,999
Race																	
White non-Hispanic	9,362	6,850	14,842	11,417	20,551	7,992	10,622	9,560	16,995	10,994	21,244	8,498	16,000	25,000	14,000	25,000	13,000
Nonwhite	7,992	6,622	15,984	11,187	22,834	6,622	6,904	6,904	7,435	8,498	8,816	8,498	10,000	10,000	10,000	8,300	12,000
Working Status of Head																	
For someone else	9,134	6,279	14,842	11,417	19,409	6,850	10,622	8,498	13,809	10,622	21,244	8,498	14,500	20,300	15,000	25,000	12,000
Self-employed	20,551	15,984	34,251	29,684	45,668	23,976	18,057	16,358	19,120	14,871	32,928	12,746	24,000	35,000	21,000	35,000	20,000
Retired	8,905	b	b	b	b	b	8,498	8,710	4,249	4,461	425	7,435	11,000	b	7,000	b	11,000
Other nonwork	3,425	b	b	b	b	b	1,593	2,124	85	85	85	32	5,800	b	b	b	b
Housing Status																	
Own	12,559	10,161	15,984	15,413	22,834	10,275	13,809	12,746	18,057	14,658	26,555	11,684	20,600	25,000	21,000	25,000	19,000
Rent	3,996	3,083	12,559	4,795	14,842	3,425	3,718	3,718	4,249	4,249	5,311	3,718	4,800	7,000	5,000	13,000	4,400
Net Worth Percentile																	
Bottom 25%	1,370	1,142	2,968	2,854	b	1,142	1,168	1,275	1,062	1,062	1,062	1,062	2,000	2,000	1,800	2,000	1,800
25%–49.9%	4,567	4,396	4,909	5,709	6,850	4,567	5,948	5,375	6,373	6,373	8,498	5,353	7,000	7,000	7,000	7,000	7,000
50%–74.9%	11,417	11,417	11,417	11,988	14,842	11,417	11,684	11,684	11,897	11,684	12,746	11,684	24,500	24,000	25,000	25,000	25,000
75%–89.9%	31,968	28,543	34,251	31,968	31,968	22,834	26,555	23,900	29,742	30,804	42,488	26,553	49,000	56,000	52,000	65,000	44,000
Top 10%	68,502	62,794	91,336	91,336	92,478	85,628	83,914	83,914	92,411	91,349	95,598	83,914	92,000	128,000	90,000	121,000	79,500

Source: EBRI estimates from Federal Reserve Board, 1992, 1995, and 1998 Survey of Consumer Finances.

Note: All income values are in 1998 dollars.

<sup>a</sup>SCF combines Sec. 401(k) plans with Sec. 403(b) plans and Supplemental Retirement Annuities. Thus, these plans are referred to as 401(k)-type plans. <sup>b</sup>fewer than 10 observations.

*The total retirement portfolio account balance for all families in 1998 was \$78,417—an increase of 54 percent in real terms over the 1992 balance of \$50,914.*

likely to have begun taking disbursements from the accounts if the account is in the family head's name. The largest increases in account balances from 1992 were for the wealthiest, the highest earners, and those ages 65–74. Those who experienced decreases in account balances were families with nonwhite family heads, families with family heads under 35, and the poorest families in terms of net worth.

## Percentage of Financial Assets From Defined Contribution and IRA/Keogh Plans

In an attempt to gauge the relative importance of personal account plans for those families participating in them, the percentage of financial assets that these plans represent is investigated. In 1998, defined contribution assets represented 43.8 percent of total financial assets for those families with defined contribution assets, while defined contribution and IRA/Keogh assets accounted for 49.5 percent of total financial assets for those families with at least one of these assets (table 7). This was a significant increase from 38.8 percent and 43.6 percent, respectively, in 1992. These assets tended to be a larger percentage of financial assets for those families with lower net worth, less educated family heads, and nonwhite family heads. These assets gained more importance for those families in the middle levels of net worth and education of family head categories, relative to their counterparts. By income category, these assets were of increasing importance for all but the lowest-income families.

## Relative Importance of IRAs vs. Employment-Based Personal Account Plans

Tables 8A and 8B provide evidence on the relative importance of IRAs versus employment-based individual account plans for 1992 and 1998, respectively. Both current and previous employment-based individual account plans are examined. *Mean* values are reported in these panels as opposed to the *median* values in tables 4 and 6, since many of the groups explored in this analysis have less than 50 percent of the families holding an account balance in one or more of the components analyzed.<sup>13</sup>

Table 8B provides information on mean balances for all families with a defined contribution retirement plan or IRA for 1998. The first four columns provide mean balances for those families with a positive account balance for that type of plan. For example, of those families with either an IRA or Keogh plan, the average account balance was \$71,296.<sup>14</sup> However when families with a Keogh balance are excluded, the balance for those with only an IRA decreases to \$64,424. For the relatively small percentage of families with account balances in previous employer's defined contribution plans, the average balance is of a similar magnitude to the IRA balance (\$57,713) and slightly larger than the average account balance for those families participating in a defined contribution plan with a current employer (\$53,589).<sup>15</sup>

From a public policy perspective, it may be more useful to consider a family's entire portfolio of retirement

<sup>13</sup> By definition, these groups would produce a median value of zero. Given that account balance distributions tend to be skewed to the right (i.e., there are a small number of very large balances), the mean value is often larger than the median. For example, in 1998, the median value of account balances for defined contribution plans with the current employer was \$15,000 (table 6), whereas the mean value was \$53,589 (table 8B).

<sup>14</sup> This was an increase from \$41,913 in 1992 (table 8A), reported in 1998 dollars.

<sup>15</sup> This number is slightly higher than the \$47,004 average account balance for the 1998 EBRI/ICI database, based on 7.9 million active participants in 30,102 plans (VanDerhei, Holden and Quick, 2000). In addition to the increased precision of using administrative data versus the self-reported numbers in the SCF, some of the discrepancy may also be due to the fact that the EBRI/ICI number was reported net of plan loans.

Table 7  
**Percentage of Financial Assets in Defined Contribution (DC) Plans and Individual Retirement Accounts (IRAs) for All Families With Assets, by Various Demographic/Economic Categories, 1992, 1995, and 1998**

Category	1992		1995		1998	
	With DC: percentage DC	With DC or IRA: percentage DC + IRA	With DC: percentage DC	With DC or IRA: percentage DC + IRA	With DC: percentage DC	With DC or IRA: percentage DC + IRA
Total	38.8%	43.6%	42.9%	49.1%	43.8%	49.5%
Family Income per Year						
< \$10,000	30.8	40.0	34.4	38.5	16.7	36.4
\$10,000–\$25,000	63.2	44.9	50.0	50.0	48.8	49.7
\$25,000–\$50,000	42.6	44.3	48.2	50.5	47.0	52.7
\$50,000–\$100,000	36.1	45.9	38.8	49.1	45.9	54.4
\$100,000 +	28.7	37.7	36.2	43.2	30.3	40.1
Age of Head						
< 35 years	38.0	46.0	39.9	49.5	40.2	46.9
35–44 years	39.1	45.7	48.8	55.3	45.8	57.9
45–54 years	45.5	55.8	42.1	50.3	40.5	53.4
55–64 years	27.7	42.1	38.0	43.0	46.5	52.3
65–74 years	20.4	27.6	34.2	33.8	21.4	35.2
75+ years	5.8	26.4	14.9	23.6	16.9	19.2
Education of Head						
Below high school	60.0	53.6	51.8	41.5	60.1	62.9
High school diploma	42.1	44.5	50.0	51.5	54.9	55.6
Some college	35.6	38.0	44.4	50.6	42.7	46.4
College degree	36.0	44.2	37.8	47.1	38.1	45.7
Race						
White non-Hispanic	35.5	42.1	41.0	47.5	41.7	47.5
Nonwhite	66.7	56.4	52.6	59.3	57.7	65.8
Working Status of Head						
For someone else	40.0	49.3	45.1	53.2	46.3	57.5
Self-employed	26.1	39.5	23.6	34.3	20.0	40.6
Retired	22.8	30.8	35.6	35.1	24.2	31.0
Other nonworkers	87.5	45.4	33.2	46.2	16.9	42.7
Housing Status						
Own	36.1	42.1	43.0	49.2	44.4	50.0
Rent	49.5	54.1	42.1	48.9	41.3	48.2
Net Worth Percentile						
Bottom 25%	61.7	66.7	47.6	55.6	57.1	62.5
25%–49.9%	48.8	50.0	52.6	62.5	49.6	61.3
50%–74.9%	36.2	46.0	43.5	51.1	46.2	59.3
75%–89.9%	35.4	38.5	35.6	46.7	35.0	42.7
Top 10%	23.3	32.0	25.2	31.4	21.6	30.8

Source: EBRI estimates from Federal Reserve Board, 1992, 1995, and 1998 Survey of Consumer Finances.  
 Note: All income values are in 1998 dollars.

income from personal account plans. Columns six through nine in tables 8A and 8B show similar information as the first four columns, although in this case averages are computed for any family with a positive total account balance. Column five provides the total account balance for the sum of defined contribution plans with the current employer, any account balances that may have been left in the defined contribution plan of a previous employer, as well as any IRA and Keogh assets

for the family. The total retirement portfolio account balance for all families in 1998 was \$78,417—an increase of 54 percent in real terms over the 1992 balance of \$50,914.

The final four columns in tables 8A and 8B show the relative importance for each of the personal account components. For families in 1998, 52 percent of the overall average was attributed to IRA/Keogh balances (43 percent from IRAs alone), 44 percent of the average

**Table 8A**  
**Mean Balances for All Families With a Defined Contribution (DC) Retirement Plan or Individual Retirement Account (IRA), 1992**

Category	Of Those Participating in Specific Plan				Of Those Participating in a DC Plan or IRA				Composition of Personal Account Plans			
	Mean balance IRA/Keogh	Mean balance IRA only	Mean balance current employer DC	Mean balance for those with an account balance	Mean balance current employer	Mean balance previous employer	Mean balance IRA/Keogh	Mean balance IRA only	DC current employer	DC previous employer	IRA/Keogh	IRA only
	\$41,913	\$34,870	\$39,183	\$50,914	\$22,122	\$2,282	\$26,510	\$19,861	43%	4%	52%	39%
<b>Total</b>												
<b>Family Income per Year</b>												
<\$10,000	18,239	18,222	a	16,706	780	1,369	14,557	14,528	5	8	87	87
\$10,000-\$25,000	18,427	18,744	6,250	13,581	2,697	353	10,531	10,212	20	3	78	75
\$25,000-\$50,000	24,749	22,954	14,383	22,921	7,965	2,304	12,652	10,851	35	10	55	47
\$50,000-\$100,000	36,055	33,186	36,338	47,935	22,629	1,272	24,034	19,701	47	3	50	41
\$100,000 +	91,846	68,491	116,408	156,449	71,884	6,462	78,103	49,106	46	4	50	31
<b>Age of Head</b>												
<35 years	11,954	11,211	13,791	15,855	10,213	966	4,676	3,976	64	6	29	25
35-44 years	25,869	21,674	25,197	31,455	16,369	1,218	13,868	10,196	52	4	44	32
45-54 years	49,169	41,110	65,740	77,832	43,913	2,162	31,757	23,501	5	3	41	30
55-64 years	52,542	43,802	78,693	84,160	33,716	6,834	43,610	33,926	40	8	52	40
65-74 years	62,502	50,044	27,496	63,323	2,508	884	59,930	43,897	4	1	95	69
75+ years	59,079	46,031	a	60,588	1,526	1	59,061	38,249	3	0	97	63
<b>Education of Head</b>												
Below high school	21,192	20,900	10,561	17,646	5,236	945	11,465	11,295	30	5	65	64
High school diploma	33,196	29,826	25,172	33,106	14,078	1,117	17,912	14,757	43	3	54	45
Some college	28,818	26,488	22,755	30,635	13,106	450	17,079	14,441	43	1	56	47
College degree	52,251	41,794	57,068	73,870	32,707	3,863	37,300	26,141	44	5	50	35
<b>Race</b>												
White non-Hispanic	43,897	36,335	41,790	54,870	22,997	2,585	29,288	21,834	42	5	53	40
Nonwhite	24,466	21,966	26,485	28,285	17,119	550	10,617	8,573	61	2	38	30
<b>Working Status of Head</b>												
For someone else	30,375	26,862	36,343	43,385	25,893	1,532	15,960	12,869	60	4	37	30
Self-employed	70,384	51,460	77,841	92,067	28,305	3,145	60,617	35,868	31	3	66	39
Retired	52,269	46,240	14,032	54,527	937	4,020	49,569	41,004	2	7	91	75
Other nonworker	20,327	19,790	21,366	28,043	8,216	7,351	12,495	11,984	29	26	45	43
<b>Housing Status</b>												
Own	44,978	37,676	47,122	59,460	26,099	2,429	30,933	23,446	44	4	52	39
Rent	24,290	18,189	12,822	19,997	7,738	1,751	10,508	6,889	39	9	53	34
<b>Net Worth Percentile</b>												
Bottom 25%	3,512	3,589	4,460	4,801	3,493	719	589	558	73	15	12	12
25%-49.9%	6,295	6,288	7,253	8,949	4,789	1,794	2,366	2,219	54	20	26	25
50%-74.9%	17,130	16,466	20,324	23,510	12,070	901	10,539	9,457	51	4	45	40
75%-89.9%	31,366	28,463	48,991	50,343	23,261	1,412	25,671	20,944	46	3	51	42
Top 10%	99,784	81,572	159,412	167,502	66,228	6,992	94,282	65,298	40	4	56	39

Source: EBRI estimates from Federal Reserve Board, 1992 Survey of Consumer Finances.  
 Note: All income values are in 1998 dollars.  
 a fewer than 10 observations.

Table 8B  
**Mean Balances for All Families With a Defined Contribution (DC) Retirement Plan or Individual Retirement Account (IRA), 1998**

Category	Of Those Participating in Specific Plan				Of Those Participating in a DC Plan or IRA				Composition of Personal Account Plans				
	Mean balance IRA/Keogh	Mean balance employer DC	Mean balance previous employer DC	Mean balance current employer DC	Mean balance IRA/Keogh	Mean balance previous employer	Mean balance current employer	Mean balance IRA only	DC current employer	DC previous employer	IRA/Keogh	IRA only	
	\$71,296	\$57,713	\$53,589	\$78,471	\$40,738	\$3,036	\$34,698	\$33,831	44%	4%	52%	43%	
<b>Family Income per Year</b>													
<\$10,000	28,013	a	2,396	26,406	16,479	8,815	1,113	16,151	4	33	62	61	
\$10,000-\$25,000	31,095	25,572	13,693	25,225	17,580	1,338	6,307	16,513	25	5	70	65	
\$25,000-\$50,000	33,817	32,191	19,876	31,487	16,437	1,887	13,163	15,630	42	6	52	50	
\$50,000-\$100,000	53,399	49,800	52,440	70,727	30,991	2,133	37,603	28,367	53	3	44	40	
\$100,000 +	187,718	167,379	160,280	245,816	137,219	8,363	100,234	101,569	41	3	56	41	
<b>Age of Head</b>													
<35 years	18,327	15,860	20,790	24,397	6,489	890	17,018	5,643	70	4	27	23	
35-44 years	33,966	31,869	43,779	52,354	15,600	1,811	34,943	12,802	67	3	30	24	
45-54 years	66,548	60,199	69,491	92,589	38,452	5,393	48,745	31,463	53	6	42	34	
55-64 years	125,856	87,926	104,065	153,483	90,834	5,194	57,455	72,951	37	3	59	48	
65-74 years	96,719	109,317	93,951	104,737	89,336	2,797	12,604	76,113	12	3	85	73	
75+ years	93,887	a	70,404	92,884	88,477	510	3,897	81,545	4	1	95	88	
<b>Education of Head</b>													
Below high school	23,686	8,942	18,170	22,684	11,308	685	10,692	9,947	47	3	50	44	
High school diploma	40,676	29,157	29,649	41,553	20,023	1,567	19,963	19,136	48	4	48	46	
Some college	49,543	18,558	40,839	54,717	27,385	807	26,525	24,426	48	1	50	45	
College degree	98,979	100,666	79,377	119,588	63,524	5,237	50,827	50,438	43	4	53	42	
<b>Race</b>													
White non-Hispanic	73,464	59,453	57,333	82,929	43,843	2,933	36,153	36,382	44	4	53	44	
Nonwhite	53,667	50,763	35,273	52,692	22,777	3,627	26,288	19,079	50	7	43	36	
<b>Working Status of Head</b>													
For someone else	43,069	58,688	47,951	60,949	19,641	2,521	38,787	17,067	64	4	32	28	
Self-employed	123,263	48,894	126,467	158,197	102,654	2,835	52,708	70,364	33	2	65	44	
Retired	102,321	66,616	27,631	100,187	93,998	4,225	1,964	88,032	2	4	94	88	
Other nonworker	49,688	48,912	26,872	56,505	29,150	16,033	11,322	14,815	20	28	52	26	
<b>Housing Status</b>													
Own	76,720	73,139	63,240	90,639	47,296	3,199	40,143	39,084	44	4	52	43	
Rent	39,909	28,140	20,391	32,621	16,022	2,419	14,179	14,034	43	7	49	43	
<b>Net Worth Percentile</b>													
Bottom 25%	4,098	17,322	9,308	9,899	1,118	1,831	6,950	972	70	18	11	10	
25%-49.9%	8,855	23,312	12,405	14,023	3,063	1,257	9,704	2,869	69	9	22	20	
50%-74.9%	23,696	67,046	32,601	39,092	12,803	3,086	23,202	12,035	59	8	33	31	
75%-89.9%	49,233	37,003	74,173	78,898	36,587	1,734	40,577	34,555	51	2	46	44	
Top 10%	191,087	206,303	229,348	274,706	169,397	7,800	97,510	132,330	35	3	62	48	

Source: EBRI estimates from Federal Reserve Board, 1998 Survey of Consumer Finances.

Note: All income values are in 1998 dollars.

a Fewer than 10 observations.

*The phenomenon that IRAs are relatively more important to families with larger net worth appears to have grown even stronger since 1992.*

was from account balances in defined contribution plans with the current employer, while account balances left with defined contribution plans from previous employers accounted for only 4 percent of the total. The composition of overall individual account balances was extremely stable between 1992 and 1998.<sup>16</sup> The only component that changed by more than 1 percent was the portion due to IRAs (without any Keogh balances), which increased from 39 percent to 43 percent.

Further exploration of the relative percentage of personal account balances residing exclusively in IRAs and their change from 1992 to 1998 reveals some definite economic and demographic influences. First, there is a marked tendency for lower-income families to have larger percentages of their assets in IRAs, although this appears to be fading with time. Families in the lower two income brackets had a substantial decrease in the percentage of personal account assets in IRAs: Holdings by families with incomes below \$10,000 decreased from 87 percent in 1992 to 61 percent in 1998; for those families earning between \$10,000 and \$25,000 a year, IRA holdings decreased from 75 percent to 65 percent. In both cases, the average IRA dollar amount increased in real terms; however, it increased substantially less than the account balances in defined contribution plans. The relative significance of IRAs to the highest income group (families earning in excess of \$100,000 a year) increased from 31 percent to 41 percent during this period.

Age also appears to significantly influence the relative value of IRAs for a family with a personal account plan, a trend that became even more noticeable during the period investigated. Both of the age groups under 45 experienced *decreases* in the relative value of IRAs (from 25 percent to 23 percent for those under age 35, and from 32 percent to 24 percent for families with

family heads between ages 35 and 44). The relative value of IRAs *increased* for all other age groups, with the oldest (families headed by someone age 75 or older) increasing from 63 percent to 88 percent.

The inverse relationship that existed between education level and relative importance of IRAs that existed in 1992 had been virtually eliminated by 1998, with the percentage of IRA holdings for those families headed by someone with less than a high school education decreasing from 64 percent to 44 percent. However, the overall average balance for this group increased by 29 percent in real terms, due in large part to a 104 percent increase in the average account balance in the current employer's defined contribution plan.

Families headed by a white, non-Hispanic still have a larger percentage of their personal account assets in IRAs than their nonwhite counterparts (44 percent versus 36 percent) in 1998, but the difference has narrowed from what existed in 1992. The impact of working status is largely dominated by the age effect mentioned earlier. Among those families headed by a retired worker, the relative value of IRAs increased from 75 percent in 1992 to 88 percent in 1998.

The relative importance of IRAs increased 4 percentage points for families who own their home, from 39 percent in 1992 to 43 percent in 1998. For those who rent, IRA holdings increased by 9 percentage points in 1998, achieving the same 43 percent average as their counterparts.

Finally, the phenomenon that IRAs are relatively more important to families with larger net worth appears to have grown even stronger since 1992. The percentage of total personal account plan balances decreased for each of the lower three net worth quartiles, but increased for the upper quartile. Families in the top 10 percent of the net worth distribution range saw their mean IRA balances increase from \$65,298 in 1992 to \$132,330 in 1998. The relative value of IRAs increased from 39 percent to 48 percent for this group during that time period.

<sup>16</sup> There does appear to be some significant activity in the relative value of account balances left with the previous employer's defined contribution plan in the intermediate years. This value increased from 4 percent in 1992 to 13 percent in 1995 (not shown) before falling back to 4 percent in 1998.

## The Impact of Rollovers on the Relative Value of IRAs

Several studies have attempted to track the cash flows resulting from job changes and other events resulting in retirement plan distributions to defined contribution plan participants. The SCF provides information on the amount of cash settlements and the year that they were received. Unfortunately, the survey makes the use of this data problematic for tracking rollovers, because it allows respondents to provide multiple answers with respect to what a settlement was used for, as well as information about multiple cash settlements, but it does not track the money associated with each transaction.

In an attempt to gain additional insight into how rollovers may be influencing overall account balances, as well as the relative value of their components, table 9 replicates columns five through nine of table 8B for those families that have received at least one cash settlement from a pension or retirement plan of a previous job and have rolled over at least a portion of the total amount. The impact of rollovers on the average total account balance for all individual account balances appears to be quite large: The average 1998 total account balance was \$152,451 for those with at least one rollover, versus \$78,471 for all families participating in at least one personal account plan, regardless of whether they have had a rollover.

Table 10 provides the ratio of the numbers in table 9, divided by those in table 8. The vast majority of the rollovers would appear to be going into IRAs (the average account balance increases from \$33,831 to \$89,544, a ratio of 2.65, or an increase of 165 percent), although the average account balance for the defined contribution plan with the current employer is also slightly higher (a 13 percent increase, to \$39,264).<sup>17</sup>

Family income appears to have no discernible impact on either the relative increase of total account balances or IRA balances for those families with at least one rollover. However, there is a noticeable decrease in account balances for defined contribution plans with the

Table 9  
Defined Contribution (DC) and Individual Retirement Account (IRA)/Keogh Mean Balances for Families With a Rollover, 1998

Category	Of Those Participating in a DC Plan or IRA				
	Mean balance for all plan types	Mean balance current employer	Mean balance previous employer	Mean balance IRA/Keogh	Mean balance IRA only
Total	\$152,451	\$ 39,264	\$ 3,816	\$109,370	\$ 89,544
Family Income per Year					
< \$10,000	a	a	a	a	a
\$10,000–\$25,000	41,319	3,263	0	38,055	38,055
\$25,000–\$50,000	43,299	4,436	65	38,796	34,165
\$50,000–\$100,000	99,405	31,671	2,040	65,693	63,506
\$100,000 +	419,700	105,691	12,884	301,124	220,518
Age of Head					
< 35 years	47,179	22,648	290	24,240	21,451
35–44 years	70,516	38,211	2,234	30,070	29,362
45–54 years	154,444	56,462	12,520	85,461	74,919
55–64 years	354,687	63,616	643	290,427	238,520
65–74 years	179,888	3,846	13	176,028	123,592
75+ years	99,596	0	0	99,596	74,487
Education of Head					
Below high school	a	a	a	a	a
High school diploma	72,129	16,597	95	55,436	55,360
Some college	98,070	23,248	0	74,821	73,700
College degree	219,727	58,294	7,244	154,188	116,788
Race					
White non-Hispanic	158,056	36,419	4,051	117,585	95,363
Nonwhite	106,057	62,805	1,864	41,387	41,387
Working Status of Head					
For someone else	109,448	45,062	5,719	58,665	48,295
Self-employed	238,757	58,020	40	180,697	114,809
Retired	234,695	1,650	349	232,696	217,146
Other nonworker	a	a	a	a	a
Housing Status					
Own	164,841	44,004	4,127	116,709	94,258
Rent	64,976	5,798	1,620	57,557	56,264
Net Worth Percentile					
Bottom 25%	a	a	a	a	a
25%–49.9%	14,540	5,360	0	9,180	9,180
50%–74.9%	45,421	22,602	2,528	20,290	20,290
75%–89.9%	114,291	41,988	804	71,498	67,983
Top 10%	438,272	84,581	12,102	341,588	262,869

Source: EBRI estimates from Federal Reserve Board, 1998 Survey of Consumer Finances.

Note: All income values are in 1998 dollars.

<sup>a</sup>Fewer than 10 observations.

<sup>17</sup> Surprisingly, the average account balance for defined contribution plans from previous employers is 26 percent higher for those families with at least one rollover. This is likely due to the inability of SCF to identify the percentage of cash flows involved in rollovers. Of those families with a positive personal account balance that had indicated they had received a cash settlement from a previous plan, 27 percent indicated they received at least one additional cash settlement. Also, the results appear to be largely due to families with more than \$100,000 in income and those whose net worth is in the top 10 percent (table 10).

current employer for all income groups other than those making in excess of \$100,000 a year.

The impact of rollovers on total account balances appears to be largest for those in the 55–64 age range (an increase of 131 percent), while the defined contribution balances with the current employer remain in the range of 9 percent to 33 percent above the average for those without rollovers until age 65—when, as expected, they drop substantially relative to those without rollovers. The impact of rollovers on IRA balances peaks for those families with a family head under age 35 and those ages 55–64.

The impact of rollovers on total account balances as a function of education does not appear to vary to a large degree. However, it would appear that those families headed by someone with a college degree are more likely to roll the cash settlement into the current employer's defined contribution plan than into an IRA, compared with their counterparts with less formal education.<sup>18</sup>

There do appear to be major differences by racial group in the way rollovers are handled. Although there is not a discernible difference in total account balances, white non-Hispanics have virtually the same balance in the current employer's defined contribution plan whether or not they have taken a rollover. By contrast, families headed by nonwhites show an increase of 139 percent in the average balance if they have taken a rollover. As expected, this translates into a larger increase in IRAs for white, non-Hispanic families (a 162 percent increase, versus a 117 percent increase for nonwhite families).

Rollovers for families who rent as opposed to owning a home have a slighter larger impact on total

<sup>18</sup> This assumes that the higher relative account balances in defined contribution plans for current employers for those families with a rollover, versus those not having at least one rollover, is due to the rollover flowing into that plan as opposed to an IRA. Of course, there are other reasons that could be causing this—such as families who take rollovers when leaving a previous job are more likely to contribute, or contribute at a higher percentage of compensation, than their counterparts who do not roll over cash settlements from previous employers.

Table 10  
Ratio of Defined Contribution (DC) and Individual Retirement Account (IRA)/Keogh Mean Balances for Families With a Rollover, 1998

Category	Of Those Participating in a DC Plan or IRA With a Rollover				
	All plan types	Current employer	Previous employer	IRA/Keogh	IRA only
Total	1.94	1.13	1.26	2.68	2.65
Family Income per Year					
< \$10,000	a	a	a	a	a
\$10,000–\$25,000	1.64	0.52	—	2.16	2.30
\$25,000–\$50,000	1.38	0.34	0.03	2.36	2.19
\$50,000–\$100,000	1.41	0.84	0.96	2.12	2.24
\$100,000+	1.71	1.05	1.54	2.19	2.17
Age of Head					
< 35 years	1.93	1.33	0.33	3.74	3.80
35–44 years	1.35	1.09	1.23	1.93	2.29
45–54 years	1.67	1.16	2.32	2.22	2.38
55–64 years	2.31	1.11	0.12	3.20	3.27
65–74 years	1.72	0.31	0.00	1.97	1.62
75+ years	1.07	—	—	1.13	0.91
Education of Head					
Below high school					
High school diploma	1.74	0.83	0.06	2.77	2.89
Some college	1.79	0.88	—	2.73	3.02
College degree	1.84	1.15	1.38	2.43	2.32
Race					
White non-Hispanic	1.91	1.01	1.38	2.68	2.62
Nonwhite	2.01	2.39	0.51	1.82	2.17
Working Status of Head					
For someone else	1.80	1.16	2.27	2.99	2.83
Self-employed	1.51	1.10	0.01	1.76	1.63
Retired	2.34	0.84	0.08	2.48	2.47
Other nonworker					
Housing Status					
Own	1.82	1.10	1.29	2.47	2.41
Rent	1.99	0.41	0.67	3.59	4.01
Net Worth Percentile					
Bottom 25%	a	a	a	a	a
25%–49.9%	1.04	0.55	—	3.00	3.20
50%–74.9%	1.16	0.97	0.82	1.58	1.69
75%–89.9%	1.45	1.03	0.46	1.95	1.97
Top 10%	1.60	0.87	1.55	2.02	1.99

Source: EBRI estimates from Federal Reserve Board, 1998 Survey of Consumer Finances.

Note: All income values are in 1998 dollars.

<sup>a</sup>Fewer than 10 observations.

account balances (99 percent, compared with 82 percent). However, there appear to be significant differences between the propensity to roll over the money into the current employer's defined contribution plan versus an IRA. While families owning a home have a 10 percent higher average account balance in the current employer's defined contribution plan when they take a rollover, those who rent have a 59 percent lower balance on average. This may be caused by families attempting to

*It appears that when given the opportunity to participate in a defined contribution plan, more employees are choosing to participate in such an arrangement.*

save for a down payment for a house who want to keep money relatively liquid for the immediate future.

Families who rent have a significantly higher increase in IRA balance as a result of rollovers (301 percent) than do those who own a house (141 percent).

Finally, and as expected, the impact of rollovers on total account balances increases with a family's net worth. Families in the second-lowest net worth quartile<sup>19</sup> had an increase of only 4 percent in the average total account balance. This value increased to 16 percent for the third-lowest net worth quartile, and increased even further to 45 percent for those families in the 75<sup>th</sup> to 90<sup>th</sup> net worth percentiles. The 10 percent of families with the highest net worth experienced an increase of 60 percent in total account balances. There did not appear to be a consistent pattern between net worth and the impact of rollovers on IRA balances; however, it is interesting to note that families with the second lowest net worth quartile experienced the largest increase (220 percent).

## Conclusion

Personal account plans are only part of the retirement assets that families have. Many families

also have coverage under "traditional" defined-benefit pension plans and Social Security retirement income. Although information on the employee's expectations for future defined benefit income is included in the SCF, future retirement income from these sources is difficult

to value because it depends crucially on assumptions about future events and conditions—work decisions, earnings, inflation rates, discount

rates, mortality, etc. (Kennickell, Starr-McCluer, and Surette, 2000). Because of the lack of widely agreed-upon standards for these assumptions, this *Issue Brief* does not include a measure of the present value of such income in the analysis.<sup>20</sup>

Our analysis of the 1992, 1995, and 1998 versions of the SCF found that the percentage of families with a participant in a pension plan from a current job increased from 38.8 percent to 41.0 percent over this six-year period. If one focuses exclusively on those families with a worker and in which the head is under age 65, the percentage for 1998 increases to 56.8 percent. The previously documented trend toward defined contribution plans was confirmed and the significance of 401(k)-type plans for those families participating in a pension plan more than doubled, from 31.6 percent to 64.3 percent.

It appears that when given the opportunity to participate in a defined contribution plan, more employees are choosing to participate in such an arrangement.<sup>21</sup> The percentage of family heads eligible to participate in a defined contribution plan who did so increased from 73.8 percent in 1995<sup>22</sup> to 77.3 percent in 1998. Of those choosing not to participate in a defined contribution plan, 40.3 percent were already participating in a defined benefit plan.

The percentage of families with either an IRA or a Keogh plan increased from 26.1 percent in 1992 to 28.4 percent in 1998. The rates increased for lower income groups (groups earning less than \$50,000 annually), while the higher income groups experienced a

<sup>19</sup> There were an insufficient number of families in the lowest net worth quartile taking rollovers to measure their activity.

<sup>20</sup> See Kennickell and Sunden (1997) for a description of one possible approach to using the SCF to value the entire retirement income portfolio for the family.

<sup>21</sup> However, to a limited degree this may be a function of firms recently choosing automatic enrollment (also known as "negative election"). Regardless of its impact on the 1998 data, automatic enrollment is likely to increase this number in the future. See Arsenault (1999) for more detail.

<sup>22</sup> The necessary variables to make this calculation were not available in 1992.

---

decline in their participation rates. The 65–74-year-old age group experienced a significant increase in IRA participation from 1992 to 1998 (33.7 percent to 42.7 percent), to become the age group with the largest participation rate.

When these two types of personal account retirement plans are combined (defined contribution plans from either a current or previous employer, and IRA/Keogh plans), we find that the percentage of families with an account balance in at least one of these entities increased from 53.2 percent in 1992 to 56.3 percent in 1998. Nearly half of all families with heads of household between the ages of 65 and 74 now have some type of individual account retirement plan (49.8 percent in 1998, an increase from 37.9 percent in 1992). Moreover, the percentage of families headed by those age 75 and older who have some type of personal account retirement plan more than doubled, from 6.8 percent in 1992 to 16.7 percent in 1998.

The median value of defined contribution plans for families with a defined contribution plan was \$15,000 in 1998, a 64 percent real increase from the 1992 median value of \$9,134 (expressed in 1998 dollars). However, participants who also had a defined benefit plan had a larger median account value (\$21,000 in 1998), while 401(k)-type participants with a defined benefit plan had the highest overall median account value (\$25,000 in 1998). In contrast, for those families with an IRA/Keogh plan, the median value from these accounts was \$20,000 in 1998, an increase of almost \$3,000 (in 1998 dollars) from 1992.

Overall, the personal account retirement plans represented nearly half (49.5 percent) of all the financial assets for those families with either a defined contribution plan account or an IRA in 1998. This was a significant increase from 43.6 percent in 1992.

The entire family portfolio of retirement assets from personal account plans was also analyzed. The average total account balance for all families in 1998 was \$78,417, an increase of 54 percent in real terms over the 1992 balance of \$50,914 (expressed in 1998 dollars). For

families participating in a defined contribution plan or IRA in 1998, 52 percent of the overall average was attributed to IRA/Keogh balances (43 percent from IRAs alone); 44 percent of the average was from account balances in defined contribution plans with the current employer; and account balances left with defined contribution plans from previous employers accounted for only 4 percent of the total. Although the composition of overall personal account balances was extremely stable between 1992 and 1998, there are obviously pronounced age differences, and they appear to have become more significant with time.

There is a marked tendency for lower-income families to have larger percentages of their total personal account retirement portfolio in IRAs, although this trend appears to be fading with time. There also appears to be a significant age influence on the relative value of IRAs for a family with an individual account plan, and this trend has become even more noticeable during the period investigated.

The impact of rollovers on the average total account balance for all personal account balances appears to be quite large: \$152,451 for those with at least one rollover, versus \$78,471 for all families participating in at least one personal account plan, regardless of whether they have had a rollover. The vast majority of the rollovers would appear to be going to IRAs, although the average account balance for the defined contribution plan with the current employer is also slightly higher.

There appears to be no discernible impact of family income on either the relative increase of total account balances or IRA balances for those families with at least one rollover. The impact of rollovers on total account balances appears to be largest for those in the 55–64 age range. However, there do appear to be major racial differences in the way rollovers are handled. Although there is not a discernible difference in total account balances, white non-Hispanics have virtually the same balance in the current employer's defined contribution plan whether or not they have taken a rollover. In contrast, families headed by nonwhites have a 139 per-

cent increase in the average balance if they have taken a rollover.

This analysis does not purport to provide an answer to the frequently asked question of what level of retirement income will be produced by defined contribution plans for their participants. From a historical perspective, the trend to defined contribution plans has been a relatively recent occurrence, and what we know as the 401(k) plan today has been widespread for less than two decades, suggesting that any inference from today's retirees may not be readily extrapolated to younger cohorts. Instead, information with respect to existing workers' account balances, asset allocations, and loan and withdrawal behavior needs to be combined with a model predicting their future contribution behavior<sup>23</sup> before projections can be performed under the status quo.

From a public policy perspective, it is also crucial to consider what type of changes may be imposed on the Social Security system. If individual accounts are included as part of a reform package, future retirement income for families may very well depend upon the impact of such changes (especially if the "defined benefit" portion of Social Security is reduced) on the defined contribution plan and IRA asset allocations.<sup>24</sup>

Each of these analyses will be provided in expanded detail in future *EBRI Issue Briefs* as we continue to analyze behavior from more than 10 million participants in more than 30,000 401(k) plans from the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

<sup>23</sup> See VanDerhei, Copeland, and Quick (2000) for modeling work along these lines.

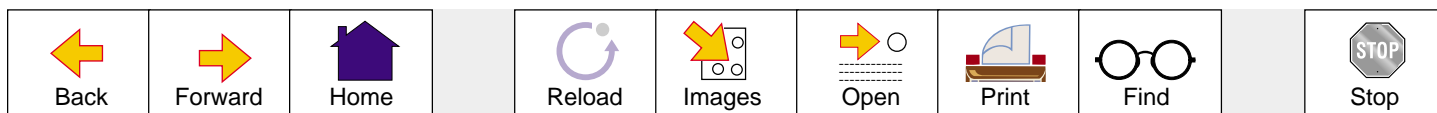
<sup>24</sup> See Uccello (2000) for an example of how this expected impact can be estimated.

## References

- Arsenault, Stephen J. "The Risks and Rewards of Sec. 401(k) Plan Negative Elections." *The Tax Adviser*. Vol. 30, no. 4 (April 1999): 250.
- Blakely, Stephen. "Executive Summary." In Dallas L. Salisbury, ed., *The Future of Private Retirement Plans*. Washington, DC: Employee Benefit Research Institute, 2000.
- DeStefano, John. "Defined Contribution Plan Distribution Trends." In Dallas Salisbury, ed., *The Future of Private Retirement Plans*. Washington, DC: Employee Benefit Research Institute, 2000.
- Employee Benefit Research Institute. *Fundamentals of Employee Benefit Programs*. Fifth edition. Washington, DC: Employee Benefit Research Institute, 1997.
- Gale, William, Leslie Papke, and Jack VanDerhei. "Understanding the Shift Toward Defined Contribution Plans." In *Framework For Evaluating Pension Reform*. Brookings Institution/TIAA-CREF/Stanford University, forthcoming.
- Hewitt Associates. *Survey Findings: Trends and Experience in 401(k) Plans*. Lincolnshire, IL: Hewitt Associates, 1999.
- Hoffman, Ellen. "Self-Directed Accounts: 401(k)s With a View." *HRMagazine*. Vol. 45, no. 3 (March 2000): 115-124.
- Ippolito, Richard A. "The New Pension Economics: Defined Contribution Plans and Sorting." In Dallas L. Salisbury, ed., *The Future of Private Retirement Plans*. Washington, DC: Employee Benefit Research Institute, 2000.
- Investment Company Institute. "IRA Ownership in 1999." *Fundamentals, Investment Company Institute Research in Brief* (December 1999).
- Kennickell, Arthur B.; Martha Starr-McCluer; and Brian J Surette. "Recent Changes in U.S. Family Finances: Results from the 1998 Survey of Consumer Finances.

- 
- Federal Reserve Bulletin* (January 2000).
- Kennickell, Arthur B., and Annika E. Sundén. *Pensions, Social Security, and the Distribution of Wealth*. SCF Working Papers, Finance and Economics Discussion Series 55 (October 1997).
- Olsen, Kelly, and Jack VanDerhei. "Defined Contribution Plan Dominance Grows Across Sectors and Employer Sizes, While Mega Defined Benefit Plans Remain Strong: Where We Are and Where We Are Going." In Dallas L. Salisbury, ed., *Retirement Prospects in a Defined Contribution World*. Washington, DC: Employee Benefit Research Institute, 1997, pp. 55–92.
- Quick, Carol. "An Overview of Cash Balance Plans." *EBRI Notes*. No. 7 (Employee Benefit Research Institute, July 1999): 1–8.
- Sabelhaus, John. "Projecting IRA Balances and Withdrawals." *EBRI Notes*. No. 5 (Employee Benefit Research Institute, May 1999): 1–4.
- Uccello, Cori E. 401(k) Investment Decisions and Social Security Reform Prepared for Retirement 2000: A Multi-Disciplinary Symposium. Washington, DC, February, 2000.
- VanDerhei, Jack. "The Controversy of Traditional vs. Cash Balance Plans." *ACA Journal*. Vol. 8, no. 4 (Fourth Quarter 1999): 7–16.
- VanDerhei, Jack; Craig Copeland; and Carol Quick. "A Behavioral Model for Predicting Employee Contributions to 401(k) Plans: Preliminary Results." Prepared for Retirement 2000: A Multi-Disciplinary Symposium. Washington, DC, February 2000.
- VanDerhei, Jack; Sarah Holden; and Carol Quick. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 1998." *EBRI Issue Brief*. No. 218 (Employee Benefit Research Institute, February 2000).
- Yakoboski, Paul. "Male and Female Tenure Continues to Move in Opposite Directions." *EBRI Notes*. No. 2 (Washington, DC: Employee Benefit Research Institute, February, 1999a): 1–4.
- \_\_\_\_\_. "Retirement Plans, Personal Saving, and Saving Adequacy." *EBRI Issue Brief*. No. 219 (Employee Benefit Research Institute, March 2000a).
- \_\_\_\_\_. "IRA Assets Total More Than 2 Trillion in 1998." *EBRI Notes*. No. 5 (Washington, DC: Employee Benefit Research Institute, May 2000b): 1–3.
- \_\_\_\_\_. "Large Plan Lump-Sums: Rollovers and Cashouts." *EBRI Issue Brief*. No. 188 (Employee Benefit Research Institute, August 1997).
- \_\_\_\_\_. "Retirement Program Lump-Sum Distributions: Hundreds of Billions in Hidden Pension Income." *EBRI Issue Brief*. No. 146 (Employee Benefit Research Institute, 1994).
- \_\_\_\_\_. "Lump-Sum Distributions Total \$87.2 Billion in 1995." *EBRI Notes*. No. 10 (Employee Benefit Research Institute, October 1999b): 4–7.

# Welcome to the Employee Benefit Research Institute On-Line



<http://www.ebri.org>

[What's New?](#)

[What's Cool?](#)

[Destinations](#)

[Net Search](#)

[People](#)

[Software](#)

## Check Out EBRI's Web Site! [www.ebri.org](http://www.ebri.org)



- [About EBRI](#)
- [Benefit Fundamentals](#)
- [Fellows](#)
- [How to Join EBRI](#)
- [Media](#)
- [Members Only](#)
- [Programs](#)
- [Publications](#)
- [What's New](#)

### Employee Benefit Research Institute

**“To contribute to, to encourage, and to enhance the development of sound employee benefit programs and sound public policy through objective research and education.”**

[Site Map](#)

[Search](#)

**Now it's easier than ever to find exactly what you're looking for with our extensive search engine and site map. Just type in the key words and let us do the work for you.**

**And, you can order many of our publications online – with delivery within 48 hours! It's as easy as clicking a button!**

**EBRI Members – check out the special password-protected area where you have access to hundreds of EBRI publications and research online!**

**EBRI Periodicals subscribers also have a password that allows them to access all online *EBRI Issue Briefs* and/or *Notes*!**

**Visit EBRI on-line today: [www.ebri.org](http://www.ebri.org)**

# Now You have more ways to subscribe to *EBRI Issue Briefs* and *EBRI Notes* – two monthly publications that go beyond the headlines to examine, analyze, and interpret the vital issues in employee benefits.

**EBRI Issue Briefs**—provide expert evaluations of employee benefit issues and trends, as well as critical analyses of employee benefit policies and proposals. Each issue, ranging in length from 16–28 pages, thoroughly explores one topic. Recent topics include: Health Insurance Portability, ERISA, Sources of Health Insurance & Characteristics of the Uninsured, Results of the 1997 Retirement Confidence Survey, Defined Contribution Pension Plans, Medicare, Lump-Sum Rollovers & Cashouts, Trends in Health Insurance Coverage, Analyzing & Comparing Social Security Policies, and more.

**EBRI Notes**—provide up-to-date information on a variety of employee benefit topics. Each issue includes a feature article on an important benefit topic; a statistical article highlighting new benefits data; highlights of legislative, regulatory, and judicial activities; research and activities taking place at EBRI; and a list of new benefit-related publications and internet sites.



## ➤ Subscription Options:

You can subscribe to both *Issue Briefs* & *Notes*, *Issue Briefs* only, or *Notes* only.

## ➤ Delivery Options:

Choose to receive your publications either in printed format—mailed to you each month, or in pdf format—e-mailed to you each month. You must provide an e-mail address for delivery of pdf files (pdf format requires the free Adobe Acrobat viewer software to read the files. This software can be downloaded from EBRI’s web site or directly from Adobe’s web site).

## ➤ Subscription Rates:

<i>Issue Briefs</i> & <i>Notes</i>	➤	printed & mailed = \$199/year	➤	pdf & e-mailed = \$89/year
<i>Issue Briefs</i> only	➤	printed & mailed = \$99/year	➤	pdf & e-mailed = \$49/year
<i>Notes</i> only	➤	printed & mailed = \$99/year	➤	pdf & e-mailed = \$49/year

## ORDER FORM

### Issue Brief/Notes Subscription

- Printed/mailed—\$199/year  
 Pdf/e-mailed—\$89/year

### Issue Brief only Subscription

- Printed/mailed—\$99/year  
 Pdf/e-mailed—\$49/year

### Notes only Subscription

- Printed/mailed—\$99/year  
 Pdf/e-mailed—\$49/year

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_ Phone # \_\_\_\_\_

Address \_\_\_\_\_

City/State/ZIP \_\_\_\_\_

E-Mail Address (required for pdf subscribers) \_\_\_\_\_

Check enclosed    Please charge my  VISA     MasterCard     Amex    Card # \_\_\_\_\_

Exp. Date \_\_\_\_\_ Signature \_\_\_\_\_

Fax to: (202) 775-6312

Order Online: [www.ebri.org/ebrisub.htm](http://www.ebri.org/ebrisub.htm)

Mail to: EBRI, 2121 K Street, NW, Suite 600, Washington, DC 20037-1896

**EBRI****EMPLOYEE****BENEFIT****RESEARCH****INSTITUTE®****Issue Brief**

© 2000.  
**Employee  
 Benefit  
 Research  
 Institute-  
 Education  
 and Research  
 Fund.**  
**All rights  
 reserved.**

*EBRI Issue Brief* (ISSN 0887-137X) is published monthly at \$300 per year or is included as part of a membership subscription by the Employee Benefit Research Institute, 2121 K Street, NW, Suite 600, Washington, DC 20037-1896. Periodicals postage rate paid in Washington, DC. POSTMASTER: Send address changes to: *EBRI Issue Brief*, 2121 K Street, NW, Suite 600, Washington, DC 20037-1896. Copyright 2000 by Employee Benefit Research Institute. All rights reserved, No. 223.

**Who we are** The Employee Benefit Research Institute (EBRI) was founded in 1978. Its mission is to contribute to, to encourage, and to enhance the development of sound employee benefit programs and sound public policy through objective research and education. EBRI is the only private, nonprofit, nonpartisan, Washington, DC-based organization committed exclusively to public policy research and education on economic security and employee benefit issues. EBRI's membership includes a cross-section of pension funds, businesses, trade associations, labor unions, health care providers and insurers, government organizations, and service firms.

**What we do** EBRI's work advances knowledge and understanding of employee benefits and their importance to the nation's economy among policymakers, the news media and the public. It does this by conducting and publishing policy research, analysis, and special reports on employee benefits issues; holding educational briefings for EBRI members, congressional and federal agency staff, and the news media; and sponsoring public opinion surveys on employee benefit issues. **EBRI's Education and Research Fund (EBRI-ERF)** performs the charitable, educational, and scientific functions of the Institute. EBRI-ERF is a tax-exempt organization supported by contributions and grants.

**Our publications** *EBRI Issue Briefs* are monthly periodicals providing expert evaluations of employee benefit issues and trends, as well as critical analyses of employee benefit policies and proposals. Each issue, ranging in length from 16–28 pages, thoroughly explores one topic. *EBRI Notes* is a monthly periodical providing current information on a variety of employee benefit topics. *EBRI's Washington Bulletin* provides sponsors with short, timely updates on major federal developments in employee benefits. *EBRI's Fundamentals of Employee Benefit Programs* offers a straightforward, basic explanation of employee benefit programs in the private and public sectors. *The EBRI Databook on Employee Benefits* is a statistical reference volume on employee benefit programs and work force related issues.

**Subscriptions/orders** Contact EBRI Publications, (202) 659-0670; fax publication orders to (202) 775-6312. Subscriptions to *EBRI Issue Briefs* are included as part of EBRI membership, or as part of a \$199 annual subscription to *EBRI Notes* and *EBRI Issue Briefs*. Individual copies are available with prepayment for \$25 each (for printed copies) or for \$7.50 (as an e-mailed electronic file) by calling EBRI or from [www.ebri.org](http://www.ebri.org). **Change of Address:** EBRI, 2121 K Street, NW, Suite 600, Washington, DC 20037, (202) 775-9132; fax number, (202) 775-6312; e-mail: [PublicationsSubscriptions@ebri.org](mailto:PublicationsSubscriptions@ebri.org). **Membership Information:** Inquiries regarding EBRI membership, and/or contributions to EBRI-ERF should be directed to EBRI President Dallas Salisbury at the above address, (202) 659-0670; e-mail: [salisbury@ebri.org](mailto:salisbury@ebri.org)

**Editorial Board:** Dallas L. Salisbury, publisher; Steve Blakely, managing editor; Cindy O'Connor, production and distribution. Any views expressed in this publication and those of the authors should not be ascribed to the officers, trustees, members, or other sponsors of the Employee Benefit Research Institute, the EBRI Education and Research Fund, or their staffs. Nothing herein is to be construed as an attempt to aid or hinder the adoption of any pending legislation, regulation, or interpretative rule, or as legal, accounting, actuarial, or other such professional advice.

*EBRI Issue Briefs* is registered in the U.S. Patent and Trademark Office. ISSN: 0887-137X 0887-137X/90 \$ .50+.50

Could we send a friend or colleague a complimentary copy of *EBRI Issue Brief*?

Send an issue to \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City/State/ZIP \_\_\_\_\_

Your Name \_\_\_\_\_

Mail to: EBRI, 2121 K Street, NW, Suite 600, Washington, DC 20037  
 or Fax to: (202) 775-6312

Did you read this as a pass-along? Stay ahead of employee benefit issues with your own subscription to *EBRI Issue Briefs* for only \$49/year electronically e-mailed to you or \$99/year printed and mailed.

For more information about subscriptions, visit our Web site at [www.ebri.org](http://www.ebri.org) or complete the form below and return it to EBRI.

Name \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City/State/ZIP \_\_\_\_\_

Mail to: EBRI, 2121 K Street, NW, Suite 600, Washington, DC 20037  
 or Fax to: (202) 775-6312