

PERSPECTIVE

Vol. 11 / No. 1

February 2005

Perspective is a series of occasional papers published by the Investment Company Institute, the national association of the U.S. investment company industry.

Brian Reid,
executive editor;
Sue Duncan,
managing editor.

1401 H Street, NW

Suite 1200

Washington, DC 20005

www.ici.org

The Individual Retirement Account at Age 30: A Retrospective

By Sarah Holden, Kathy Ireland,
Vicky Leonard-Chambers, and Michael Bogdan*

INTRODUCTION

A little over 30 years ago, Congress enacted and President Gerald R. Ford signed into law the Employee Retirement Income Security Act (ERISA). The purpose of the Act was to protect and enhance Americans' retirement security by establishing comprehensive standards for employee benefit plans. The Act also created the Individual Retirement Account, or IRA.

To give the new account *flexibility* in accumulating assets for retirement, Congress designed a dual role for the IRA. One was to give individuals not covered by retirement plans at work an opportunity to save for retirement on their own in tax-deferred accounts made available through private financial institutions. The other was to give retiring workers or individuals changing jobs a means to preserve employer-sponsored retirement plan assets by allowing them to transfer, or roll over, plan balances into IRAs.

Since 1974, Congress has made many changes to the IRA. It created new IRAs with simple, understandable features designed to encourage

small businesses to make retirement plans available to their workers. It also created an IRA that only allows after-tax contributions but generally exempts investment earnings from taxation. In addition, Congress has raised limits on the amounts that individuals are allowed to contribute to their IRAs. And, at times, it expanded the eligibility for tax-deductible IRA contributions to all workers under age 70½ and, at other times, restricted eligibility.

The past 30 years clearly show that the IRA has successfully promoted and sustained retirement saving among many Americans. Individuals had \$3.0 trillion in IRAs by the end of 2003. IRAs were the largest component of the \$11.6 trillion U.S. retirement market, representing over one out of every four retirement dollars. Further attesting to the importance of the IRA in the retirement

TABLE OF CONTENTS

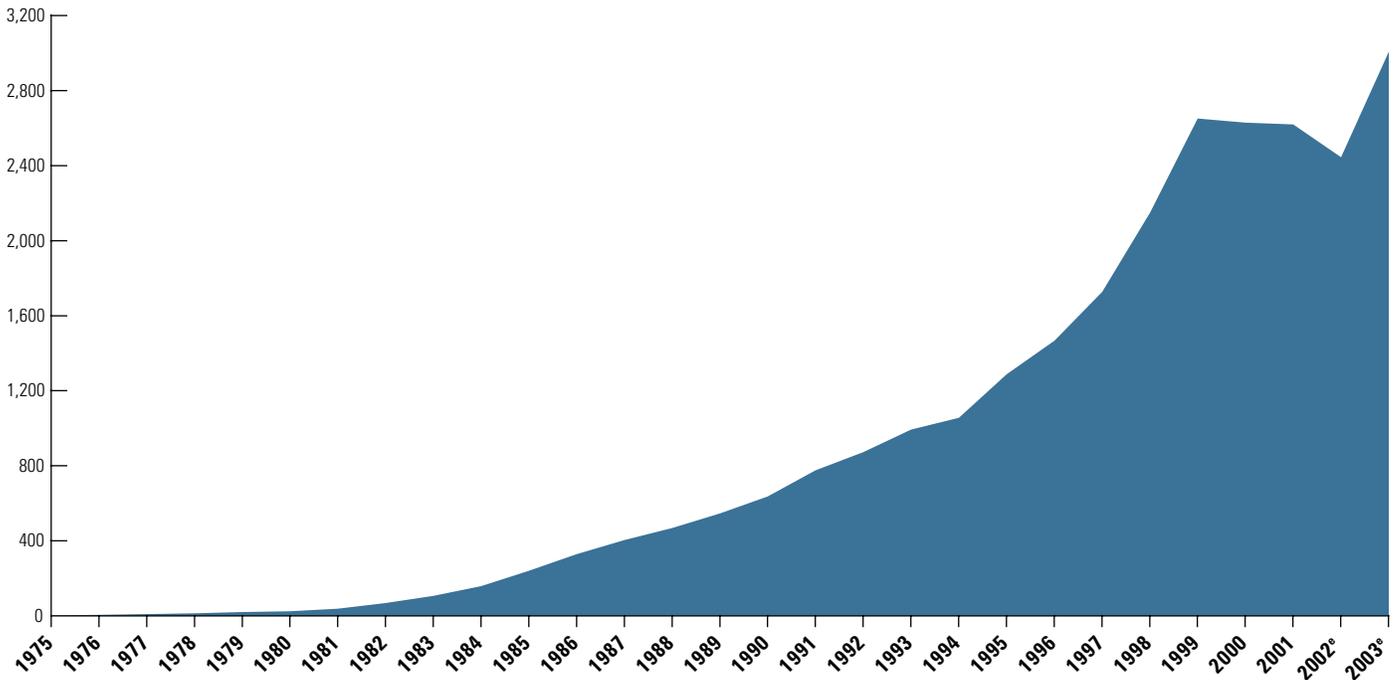
Introduction	1
History of IRAs	3
Traditional IRAs	4
Employer-Sponsored IRAs	8
Roth IRAs	9
Importance of IRAs to Retirement Saving	10
Characteristics of IRA-Owning Households	11
IRA Balances	14
IRA Investments	16
Withdrawals from Traditional IRAs	18
Conclusion	20
References	21

*Sarah Holden is Senior Economist at the Investment Company Institute. Kathy Ireland is Senior Associate Counsel, Vicky Leonard-Chambers is Assistant Director, Market and Policy Research, and Michael Bogdan is Senior Research Analyst.

FIGURE 1

IRA Assets, 1975–2003

(billions of dollars)



e=estimated

Sources: Investment Company Institute; IRS, Statistics of Income Division; Federal Reserve Board; and American Council of Life Insurers

saving system, 45.2 million U.S. households—or 40.4 percent of all U.S. households—owned IRAs in 2004.¹ In addition, the typical IRA-owning household holds more than one-fifth of its financial assets in IRAs.

The size of the IRA market, although impressive, tells only part of the IRA story. Experience from changing the rules governing IRAs shows that individuals respond to incentives that encourage the use of IRAs to build retirement assets. Incentives work best when rules, structure, and provisions are simple, understandable, and predictable. This is evident in the large volume of contributions during the period of the “universal” IRA in the early and mid 1980s when all workers under age 70½ were eligible to make tax-deductible contributions to IRAs. In contrast, the record shows that complexity discourages the use of IRAs. This is particularly evident in individuals’ negative reactions to the complicated rules that determined tax-deductible contribution eligibility after the elimination of the “universal” IRA.

Individuals’ strong response to the rollover provision also underscores the importance of *simplicity* in IRA design. IRAs not only offer workers

a way to maintain the tax advantage of assets accumulated in their employer-sponsored plans through rollovers at job change or retirement, IRAs themselves preserve the assets for retirement. By specially earmarking the assets for retirement, IRAs help workers make a commitment to preserving those assets for that goal. Very few workers tap their IRA nest eggs prior to retirement.

Finally, the increased use of new types of IRAs introduced in the late 1990s represents a positive response to the specialized savings opportunities they offer. Without doubt, individuals are using IRAs in a manner consistent with Congress’ intent, established more than 30 years ago.

This issue of *Perspective* provides a summary of the growth and development of the IRA, drawing

¹ The discussion in this report generally does not include education IRAs, which were created in 1997, first permitted in 1998, and renamed Coverdell Education Savings Accounts (ESAs) in 2001. For information on Coverdell ESAs, see Investment Company Institute (June 2004 and Fall 2003).

from surveys conducted by the Investment Company Institute (ICI), along with Internal Revenue Service (IRS) Statistics of Income (SOI) data and other recent research. This article starts with a section that recounts the legislative history of the IRA, focusing on individuals' responses to changes in IRA eligibility requirements, contribution limits, and other provisions. The section also describes contribution and roll-over activity and analyzes the aggregate responses to the introduction of new types of IRAs.

The next section highlights the importance of IRAs to retirement saving. This section compares the financial and demographic characteristics of IRA-owning households² and non-owning households. IRA balances and the investments that individuals hold in their IRAs are also discussed. Finally, this section documents the success of IRAs in preserving retirement savings by analyzing the withdrawal activity of IRA owners.

HISTORY OF IRAs

Over the past 30 years, U.S. households have utilized IRAs to accumulate \$3.0 trillion in assets (Figure 1). As a result, IRAs have become the single largest component of the \$11.6 trillion U.S. retirement market, representing about a quarter of total U.S. retirement assets at the end of 2003. Looking back, the historical record of IRAs suggests that savings incentive programs work best when the rules governing them are simple.

Since Congress created the original, or traditional, IRA in 1974, Congress has added new types of IRAs and changed eligibility and contribution rules several times. In 1978, Congress established the Simplified Employee Pension (SEP) IRA—an employer-based IRA (Figure 2). Between 1982 and 1986, Congress made the traditional IRA “universal” by allowing all workers under age 70½ to make tax-deductible IRA contributions. Beginning in 1987, Congress eliminated the universality of tax-deductible IRA contributions, but permitted workers meeting certain income limits to make such contributions even if they were covered by employer-sponsored retirement plans. In addition, after-tax, or nondeductible, contributions were permitted. In 1996, Congress added the Savings Incentive Match Plan for Employees, or SIMPLE, IRA, an account targeted to small businesses. Congress expanded the menu of offerings again in 1997 with the Roth IRA—a

FIGURE 2

Types of IRAs and Incidence of IRA Ownership, 2004

	Year Created	Number of U.S. Households With Type of IRA, 2004	Percent of U.S. Households With Type of IRA, 2004
Traditional IRA	1974 (Employee Retirement Income Security Act)	36.7 million	32.8%
SEP IRA	1978 (Revenue Act)	9.6 million	8.6%
SAR-SEP IRA	1986 (Tax Reform Act)		
SIMPLE IRA	1996 (Small Business Job Protection Act)		
Roth IRA	1997 (Taxpayer Relief Act)	14.3 million	12.8%

Note: Multiple responses included.

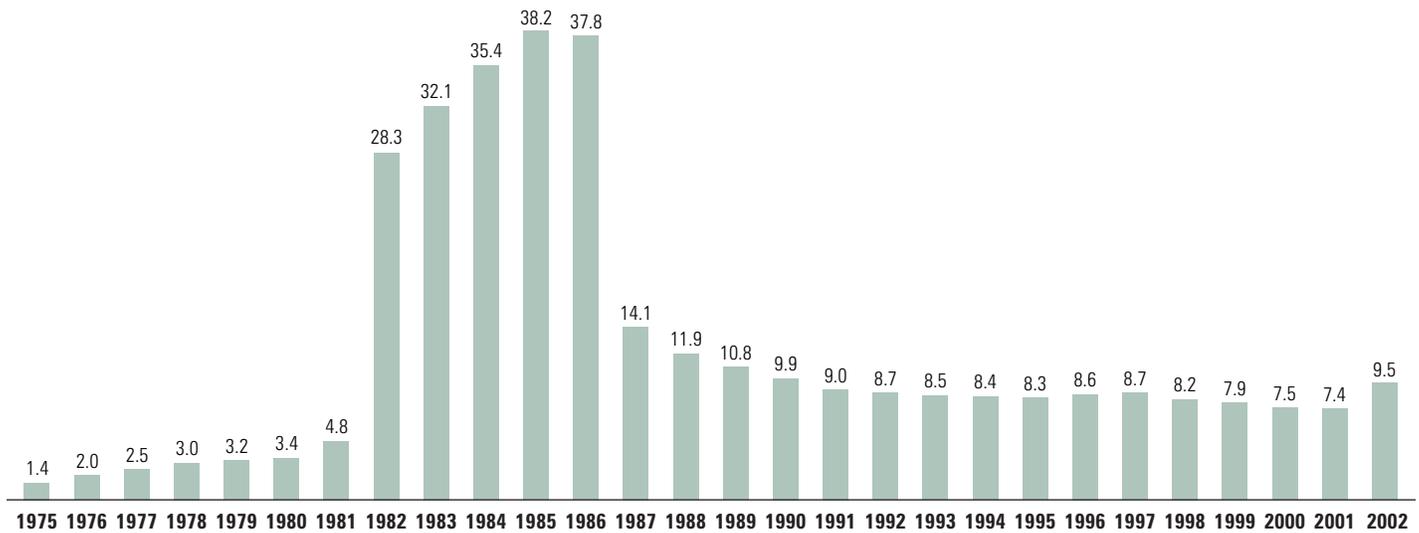
Sources: Investment Company Institute, 2004 Annual Tracking Survey and U.S. Census Bureau

² For complete details from the ICI's 2004 IRA survey, see "IRA Ownership in 2004," *Fundamentals*, Vol. 14, No. 1, February 2005, available at www.ici.org/pdf/fm-v14n1.pdf (to be referenced as ICI (February 2005) in the remainder of this publication).

FIGURE 3

Deductible Contributions to Traditional IRAs,* 1975–2002

(billions of dollars)



*Deductible IRA contributions reported on individual income tax returns (Form 1040)

Sources: IRS, Statistics of Income Division, Individual Income Tax Returns, Publication 1304, various years, and SOI Bulletin, various issues

retirement savings account for after-tax contributions—and raised the income limits for IRA contribution deductibility. Most recently, in 2001, Congress raised contribution limits for IRAs.

Traditional IRAs

Congress created the first, or traditional, IRA to have two roles: (1) to give workers without retirement plan coverage at work a tax-advantaged means to save for retirement, and (2) to preserve employer-sponsored plan assets by allowing them to be rolled over into IRAs at job change or retirement. Eligible workers under the age of 70½ annually could contribute to an IRA the lesser of \$1,500 or 15 percent of compensation. Individuals did not pay income taxes on these contributions (after-tax, or nondeductible, contributions were not allowed), but rather the contributions and investment earnings were taxed when withdrawn from the IRA.

To facilitate the preservation of retirement savings accrued in the workplace, the original IRA legislation also permitted workers in employer-sponsored retirement plans to transfer, or roll over, plan

assets into traditional IRAs when retiring or changing jobs. This feature continues to be very important because it allows workers to preserve assets accumulated in employer-sponsored plans for retirement in tax-advantaged specially earmarked accounts.

The IRA was immediately popular, with contributions totaling \$1.4 billion in 1975, the first year in which the new savings instrument was available (Figure 3). Contributions continued to rise steadily and reached \$4.8 billion in 1981.³

“Universal” IRAs

Concerned about the performance of the economy, Congress passed the Economic Recovery Tax Act of 1981 (ERTA) to spur economic growth through multi-year tax reductions.⁴ In addition, to address the low level of personal and retirement saving,⁵ Congress included provisions in ERTA

³ The Tax Reform Act of 1976 created the spousal IRA, which allowed individuals eligible to deduct IRA contributions to make contributions on behalf of the individual and his or her nonworking spouse. The contribution limit was the lesser of \$1,750 (\$875 for each spouse) or 15 percent of compensation. The spousal IRA became effective for tax years beginning after December 31, 1976.

⁴ See Joint Committee on Taxation (December 29, 1981).

⁵ *Ibid.*

to encourage Americans to save through IRAs. Starting in 1982, the Act raised the annual IRA contribution limit to the lesser of \$2,000 or 100 percent of compensation.⁶ Furthermore, it made the IRA “universal” by allowing any taxpayer under age 70½ with earned income to make a tax-deductible contribution to an IRA regardless of retirement plan coverage. Thus, any individual participating in an employer-sponsored retirement plan also was eligible to make a tax-deductible traditional IRA contribution.

During this period when IRA rules were simplified and eligibility was expanded, traditional IRA contributions rose sharply, averaging \$34.4 billion per year from 1982 through 1986 (Figure 3). In addition, research finds high persistence in contribution activity during this time period: 61 percent of IRA owners in 1982 contributed in every single year from 1982 through 1986, and over 80 percent of IRA owners participating in a given year contributed in the next year.⁷ Furthermore, the number of individuals saving for retirement through IRAs increased, including those with lower incomes.⁸

Elimination of Universal Deductibility

Congress eliminated universal deductible IRA eligibility in the Tax Reform Act of 1986 (TRA 1986). This move by Congress stemmed partly from the uncertain effect of the “universal” IRA on national savings.⁹ In addition, Congress felt the increased availability of employer-maintained plans reduced the need for “universal” IRAs.¹⁰

TRA 1986 re-established employer-sponsored retirement plan coverage as the basis for eligibility to make tax-deductible contributions to IRAs. For determining eligibility, both spouses in a married household were treated as being covered by a retirement plan at work if a plan covered at least one spouse. A household with retirement plan coverage at work retained its eligibility to make deductible contributions to an IRA only if household income was below certain limits. However, TRA 1986 for the first time allowed taxpayers under the age of 70½ with earned income to make nondeductible (after-tax) contributions (irrespective of retirement plan coverage at work).

Reintroducing limitations on deductible contributions, along with the added complexity of determining eligibility, drastically reduced deductible IRA contributions and reduced participation among many households who continued to be eligible. In 1987, the first year the new provisions were in effect, deductible contributions were \$14.1 billion, down from \$37.8 billion in 1986 (Figure 3).¹¹ Tax return data suggest that many taxpayers who remained eligible to make deductible contributions stopped making them.¹² For example, between 1986 and

⁶ A total of the lesser of \$2,250 or 100 percent of compensation could be contributed by a worker and a nonworking spouse, and the overall limit no longer had to be divided equally between the spouses (although neither individual’s IRA could accept more than the \$2,000 limit).

⁷ See Skinner (January 13, 1992).

⁸ See Skinner (January 13, 1992) and IRS SOI (1984 and 1989).

⁹ It is still a topic of debate today as to whether special tax-advantaged retirement accounts increase overall saving or merely reallocate saving from elsewhere into those accounts. For example, Poterba, Venti, and Wise (Fall 1996) conclude that IRA and 401(k) plan contributions represent new savings, while Engen, Gale, and Scholz (Fall 1996) conclude that the bulk of retirement saving has been reallocated from other savings. In addition, Gustman and Steinmeier (August 1998) find limited displacement, if any, and that pensions add to total wealth by at least half the value of the pension. Furthermore, Shefrin and Thaler (October 1988) suggest that people engage in “mental accounting,” dividing up their financial resources into buckets that they tap for current consumption at differing frequencies. Money allocated to a special retirement savings bucket is less likely to be spent than other available funds and thus more likely to remain as savings. (For additional discussion of this debate, see Hubbard and Skinner (Fall 1996).) In addition, Employee Benefit Research Institute (EBRI; 1981) concludes that increasing savings specifically set aside for retirement is “a desirable and appropriate national objective.”

¹⁰ See Joint Committee on Taxation (May 4, 1987).

¹¹ Smith (December 2002) finds lower persistence in contributions among IRA owners from 1987 through 1996. For example, although a substantial two-thirds to three-quarters of IRA owners contributing in a given year contributed again in the next year, these rates are lower than the more than 80 percent repeat contribution activity in neighboring years observed during the time of “universal” IRAs. In addition, only 10 percent of IRA owners in 1987 contributed every year from 1987 through 1996. However, over that time period the percentage of individuals ineligible to make full deductible IRA contributions nearly doubled from about one-fifth to two-fifths.

¹² For example, see Joint Economic Committee (March 10, 2004), which indicates that analysis of IRS SOI data suggests that the presence of income limits reduces participation rates at all income levels. Hrungr (2004) cites literature analyzing the role that taxpayer confusion plays in the reduction in contribution activity. In addition, Burnham (August 2003) finds that some lower-income individuals who are covered by employer-sponsored plans contribute to their IRAs as if they were constrained by the same contribution limits as higher-income individuals when they are not (analyzing 1997 IRS SOI data). Smith (December 2002) finds lower participation rates among taxpayers in the phase-out ranges, which he suggests may be due to the complexity of calculating a partial deduction and/or the expectation of being above the income range in the future. Furthermore, some research suggests that a reduction in the promotion of IRAs after universality was removed also had an impact (see Hrungr (2004) for references).

1987, the number of tax returns filed with deductible IRA contributions and adjusted gross incomes (AGI) of less than \$25,000 declined 30 percent, despite continued eligibility in 1987 based on income limits for many of those taxpayers.¹³

Deductible contributions continued to drift downward over the next several years before leveling off at around \$8.5 billion in the mid 1990s (Figure 3). Congress eased restrictions on eligibility in the Taxpayer Relief Act of 1997, which became effective on January 1, 1998, by raising the income limits that determine whether an individual covered by an employer-sponsored retirement plan also is eligible to make deductible IRA contributions. In addition, Congress allowed spouses not covered by qualified retirement plans at work to make deductible contributions irrespective of their partner's coverage.¹⁴ Despite these measures, deductible IRA contributions in the late 1990s and early 2000s remained well below the high levels reached during the 1982–86 period of universality.¹⁵

EGTRRA

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) provided a boost to traditional IRA contributions. Effective in 2002, EGTRRA increased annual contribution limits for the first time in 20 years.¹⁶ In addition, to encourage more saving by older workers, it permitted “catch-up” contributions for individuals age 50 or older.¹⁷ These changes were successful in motivating individuals to increase deductible contributions to traditional IRAs, which rose to

\$9.5 billion in 2002, the largest amount since 1990 (Figure 3). ICI household survey data provide an even more recent snapshot of contribution activity among households since the enactment of EGTRRA.

Households have responded to both the higher contribution limits and the availability of catch-up contributions. In both 2002 and 2003, among households making contributions to traditional IRAs, about half contributed \$3,000 or more (Figure 4).^{18,19} Furthermore, about a third of the contributing households that were eligible to make catch-up contributions did so and in all cases contributed the maximum of \$3,500.²⁰

IRA Rollovers

As important as IRAs have been in providing a tax-deferred contribution-based retirement savings program for workers not covered by employer-sponsored retirement plans, they also have been extremely valuable as a way for workers to preserve retirement plan assets upon job change or retirement.²¹ The importance of this use of the IRA is evident in the annual magnitude of IRA

¹³ In 1987, deductible contributions were allowed for single-filer tax returns with modified AGI of \$25,000 or less even if the individual had retirement plan coverage at work. Deductible contributions were allowed for married-filing-joint tax returns with modified AGI of \$40,000 or less, even if one of the individuals had retirement plan coverage at work. Between 1986 and 1987, a 38 percent drop occurred in the number of tax returns with deductible IRA contributions and AGI between \$25,000 and \$40,000, even though it is likely that many of these taxpayers still would have been eligible to make deductible contributions. See IRS SOI (1989) and (1990).

¹⁴ Special income limits apply for this purpose, however.

¹⁵ Factoring in nondeductible contributions to traditional IRAs increases the average annual contribution amount by about \$2.5 billion between 1999 and 2001 (latest data available; Sailer and Holden (2004), Sailer and Nutter (Spring 2004), and tabulations by IRS SOI Division).

¹⁶ The traditional IRA contribution limits set in 1974 remained in place until new limits went into effect in 1982; the next contribution limit change occurred with EGTRRA. Going forward, EGTRRA stipulates that the traditional IRA contribution limit will be \$4,000 in 2005 through 2007, \$5,000 in 2008, and indexed annually for inflation in \$500 increments thereafter. However, the provisions of EGTRRA expire in 2010 unless extended by Congress. See Joint Committee on Taxation (January 24, 2003).

¹⁷ The life-cycle pattern of savings suggests that older individuals are able to save at higher rates because they no longer face the expenses of buying a home and/or putting children through college. An augmented version of the life-cycle theory predicts that the optimal savings pattern increases with age. For a summary discussion of life-cycle models, see Browning and Crossley (Summer 2001). For a more extensive discussion, see Engen, Gale, and Uccello (December 1999).

¹⁸ The individual annual contribution limit was \$3,000 in 2003 or \$3,500 for individuals age 50 or older. See Internal Revenue Service, *Individual Retirement Arrangements (IRAs)*, Publication 590, for tax-year 2003.

¹⁹ Slightly more than a quarter of the households with traditional IRAs made contributions in the 2003 tax year. Earlier surveys produced similar results: in tax-year 2002, 23 percent contributed; in tax-year 2001, 27 percent contributed; and in tax-year 2000, 28 percent contributed. For a comparison of the demographic and financial characteristics of households with traditional IRAs making contributions and those not making contributions, see Figure 6 in ICI (February 2005).

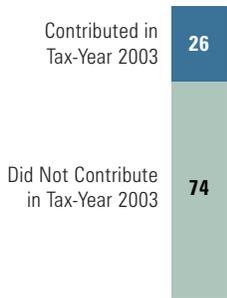
²⁰ Based on tabulations from small sub-samples of the ICI 2003 and 2004 IRA Surveys.

²¹ ICI (Fall 2000) finds that 84 percent of retirees who received lump-sum distributions from defined contribution retirement plans between 1995 and 2000 reinvested the proceeds in IRAs. Purcell (June 30, 2003) and Copeland (July 2002), analyzing Survey of Income and Program Participation (SIPP) data, find a rising trend over time in the proportion of lump-sum distribution recipients preserving the entire retirement plan balance. Nevertheless, studies have shown that larger account balances tend to get rolled over at job change, while small account balances tend to get cashed out (see Holden and VanDerhei (November 2002) for references; see also Purcell (June 30, 2003)). Recent legislative and regulatory changes aim to preserve more small account balances by providing that employer-sponsored plans that otherwise would distribute those amounts to participants must roll them into IRAs, unless the participant opts out.

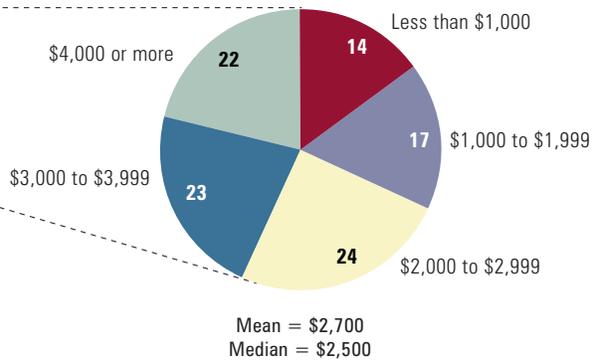
FIGURE 4

Household Contributions to Traditional IRAs in Tax-Year 2003

Households With Traditional IRAs in 2004
(percent)



Amount Contributed to Traditional IRAs in Tax-Year 2003
(percent of traditional IRA households that contributed)



Source: Investment Company Institute, 2004 IRA Survey

rollovers. Rollovers trended steadily upward—from \$114 billion in 1996 to \$226 billion in 2000 and were \$187 billion in 2001, the most recent year for which the data are available (Figure 5).^{22,23}

Workers of all age and income groups take advantage of rollovers²⁴ and the holding of IRA rollover assets is widespread among traditional IRA owners. Nearly half of all U.S. households with traditional IRAs hold rollover assets in these accounts (Figure 6).²⁵ The majority of those with rollover assets have conducted only one rollover, but 28 percent have rolled over assets from employer plans two or more times. Reflecting the mobility of the American workforce, 70 percent of traditional IRA owners with rollover assets cite a job change as the reason for the rollover. Over

FIGURE 5

Traditional IRA Contributions, Rollovers, Withdrawals, and Assets, 1996–2003

(billions of dollars)

	Contributions ¹	Rollovers ²	Withdrawals ³	Total Assets ⁴
1996	14.1	114.0	45.5	N/A
1997	15.0	121.5	55.2	1,642.3 ^e
1998	11.9	160.0	74.1	1,974.2
1999	10.3	199.9	87.1	2,422.8
2000	10.0	225.6	99.0	2,407.0
2001	9.8	187.1	94.3	2,394.9
2002	N/A	N/A	88.2	2,219.0 ^e
2003	N/A	N/A	N/A	2,730.0 ^e

e = estimated

N/A = not available

¹ Both deductible and nondeductible contributions to traditional IRAs.

² Primarily rollovers from employer-sponsored retirement plans.

³ Taxable IRA distributions reported on Form 1040, which have been primarily from traditional IRAs.

⁴ Fair market value of assets at year-end.

Sources: Investment Company Institute; IRS, Statistics of Income Division; and SOI Bulletin, various issues

²² These data are from tabulations by the IRS SOI Division, based on a weighted sample of information from Form 5498 and individual tax returns (Form 1040). Tax-year 2001 is the latest year for which this information is available from the IRS. See Sailer and Holden (2004) and Sailer and Nutter (Spring 2004).

²³ Rollovers to IRAs are permitted from qualified employer-sponsored plans. While rollovers are generally associated with defined contribution plans, 43 percent of full-time employees (in private industry) in 2000 were at firms offering defined benefit plans containing a lump-sum distribution option at retirement (see U.S. Department of Labor, Bureau of Labor Statistics (January 2003)).

²⁴ IRS SOI data indicate that 36 percent of taxpayers making rollovers in 2000 had less than \$50,000 in AGI on their tax returns, while 27 percent had AGI of \$100,000 or more. Rollovers also come from workers of all ages: 17 percent of taxpayers with rollovers were under age 30; 24 percent were in their thirties; 23 percent were in their forties; 23 percent were in their fifties; and 14 percent were 60 or older. See Sailer and Nutter (Spring 2004).

²⁵ For a comparison of the demographic and financial characteristics of households with traditional IRAs with rollovers and those without rollovers, see Figure 8 in ICI (February 2005).

FIGURE 6

Households With Rollovers in Traditional IRAs,¹ 2004

(percent)

Traditional IRA rollover due to: ²	
Job change, layoff, or termination	70
Retirement	27
Other	8
Amount of most recent traditional IRA rollover:	
All assets in employer-sponsored retirement plan were rolled over	91
Some assets in employer-sponsored retirement plan were rolled over	9
Number of traditional IRA rollovers conducted:	
One	72
Two	20
Three	4
Four or more	4
Year of most recent traditional IRA rollover:	
Before 1994	21
1994 through 1998	28
1999 through 2002	34
2003 through June 2004	17

¹ Forty-six percent of households owning traditional IRAs have traditional IRAs that include rollovers from employer-sponsored retirement plans.

² Multiple responses included.

Note: Number of respondents varies.

Source: Investment Company Institute, 2004 IRA Survey

90 percent of those with rollover assets transferred the entire balance from their employer-sponsored account when making their most recent rollover,²⁶ a sign that they are aware of the importance of maintaining these assets for retirement. More than a fifth conducted their most recent rollover before 1994, while 17 percent rolled over assets in 2003 or the first half of 2004.

Employer-Sponsored IRAs

Retirement plan coverage has been and continues to be much lower among small businesses than among medium and large establishments.²⁷ The two reasons that small businesses most frequently cite for not offering a retirement plan are that revenue is too uncertain or too low (cited by 27 percent) and that plans cost too much to set up and administer (cited by 16 percent).^{28,29}

At times during the IRA's 30-year history, Congress has acted to encourage IRA formation at small businesses. Congress created the Simplified Employee Pension (SEP) IRA in the Revenue Act of 1978 because of concern that the complex regulations governing employer-sponsored retirement plans were preventing small employers from offering retirement plans to their workers.^{30,31} SEP IRAs were designed to benefit small businesses, although they may be offered by businesses of all sizes. More recently, in the Small Business Job Protection Act of 1996, Congress created the Savings Incentive Match Plan for Employees, or SIMPLE, IRA, specifically for employers with 100 or fewer employees. At the end of 2003, the older and more established SEP IRAs held an estimated \$150 billion in assets,³²

²⁶ This result is consistent with earlier SIPP data: Copeland (July 2002) finds that 91.5 percent of individuals rolling over (at least some of) their most recent distribution (to another tax-qualified plan) through 1998 rolled over the entire amount.

²⁷ U.S. Department of Labor, Bureau of Labor Statistics (November 2004) indicates that 44 percent of individuals employed by private establishments with 99 or fewer workers had retirement plan coverage in March 2004, compared with 77 percent of individuals employed by private establishments with 100 or more workers. In addition, Copeland (October 2004), which analyzes the U.S. Census Bureau's Current Population Survey (CPS) data, finds that 20.6 percent of wage and salary workers employed at private establishments with 10 or fewer workers had retirement plan coverage in 2003, compared with 76.3 percent of wage and salary workers employed at private establishments with 1,000 or more workers.

²⁸ See EBRI (2003).

²⁹ In addition, Congress has expressed concern over the cost of compliance (see Joint Committee on Taxation (December 18, 1996)).

³⁰ ERISA, which created the traditional IRA, included a provision allowing for the creation of group IRAs by employers or certain associations of employees for their employees or members (see Internal Revenue Code § 408(c)). Unlike IRAs established outside the group environment, these IRAs are also subject to some of the regulatory requirements applied to employer-sponsored benefit plans (for example, group IRAs must file Form 5500 with the Department of Labor, while SEP, SAR-SEP, and SIMPLE IRAs generally are exempted from filing Form 5500). Group traditional IRAs appear to represent a negligible part of the total IRA market (see Form 5500 tabulations reported in the U.S. Department of Labor (Summer 2004, Winter 2001–2002, Winter 2001, Winter 1999–2000, Spring 1999, Spring 1998, Winter 1997, and Winter 1996)).

³¹ In addition to simplifying the regulatory burden, SEP IRAs also have higher contribution limits than traditional group IRAs. A salary reduction (SAR) feature was added to SEP IRAs in the Tax Reform Act of 1986. The Small Business Job Protection Act of 1996 prohibited the formation of new SAR-SEP IRAs after December 31, 1996, in connection with the establishment of SIMPLE IRA plans.

³² SEP IRA contributions averaged \$9.8 billion per year from 1999 through 2001 (latest data available; Sailer and Holden (2004), Sailer and Nutter (Spring 2004), and tabulations by IRS SOI Division).

FIGURE 7

Total IRA Assets by Type of IRA, 1997–2003

(billions of dollars)

	Traditional	Employer-Sponsored		Roth	Total*
		SEP and SAR-SEP	SIMPLE		
1997	1,642.3 ^e	84.7	0.6	0.0	1,727.6
1998	1,974.2	115.4	3.6	56.8	2,150.1
1999	2,422.8	142.9	9.1	76.2	2,651.2
2000	2,407.0	134.0	10.4	77.6	2,629.3
2001	2,394.9	131.4	13.6	79.3	2,619.4
2002 ^e	2,219.0 ^e	131.0 ^e	15.0 ^e	80.0 ^e	2,445.0 ^e
2003 ^e	2,730.0 ^e	150.0 ^e	25.0 ^e	102.0 ^e	3,007.0 ^e

e = estimated

*Total contains negligible amount of education IRA assets (which were renamed Coverdell ESAs in 2001).

Sources: Investment Company Institute and IRS, Statistics of Income Division

while SIMPLE IRAs had accumulated an estimated \$25 billion in assets (Figure 7).³³

Although relatively new, there has been healthy growth in the number of SIMPLE IRA plans and participants. The number of SIMPLE IRA plans grew an average of 25 percent per year between 1998 and 2003, and the number of participants increased at a 27 percent annual rate.^{34,35} At the end of 2003, an estimated 1.7 million participants were in some 375,300 SIMPLE IRA plans (Figure 8).

Roth IRAs

The Taxpayer Relief Act of 1997 introduced the Roth IRA, named after its leading proponent, the late Senator William V. Roth Jr. Contributions

to Roth IRAs are not deductible from current income, but investment earnings may generally be withdrawn tax free (features that Congress felt might be appealing to some taxpayers³⁶). In addition, the Roth IRA does not have a minimum distribution requirement and contributions are allowed after age 70½.³⁷ Holders of other types of IRAs may, under certain circumstances, convert some or all of those holdings to Roth IRAs, although the converted amounts generally are taxable as current income.

The Roth IRA was immediately successful. Contributions to Roth IRAs were \$8.6 billion in 1998, the first year in which an account could be opened. Traditional IRA owners converted a record \$39.3 billion of assets into Roth IRAs in 1998.³⁸ In 2001 (the latest available data), Roth IRA contributions totaled \$11.1 billion and exceeded traditional IRA contributions in that year.³⁹ With these infusions, along with investment returns, assets in Roth IRAs stood at an estimated \$102.0 billion at the end of 2003 (Figure 7).

³³ Contributions to SIMPLE IRAs have increased each year since the SIMPLE IRA was introduced, reaching \$5.5 billion in 2001 (latest data available; see Sailer and Holden (2004), Sailer and Nutter (Spring 2004) and ICI (June 2004)).

³⁴ Based on results from semi-annual surveys of 24 ICI member firms that hold approximately three-quarters of the SIMPLE IRA assets invested in mutual funds. At the end of 2001, IRS SOI tabulations indicate there were nearly 2.0 million taxpayers with SIMPLE IRAs (see Sailer and Holden (2004)). ICI's member survey covered nearly 1.4 million participants at the end of 2001, or 70 percent of the SOI universe. ICI's member survey covered about 60 percent of all SIMPLE IRA assets.

³⁵ In addition, growth in 401(k) plans during the 1990s was concentrated in the small plans area (plans with 99 or fewer participants). From 1992 to 1999 (latest data available), the number of 401(k) plans increased 140 percent, with the growth in 401(k) plans at small businesses accounting for 86 percent of that growth (see U.S. Department of Labor (Summer 2004 and Winter 1996)).

³⁶ See Joint Committee on Taxation (December 17, 1997).

³⁷ Taxpayers must have earned income not exceeding certain limits to make Roth IRA contributions. Contribution limits are the same as traditional IRA contribution limits, although the annual combined contribution by a taxpayer to both Roth and traditional IRAs must not exceed the limit. Catch-up contributions are allowed for individuals age 50 or older.

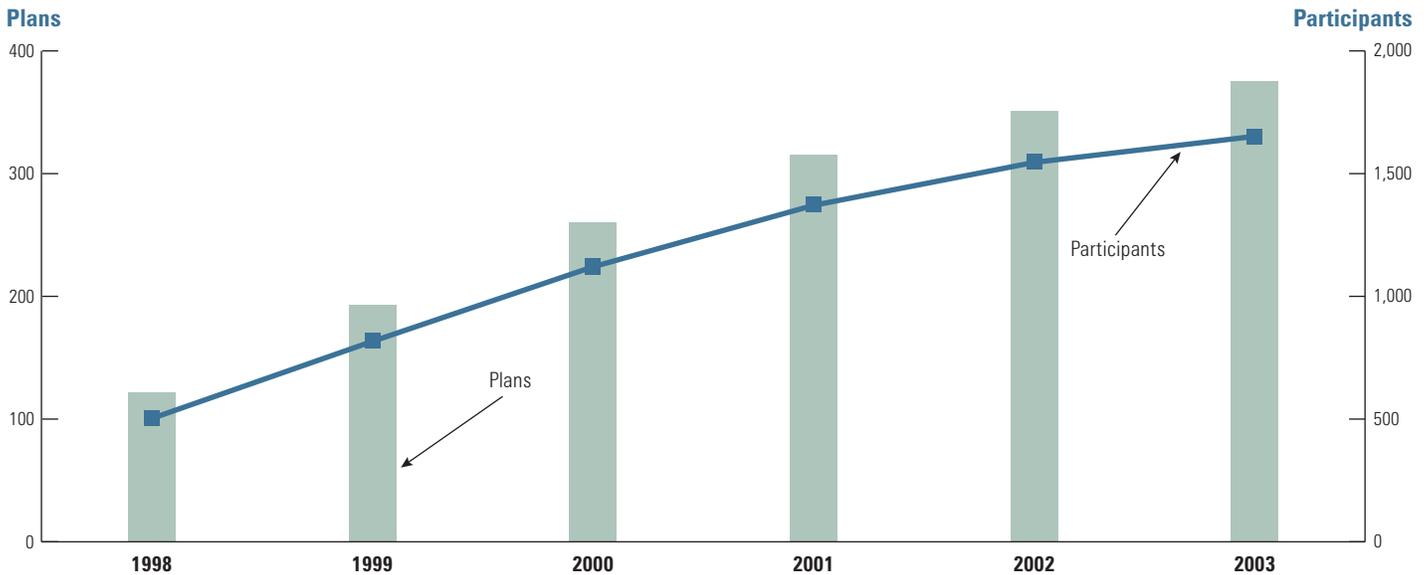
³⁸ See Campbell, Parisi, and Balkovic (Fall 2000). Conversions were largest in 1998 when the income tax owed on converted amounts could be spread over four tax years. Conversions were \$3.7 billion in 1999, \$3.2 billion in 2000, and \$3.1 billion in 2001 (see Sailer and Holden (2004), Sailer and Nutter (Spring 2004), and ICI (June 2004)).

³⁹ Total traditional IRA contributions were \$9.8 billion in tax-year 2001 (deductible traditional IRA contributions were \$7.4 billion, nondeductible contributions were \$2.4 billion). See Sailer and Holden (2004).

FIGURE 8

SIMPLE IRA Plans and Participants for a Sample of Mutual Fund Companies, 1998–2003

(thousands)



Note: The firms surveyed held about 60 percent of all SIMPLE IRA assets (in 2001).

Source: Investment Company Institute, Survey of a Segment of Member Mutual Fund Companies

Attesting further to the popularity of Roth IRAs, 14.3 million households owned these IRAs in 2004 (Figure 2). For almost a third of these households, the Roth IRA was the first IRA that they had owned,⁴⁰ suggesting that this new IRA has increased IRA ownership.

Households with Roth IRAs also responded to the higher contribution limits and catch-up contributions legislated in EGTRRA. In both 2002 and 2003, among households making contributions to Roth IRAs,⁴¹ about half included at least one individual contributing at the \$3,000 limit. Furthermore, among contributing households that had an individual age 50 or older, 41 percent took advantage of the catch-up contribution feature in 2003, while 30 percent did so in 2002, in all cases contributing the allowable limit of \$3,500.⁴²

IMPORTANCE OF IRAs TO RETIREMENT SAVING

The role of IRAs in saving for retirement and the accumulation of retirement assets is substantial. At the end of 2003, IRAs represented the largest component of the U.S. retirement market and accounted for 26 percent of the \$11.6 trillion in U.S. retirement assets (Figure 9). In addition, large numbers of households have chosen to own IRAs over time.⁴³ In the middle of 2004, 45.2 million households owned IRAs, amounting to approximately two out of every five households

⁴⁰ See Figure 4 in ICI (February 2005).

⁴¹ Forty-one percent of households with Roth IRAs in 2004 contributed to these accounts in the 2003 tax year (see Figure 4 in ICI (February 2005)). Fifty-three percent of households with Roth IRAs in 2003 made contributions in the 2002 tax year (see ICI (September 2003)).

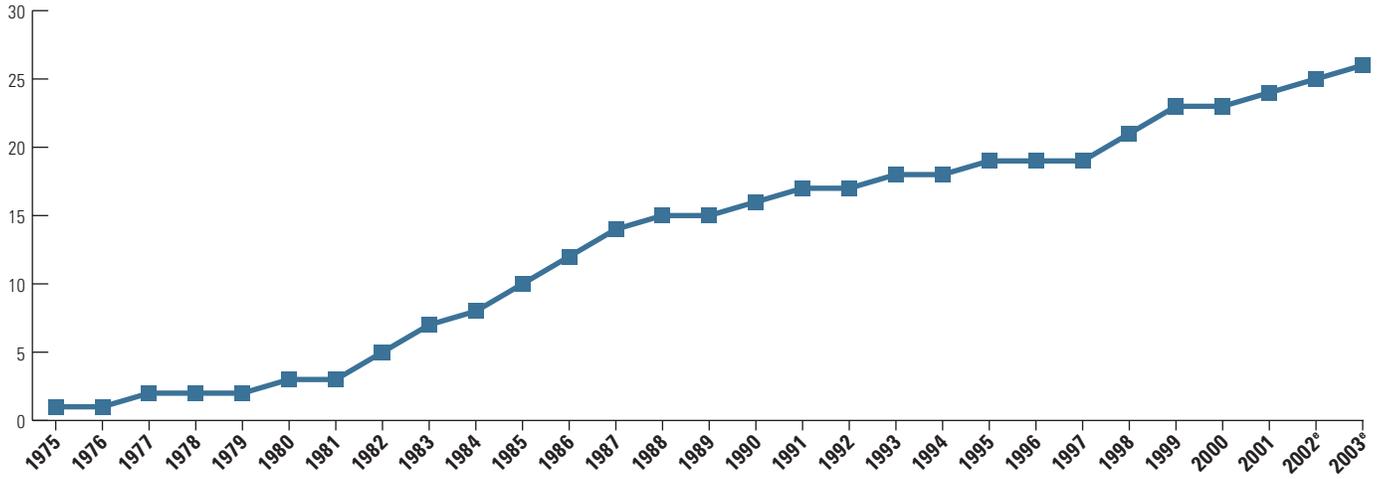
⁴² Based on tabulations from small sub-samples of the ICI 2003 and 2004 IRA Surveys.

⁴³ IRS SOI tabulations indicate that the number of taxpayers owning IRAs grew 53.0 percent between 1989 and 2001 (the latest data available; an average growth rate of 3.6 percent per year), from 31.6 million taxpayers with IRAs at year-end 1989 to 48.4 million taxpayers with IRAs at year-end 2001 (see Sailer and Holden (2004) and Sailer, Weber, and Gurka (2003)). From 2000 to 2004, ICI household survey data indicate that the number of households owning IRAs grew 6.9 percent (rising 1.7 percent per year on average; Figure 10). In addition, Copeland (July 2003) points to a rising trend in IRA and Keogh ownership by households based on analysis of data from the Federal Reserve Board's Survey of Consumer Finances (SCF).

FIGURE 9

Share of U.S. Retirement Assets Held in IRAs, 1975–2003

(percent)



e = estimated

Sources: Investment Company Institute; IRS, Statistics of Income Division; Federal Reserve Board; National Association of Defined Contribution Administrators; and American Council of Life Insurers

(Figure 10). Furthermore, the typical IRA-owning household has more than a fifth of all its financial assets in IRAs (Figure 11).

Characteristics of IRA-Owning Households

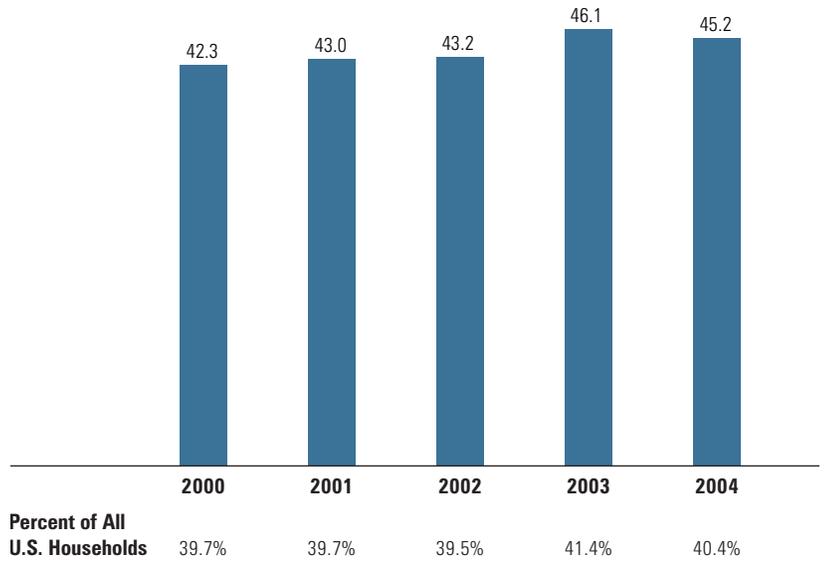
Households using IRAs to save for retirement tend to have higher incomes and financial assets than households not using IRAs. Decisionmakers in IRA-owning households also are more likely to hold college degrees and to be married and employed. Typically, they are older as well. The differences between IRA-owning and non-owning households are generally consistent with findings from research on patterns of household saving activity.

To some extent, the differences in demographic and financial characteristics between IRA owners and non-owners reflect differences in their propensity, or tendency, to save. There is a vast body of research linking demographic characteristics with propensity to save.⁴⁴ For

FIGURE 10

U.S. Households Owning IRAs, 2000–2004

(millions of U.S. households)^{1,2}



¹ The number of U.S. households owning IRAs in 2000 through 2004 is based on the following U.S. Census Bureau total U.S. household estimates: 106.4 million in 2000, 108.2 million in 2001, 109.3 million in 2002, 111.3 million in 2003, and 112.0 million in 2004 (U.S. Census Bureau, Current Population Reports, P60-226 (August 2004)).

² Excludes ownership of Coverdell Education Savings Accounts, which were referred to as education IRAs before July 2001.

Sources: Investment Company Institute, Annual Tracking Survey (2000 through 2004) and U.S. Census Bureau

⁴⁴ For a summary of the literature on savings and consumption, see, for example, Venti and Wise (February 2000) and Gustman and Steinmeier (August 1998). For variation in the percentage of families who saved by household characteristics, see Aizcorbe, Kennickell, and Moore (January 2003).

FIGURE 11

Characteristics of IRA-Owning, Non-Owning, and All U.S. Households, 2004

	Households Owning Any Type of IRA ¹	Households Not Owning Any Type of IRA ²	All U.S. Households ²
Median Per Household			
Age of household sole or co-decisionmaker for investing	49 years	45 years	47 years ³
Household income	\$62,500	\$35,000	\$45,000 ⁴
Household financial assets ³	\$172,100	\$21,700	\$50,000
Household financial assets in all types of IRAs	\$25,000	N/A	N/A
Share of household financial assets in IRAs	21%	N/A	N/A
Percent of Households			
Household sole or co-decisionmaker for investing:			
Married	66	46	54 ^c
College or postgraduate degree	57	28	39
Employed full- or part-time	71	61	65
Self-employed ⁴	23	16	18
Retired from lifetime occupation	26	26	26
Household has defined contribution plan account	68	43	53
Household has multiple types of IRAs ⁵	30	N/A	N/A
Types of IRAs owned: ⁵			
Traditional IRA	81	N/A	33
Roth IRA	32	N/A	13
Employer-sponsored IRA ⁶	21	N/A	9

N/A = not applicable

¹ All data in this column are for mid 2004 from ICI's 2004 Annual IRA Survey.

² All data in this column are for mid 2004 from ICI's 2004 Annual Tracking Survey, which is a survey of 3,000 randomly selected U.S. households conducted in June 2004.

³ Includes assets in employer-sponsored defined contribution retirement plans but excludes primary residence.

⁴ Of household sole or co-decisionmakers who are employed.

⁵ Multiple responses included.

⁶ Includes SIMPLE IRAs, SEP IRAs, and SAR-SEP IRAs.

^a U.S. Census data for March 2003 report a median age of individuals heading U.S. households of 47.5 years (see U.S. Census Bureau, Current Population Reports (September 15, 2004)).

^b U.S. Census data for 2003 report a median household income of \$43,318 (see U.S. Census Bureau, Current Population Reports, P60-226 (August 2004)).

^c U.S. Census data for March 2004 report 51.5 percent of U.S. households were married (see U.S. Census Bureau, Current Population Reports, P60-226 (August 2004)).

Note: Number of respondents varies.

Sources: Investment Company Institute, 2004 IRA Survey and 2004 Annual Tracking Survey and U.S. Census Bureau

example, researchers have found that married households are more likely to save than singles. In addition, research shows that saving activity rises with educational attainment and household income. IRAs, as a tool for savings, tend to attract households that save and thus, to the extent that more higher-income, higher-educated, and married households save, IRA owners will tend to have those characteristics.

Nevertheless, IRA owners come from a wide range of ages, educational backgrounds, and income groups because there are savers within each of these demographic groupings. For example, even among

households with the same lifetime income, research finds substantial variation in saving related to households' varying propensities to save.⁴⁵ A household with a higher propensity to save generally starts saving at an earlier age than other households, thereby enabling high savers to accumulate more assets. Higher financial assets accumulated by households owning IRAs result from their persistence in saving for retirement.

⁴⁵ See Venti and Wise (February 2000).

Household Income

The typical IRA-owning household has higher income than the typical non-owning household. The median income of IRA-owning households was \$62,500 in mid 2004, compared with \$35,000 among non-owning households (Figure 11).

The difference likely reflects several factors. For instance, household income tends to rise with educational attainment⁴⁶ and IRA owners tend to have more education than non-owners. For example, 57 percent of heads of IRA-owning households have college or postgraduate degrees, compared with 28 percent of individuals heading households without IRAs (Figure 11). Another factor is that households with IRAs are more likely to be headed by married couples, which typically have higher household incomes than non-married households.⁴⁷ Two-thirds of financial decisionmakers in IRA households are married, compared with a little less than half of non-owning households. In addition, because saving activity tends to rise with household income,⁴⁸ IRA ownership would likely be an indicator of the propensity to save, and thus the income levels of households saving through IRAs would be expected to be higher.

Household Financial Assets

Households owning IRAs typically have accumulated higher levels of financial assets than non-owning households. The factors behind the

differences in holdings of financial assets are likely the same as those creating differences in household incomes between IRA owners and non-owners.⁴⁹ Reflecting their higher propensity to save, households owning IRAs are more likely also to have defined contribution plan assets compared with households not owning IRAs (Figure 11).⁵⁰

Households owning traditional IRAs have greater median financial assets (but lower median incomes) than households holding either Roth or employer-sponsored IRAs (Figure 12). Roth IRA-owning households had the lowest median financial assets of all IRA households as of mid 2004, probably because they tend to be younger than owners of other types of IRAs.

Age

The median age of financial decisionmakers in IRA-owning households was 49 years in 2004, while the median age of individuals heading non-owning households was 45 years (Figure 11). Nonetheless, IRA owners represent a wide range of age groups, with 19 percent younger than age 35, 45 percent between age 35 and 54, and 37 percent age 55 or older. Financial decisionmakers in households owning traditional IRAs tend to be older than those in households with Roth or employer-sponsored IRAs (Figure 12).

Working Status

Financial decisionmakers in IRA-owning households are more likely to be employed than non-owners, but about equally likely to be retired from their lifetime occupations (Figure 11). Retirement status, however, varies by type of IRA owned: financial decisionmakers in traditional IRA-owning households are more likely to be retired than decisionmakers in households owning Roth or employer-sponsored IRAs (Figure 12).

⁴⁶ For example, see Aizcorbe, Kennickell, and Moore (January 2003). In 2001, the median household before-tax family income for households whose heads had college degrees was \$67,800, compared with the median income of \$17,000 among households with heads with no high school diplomas.

⁴⁷ For example, see U.S. Census Bureau (August 2004).

⁴⁸ For example, see Aizcorbe, Kennickell, and Moore (January 2003), reporting that the percentage of households who saved rises with before-tax family income.

⁴⁹ See Aizcorbe, Kennickell, and Moore (January 2003), showing that household net worth tends to rise with educational achievement and household income. In addition, ICI staff tabulations of the Federal Reserve Board's 2001 SCF data indicate that net worth is higher among married households compared with other households.

⁵⁰ Ippolito (1997) argues that firms that offer defined contribution plans attract workers who are "savers." Pence (June 2002) finds that 401(k) plan participants have a greater interest in saving compared with other workers. Thus, it is not surprising that households with an appreciation for saving would be saving in multiple plans.

FIGURE 12

Characteristics of U.S. Households Owning IRAs, 2004

	Own Any Type of IRA	Type of IRA Owned		
		Traditional IRA	Roth IRA	Employer-Sponsored IRA ¹
Median Per Household				
Age of household sole or co-decisionmaker for investing	49 years	52 years	44 years	47 years
Household income	\$62,500	\$63,800	\$70,000	\$64,500
Household financial assets ²	\$172,100	\$250,000	\$137,000	\$200,000
Household financial assets in all types of IRAs	\$25,000	\$30,300	\$21,800	\$47,800
Share of household financial assets in type of IRA indicated	21%	20%	9%	11%
Percent of Households				
Household sole or co-decisionmaker for investing:				
Married	66	66	71	62
College or postgraduate degree	57	54	68	53
Employed full- or part-time	71	66	82	81
Self-employed ³	23	24	21	31
Retired from lifetime occupation	26	32	11	13
Household has defined contribution plan account	68	65	74	73
Household has multiple types of IRAs ⁴	30	35	72	63
Types of IRAs owned: ⁴				
Traditional IRA	81	100	66	54
Roth IRA	32	26	100	27
Employer-sponsored IRA ¹	21	14	18	100

¹ Includes SIMPLE IRAs, SEP IRAs, and SAR-SEP IRAs.

² Includes assets in employer-sponsored defined contribution retirement plans but excludes primary residence.

³ Of household sole or co-decisionmakers who are employed.

⁴ Multiple responses included.

Note: Number of respondents varies.

Source: Investment Company Institute, 2004 IRA Survey and 2004 Annual Tracking Survey

Ownership of Multiple Types of IRAs

Households saving for retirement through IRAs often own multiple types of IRAs. For example, 66 percent of Roth IRA-owning households also have traditional IRAs, while 54 percent of households with employer-sponsored IRAs own traditional IRAs (Figure 12). Twenty-six percent of households with traditional IRAs also have Roth IRAs. Altogether, almost a third of all IRA-owning households have more than one type of IRA.

IRA Balances

IRA balances vary across households. Household IRA holdings tend to increase with the length of IRA ownership and with the age of the household financial decisionmaker.⁵¹ Furthermore, traditional IRA balances that include rollover assets generally are larger, as are Roth IRA balances that include conversions from traditional IRAs.

⁵¹ IRS SOI data find a similar trend in average traditional IRA balances by age. Average traditional IRA balances increase as age increases through individuals in their sixties and are somewhat lower for individuals in their seventies or older compared with those in their sixties. This pattern likely reflects the impact of the required minimum distributions on the size of the accounts. See Sailer, Gurka, and Holden (2003).

Traditional IRA Balances

The typical traditional IRA-owning household has traditional IRA assets totaling \$24,000 (Figure 13). Twenty-six percent of traditional IRA-owning households have traditional IRA assets under \$10,000, while 37 percent have balances of \$50,000 or more. Traditional IRA balances tend to increase with length of ownership.⁵² For example, households that have owned traditional IRAs for four or fewer years have mean traditional IRA holdings of \$21,000, compared with a mean of \$100,400 for households that have owned traditional IRAs for 15 or more years (Figure 14). In addition, households with larger traditional IRA holdings are more likely to have rollover assets and/or own more than one traditional IRA.⁵³

Employer-Sponsored IRA Balances

There is also a wide range of employer-sponsored IRA balances, around a median of \$20,000 in mid 2004 (Figure 13). Among households with employer-sponsored IRAs, 30 percent have employer-sponsored IRA assets of less than \$10,000, and 21 percent have balances between \$10,000 and \$24,999. Twenty-eight percent have employer-sponsored IRA balances of \$50,000 or more. Similar to traditional IRA balances, employer-sponsored IRA balances tend to increase with length of ownership.⁵⁴

Roth IRA Balances

Roth IRA balances typically are smaller than traditional IRA balances, likely reflecting the younger age of Roth IRA owners, the relative newness of the Roth IRA, and limitations on

FIGURE 13

Household Financial Assets in IRAs by Type of IRA, 2004

Assets in Type of IRA	Traditional IRA Households (percent)	Employer-Sponsored IRA* Households (percent)	Roth IRA Households (percent)
Less than \$10,000	26	30	51
\$10,000 to \$24,999	24	21	26
\$25,000 to \$49,999	13	21	11
\$50,000 to \$99,999	17	14	9
\$100,000 to \$249,999	13	9	3
\$250,000 or more	7	5	1
Mean	\$76,000	\$52,500	\$28,100
Median	\$24,000	\$20,000	\$8,600

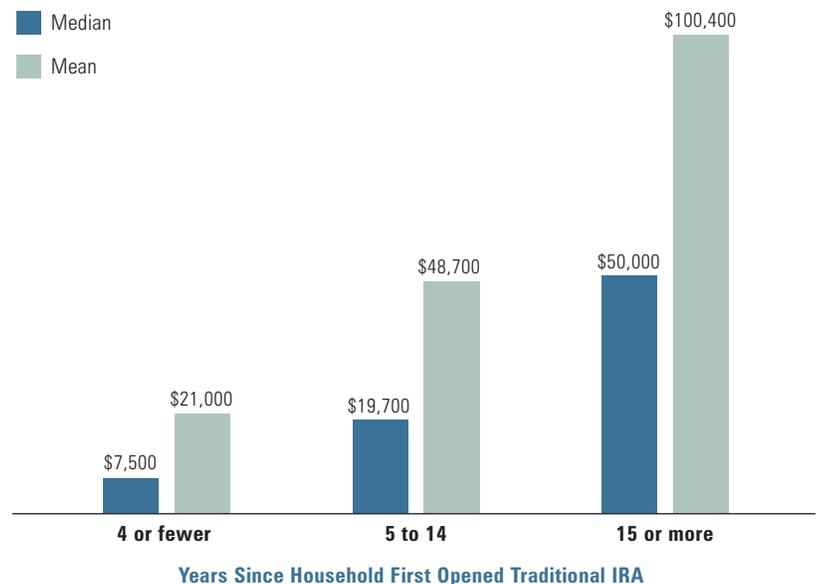
*Includes SIMPLE IRAs, SEP IRAs, and SAR-SEP IRAs.

Note: Number of respondents varies. Components may not add to 100 percent because of rounding.

Source: Investment Company Institute, 2004 IRA Survey

FIGURE 14

Household Traditional IRA Assets by Years Since Household First Opened Traditional IRA, 2004



Source: Investment Company Institute, 2004 IRA Survey

⁵² EBRI/ICI analysis of 15.0 million 401(k) plan participants at the end of 2003 finds a similar pattern among 401(k) plan participant account balances, which also tend to rise with participant age and job tenure (see Holden and VanDerhei (August 2004)).

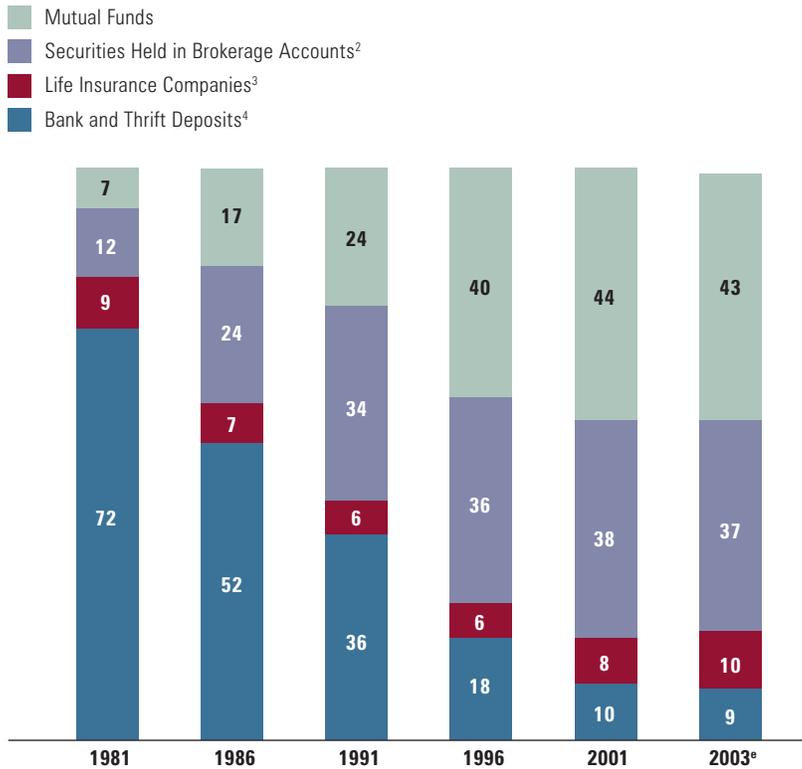
⁵³ For a comparison of financial and demographic characteristics of households whose traditional IRAs include rollovers from employer-sponsored retirement plans to those without rollovers, see Figure 8 in ICI (February 2005). Furthermore, IRS SOI tabulations indicate that individual traditional IRA balances also vary with taxpayer gender and marital status (see Sailer, Gurka, and Holden (2003)).

⁵⁴ Based on tabulations from a small sub-sample of the ICI 2004 IRA Survey.

FIGURE 15

Share of IRA Assets by Institution, Selected Years

(percent)¹



e=estimated

¹ Components may not add to 100 percent because of rounding.

² Securities held in brokerage accounts exclude mutual fund assets held through brokerage accounts, which are included in mutual funds.

³ Annuities held by IRAs exclude variable annuity mutual fund IRA assets.

⁴ Bank and thrift deposits include Keogh deposits.

Sources: Investment Company Institute; IRS, Statistics of Income Division; Federal Reserve Board; and American Council of Life Insurers

conversion activity.⁵⁵ The median balance in Roth IRAs is \$8,600 as of mid 2004, well below the median balance of traditional IRAs (Figure 13). Fifty-one percent of Roth IRA-owning households have total Roth IRA balances of less than \$10,000, while 26 percent have balances between \$10,000 and \$24,999 as of mid 2004. Only 4 percent have total Roth IRA balances of \$100,000 or more. Households with larger

balances tend to have Roth IRAs that include assets converted from traditional IRAs⁵⁶ and/or more than one Roth IRA.

IRA Investments

The composition of investments in IRAs has changed significantly over the past two decades. In the early 1980s, households primarily invested IRA assets in bank and thrift deposits. At the end of 1981, for example, nearly three-quarters of the \$38 billion in IRA assets were invested in bank and thrift deposits, only 7 percent were invested in mutual funds, 12 percent in securities held in brokerage accounts, and the remaining 9 percent in annuities (Figure 15).⁵⁷

Over the past two decades, the asset share of bank and thrift deposits has steadily declined, reaching 9 percent in 2003 (Figure 15). In contrast, the asset share of predominantly equity security investment through mutual funds and securities in brokerage accounts rose—their combined share standing at 80 percent of the \$3.0 trillion in IRA assets at the end of 2003. In that year, the mutual fund share was 43 percent, and the share of securities in brokerage account investments was 37 percent. Annuities (excluding variable annuities) captured roughly the same asset share in 2003 as in 1981.

The change in the composition of IRA investments reflects several financial developments. In part, the changing IRA asset composition parallels the rising importance of participant-directed defined contribution plans (such as 401(k) plans). In addition to fueling the IRA asset composition changes directly through rollovers, research shows

⁵⁵ Generally, in order to convert traditional IRA assets into Roth IRA assets in 2003, taxpayers must have had modified AGI of \$100,000 or less. In addition, income taxes must be paid on the taxable part of the conversion amount, which are calculated as if the taxpayer was receiving a distribution from the traditional IRA (in 1998, the income taxes could be divided over four tax years; after 1998, the entire income tax was computed in the same year; see footnote 38).

⁵⁶ For a comparison of the demographic and financial characteristics of households with Roth IRAs including conversions and without conversions, see Figure 9 in ICI (February 2005).

⁵⁷ The bank and thrift deposits include assets from Keogh plans as well as IRAs (the two items cannot be separated; see Federal Reserve Board, H.6 Release). See ICI (June 2004) for additional information.

that households in a defined contribution plan with participant investment choice are more likely to own stock investments outside of the retirement plan than households without such choice.⁵⁸ For many investors, defined contribution plans are their first introduction to equity securities, and they often invest in equities through mutual funds.⁵⁹

IRA asset composition changes are also part of the rising trend in equity ownership in the United States,⁶⁰ which results from several factors. For example, households' demand for equity investments has risen over this time period as more households have increased their risk tolerance⁶¹ and recognized the return potential of these securities. In addition, financial market innovations have increased product diversity and reduced the cost of accessing equity markets. Furthermore, increased opportunities for discussing stock and mutual fund investments with colleagues and peers may have reduced the costs of learning associated with such investments.⁶²

Households show strong evidence of having diversified their IRA investments. In mid 2004, nearly two-thirds of IRA-owning households had mutual funds in their IRAs, which usually included stock mutual funds (Figure 16). Thirty-one percent held annuities in their IRAs, and 27 percent had bank deposit accounts. About three-quarters of IRA-owning households had

FIGURE 16

Investments Held in IRAs by Type of IRA Owned, 2004
(percent of U.S. households owning each type of IRA)

	Own Any Type of IRA	Type of IRA Owned		
		Traditional IRA	Roth IRA	Employer-Sponsored IRA*
Mutual funds (total)	65	66	73	52
Stock mutual funds	54	54	57	38
Bond mutual funds	27	27	21	22
Hybrid mutual funds	19	21	14	16
Money market mutual funds	27	28	20	22
Individual stocks	37	39	30	28
Annuities (total)	31	32	17	20
Fixed annuities	20	24	13	12
Variable annuities	18	20	12	12
Bank deposit accounts	27	28	17	17
Individual bonds	16	16	13	13
Other	5	6	4	2

*Includes SIMPLE IRAs, SEP IRAs, and SAR-SEP IRAs.

Note: Multiple responses included. Number of respondents varies.

Source: Investment Company Institute, 2004 IRA Survey

invested their IRAs in more than one type of investment, with nearly a third holding four or more different types of investments (Figure 17).⁶³

Households hold IRAs through a variety of financial institutions. In mid 2004, about a third of households owning traditional IRAs and 26 percent of those owning Roth IRAs had accounts at full-service brokerage firms (Figure 18). Thirty percent of households owning traditional IRAs and 26 percent of households with Roth IRAs had accounts at mutual fund companies. IRA owners also use independent financial planning firms, banks, and savings institutions.

⁵⁸ See Weisbenner (October 1999), which analyzes SCF data, and Poterba (January 2001).

⁵⁹ ICI (Fall 2004) finds that 58 percent of all U.S. mutual fund shareholders purchased their first mutual fund through a defined contribution retirement plan. Similarly, ICI and Securities Industry Association (2002) finds that 48 percent of U.S. equity owners bought their first equity investment through an employer-sponsored retirement plan.

⁶⁰ For example, see Aizcorbe, Kennickell, and Moore (January 2003); ICI and Securities Industry Association (2002); and Poterba (January 2001).

⁶¹ See Poterba (January 2001), which shows that the proportion of households willing to take above-average risks for above-average returns increased between 1989 and 1998, while the proportion unwilling to take risks fell (analyzing SCF data).

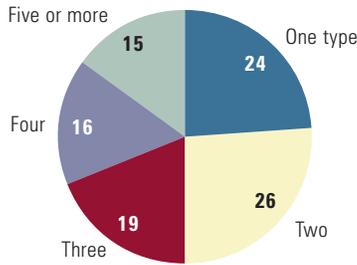
⁶² See Poterba (January 2001).

⁶³ Investment types are classified as indicated in the figure. A household may be holding multiple individual investments within a given type (e.g., more than one equity mutual fund within the equity mutual fund investment type).

FIGURE 17

Number of Types of Investments Held in IRAs by Households, 2004

(percent of households)



Median = 3 types of investment per household

Note: Equity mutual funds, bond mutual funds, hybrid mutual funds, money market mutual funds, fixed annuities, and variable annuities were each counted as a separate investment type. Other investment types counted as listed in Figure 16. A household may hold multiple investments within a given investment type and/or multiple IRAs.

Source: Investment Company Institute, 2004 IRA Survey

FIGURE 18

Where Households Hold Their IRA Assets, 2004

(percent of households)

	Households With Traditional IRAs	Households With Roth IRAs
Full-service brokerage	33	26
Mutual fund company	30	26
Independent financial planning firm	28	31
Bank or savings institution	26	16
Insurance company	9	10
Discount brokerage (total)	9	10
Discount brokerage firm with walk-in offices	7	7
Discount brokerage firm only available online	2	4

Note: Multiple responses included. Number of respondents varies.

Source: Investment Company Institute, 2004 IRA Survey

Withdrawals from Traditional IRAs

Individuals don't tend to prematurely tap their IRA nest eggs.⁶⁴ It is likely that IRA assets typically are preserved until retirement for two reasons. First, research indicates that mental accounting that earmarks funds as set aside for a special purpose (in the case of IRAs, for retirement) provides households with the self-discipline to avoid tapping those funds for current consumption.⁶⁵ In addition, Congress designed IRAs with a withdrawal tax penalty when funds are taken out prematurely.

Nevertheless, the ultimate purpose of IRAs is to provide individuals with income in retirement. Although IRA holders can withdraw funds before retiring, the vast majority withdrawing funds between 1999 and 2003 were older IRA owners making required minimum distributions rather than younger IRA owners making pre-retirement withdrawals. Except for nondeductible contributions, withdrawals from traditional IRAs generally are subject to income taxes. Depending upon the age of the taxpayer and the purpose of the withdrawal, an individual making an early withdrawal also may incur a 10 percent tax penalty. All IRA owners may take penalty-free withdrawals starting at age 59½. Upon turning age 70½, traditional IRA owners annually must take out at least a certain amount, known as the required minimum distribution.⁶⁶

⁶⁴ Similarly, 401(k) plan participants generally do not tap their 401(k) accounts. At the end of 2003, only 18 percent of 401(k) plan participants had loans outstanding (see Holden and VanDerhei (August 2004)). Even smaller numbers of 401(k) plan participants take withdrawals (see Holden and VanDerhei (November 2002 and November 2002—Appendix)).

⁶⁵ See Hubbard and Skinner (Fall 1996), Shefrin and Thaler (October 1988), and footnote 9.

⁶⁶ Certain inherited IRA account owners must begin to receive distributions even before age 70½.

FIGURE 19

Traditional IRA Withdrawal Activity by Age of Head of Household, 1999–2003

(percent of households taking traditional IRA withdrawals)¹

	Households With Traditional IRA Withdrawals	Age of Head of Household		
		Under 59	59 to 69	70 or Older
Full or Partial Withdrawal from Traditional IRA				
Withdrew some, but not all money	84	66	86	92
Withdrew all money	16	34	14	8
Age of Head of Household				
Under 59	28	100	0	0
59 to 69	20	0	100	0
70 or older	52	0	0	100
Amount Withdrawn²				
Less than \$2,500	31	30	14	39
\$2,500 to \$4,999	14	14	13	15
\$5,000 to \$9,999	18	19	21	16
\$10,000 to \$24,999	20	20	26	17
\$25,000 to \$49,999	8	6	13	8
\$50,000 or more	8	11	13	4
Mean	\$15,500	\$17,800	\$20,800	\$11,900
Median	\$5,000	\$5,000	\$10,000	\$4,000
Reason for Withdrawal³				
To take a required minimum distribution	43	10	13	72
To pay living expenses	14	23	27	5
To pay for health care	9	9	10	8
To reinvest the money ⁴	9	10	14	7
To buy a home	5	9	8	2
To make a large purchase	9	10	17	5
To pay for education	4	10	5	1
Other reason	16	20	23	12

¹ Sixteen percent of households either still holding traditional IRAs in the year of the survey and having withdrawn some of the assets (13 percent) or having liquidated (3 percent) their traditional IRAs during the year prior to the survey are counted as having withdrawals. Results are pooled over 2000 through 2004 survey years covering withdrawal activity in 1999 to 2003.

² Components may not add to 100 percent because of rounding.

³ Multiple responses included.

⁴ Households indicating they were buying investments outside IRAs and/or buying another type of IRA.

Note: Number of respondents varies.

Source: Investment Company Institute, Annual Tracking Survey (2000 through 2004)

In recent years, the dollar volume of withdrawals from traditional IRAs has been relatively small in comparison with total assets. For example, withdrawals of \$88.2 billion in 2002 were only 3.7 percent of all traditional IRA assets (Figure 5). In any given year, only a small percentage of

traditional IRA owners make withdrawals. Between 1999 and 2003, only 13 percent of traditional IRA-owning households, on average, made partial withdrawals, while 3 percent made full withdrawals (Figure 19).⁶⁷

Most traditional IRA withdrawals made by households between 1999 and 2003 were small in size. The median amount withdrawn over this period is \$5,000, while the mean is \$15,500 (Figure 19).

⁶⁷ IRS SOI data also indicate similar activity: in 2001, 8.6 million traditional IRA taxpayers—22.5 percent of those with traditional IRA balances at year-end 2000—made withdrawals (see Sailer and Holden (2004)).

Thirty-one percent of households making withdrawals from their traditional IRAs withdrew less than \$2,500, and 14 percent withdrew between \$2,500 and \$4,999.⁶⁸ Only 8 percent withdrew \$50,000 or more.

Traditional IRA owners do not appear to be tapping their retirement nest eggs prematurely. More than half of households making withdrawals between 1999 and 2003 included individuals age 70 or older, and 20 percent included individuals between the ages of 59 and 69 (Figure 19).⁶⁹

The primary reason for making traditional IRA withdrawals is to satisfy minimum distribution requirements. Indeed, 72 percent of heads of households age 70 or older mentioned this reason (Figure 19). To pay current living expenses was another important reason for making withdrawals, with younger households more likely to mention this reason. Other reasons for withdrawing funds from traditional IRAs include paying for health care expenses (with similar frequency across all age groups), reinvesting the money in other types of IRAs, and making investments outside IRAs.

Households often seek advice or other assistance before making withdrawals. Two-thirds of those withdrawing funds from traditional IRAs in 2003 consulted with professional financial advisers, and 26 percent studied written information, software, or website publications on tax rules and consequences (Figure 20).

CONCLUSION

Over its 30-year history, the IRA has proven successful in building retirement assets for many Americans. Buoyed by rollovers from employer-sponsored retirement plans, direct contributions, and the compounding of investment returns over time, IRA assets had grown to \$3.0 trillion at the end of 2003, the largest component of the U.S. retirement market. In 2004, over 45 million U.S. households owned IRAs with IRA assets amounting to over 20 percent of the typical IRA-owning household's entire holdings of financial assets.

In 1974, ERISA created the IRA and gave it the *flexibility* to play two key roles—as a separate, tax-advantaged savings program for workers without employer-sponsored retirement plans, and as a complementary

FIGURE 20

Sources Consulted Prior to Making Traditional IRA Withdrawal in Tax-Year 2003

(percent of traditional IRA households that withdrew from traditional IRAs in tax-year 2003)

Professional financial adviser (total)	66
Accountant	19
Bank or savings institution representative	17
Broker	16
Independent financial planner	16
Mutual fund company representative	11
Insurance agent	6
Written information, software, or website (total)	26
IRS rules or publications	22
Financial software program	4
Internet website	2
Book or article in a magazine, newspaper, or newsletter	2

Note: Multiple responses included. Number of respondents varies.

Source: Investment Company Institute, 2004 IRA Survey

vehicle that allows workers to roll over employer-sponsored retirement plan assets to IRAs when changing jobs or retiring. Over the years, policy changes involving IRA provisions at times have encouraged American households to save in IRAs and at other times have discouraged them from doing so. Historical trends, including IRA activity since recent changes enacted in 2001, would suggest that individuals respond positively to enhanced tax deductions for IRA investing and negatively when such deductions are curtailed. The period of the “universal” IRA demonstrates that *simplicity* of incentive design is key to promoting the use of IRAs.

Considering this 30-year track record of changes in policy regarding IRAs and the substantial body of research now available, it becomes clear that IRAs make an important contribution

⁶⁸ Among households taking partial withdrawals in 2003, more than half withdrew less than 10 percent of their traditional IRA balances.

⁶⁹ Twenty-eight percent of households making traditional IRA withdrawals between 1999 and 2003 were younger than age 59 (Figure 19). However, their withdrawals may have been penalty-free if, for example, they were used to finance a first home purchase, education, or health emergency (see IRS, *Publication 590*, for qualified exceptions). IRS SOI data similarly indicate that 31 percent of taxpayers with withdrawals in 2000 were younger than age 60; 40 percent were between 60 and 70 years of age; and 29 percent were age 70 or older (see Sailer and Nutter (Spring 2004)). For a comparison of the demographic and financial characteristics of households with traditional IRAs taking withdrawals and those not taking withdrawals, see Figure 7 in ICI (February 2005).

to enhanced retirement security. With assets that are earmarked for retirement, IRAs help individuals make a *commitment* to saving for retirement and tend not to be tapped earlier or for other purposes. By offering an easy-to-administer savings plan for small employers to offer their employees, SIMPLE IRAs have made inroads into providing coverage to those workers. There is room for improvement, however, and further gains to be made by simplifying eligibility requirements so that the IRA can achieve its full potential of contributing to the retirement security of an even larger share of the U.S. population.

REFERENCES

- Aizcorbe, Ana M., Arthur B. Kennickell, and Kevin B. Moore. "Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances," *Federal Reserve Bulletin*, Vol. 89, January 2003: pp. 1–32.
- Browning, Martin, and Thomas F. Crossley. "The Life-Cycle Model of Consumption and Saving," *Journal of Economic Perspectives*, Vol. 15, No. 3, Summer 2001: pp. 3–22.
- Burnham, Paul. "Utilization of Tax Incentives for Retirement Saving," *A CBO Paper*, Washington, DC: Congress of the United States, Congressional Budget Office, August 2003.
- Campbell, David, Michael Parisi, and Brian Balkovic. "Individual Income Tax Returns, 1998," *SOI Bulletin*, Washington, DC: Internal Revenue Service, Statistics of Income Division, Fall 2000: pp. 8–46.
- Copeland, Craig. "Employment-Based Retirement Plan Participation: Geographic Differences and Trends," *EBRI Issue Brief*, No. 274, Washington, DC: Employee Benefit Research Institute, October 2004.
- Copeland, Craig. "Individual Account Retirement Plans: An Analysis of the 2001 Survey of Consumer Finances," *EBRI Issue Brief*, No. 259, Washington, DC: Employee Benefit Research Institute, July 2003.
- Copeland, Craig. "Lump-Sum Distributions: An Update," *EBRI Notes*, Vol. 23, No. 7, Washington, DC: Employee Benefit Research Institute, July 2002: pp. 1–8.
- Employee Benefit Research Institute. "Small Employers Without Plans," *Small Employer Retirement Survey (SERS)*, 2003.
- Employee Benefit Research Institute. "Universal IRA's and Deductible Employee Contributions," *EBRI Issue Brief*, No. 1, Washington, DC: Employee Benefit Research Institute, 1981.
- Engen, Eric M., William G. Gale, and John Karl Scholz. "The Illusory Effects of Saving Incentives on Saving," *Journal of Economic Perspectives*, Vol. 10, No. 4, Fall 1996: pp. 113–138.
- Engen, Eric M., William G. Gale, and Cori E. Uccello. "The Adequacy of Household Saving," *Brookings Papers on Economic Activity*, Vol. 2, Washington, DC: Brookings Institution, December 1999: pp. 65–188.
- Federal Reserve Board. *Flow of Funds Accounts of the United States*, Z.1 Release. Washington, DC: Board of Governors of the Federal Reserve System, December 9, 2004.
- Federal Reserve Board. *Money Stock Measures*, H.6 Release. Washington, DC: Board of Governors of the Federal Reserve System.
- Fink, Matthew P. *Statement Before the Committee on Finance, United States Senate on Increasing Retirement Savings*. Washington, DC: Investment Company Institute, February 24, 1999.
- Gustman, Alan L., and Thomas L. Steinmeier. "Effects of Pensions on Savings: Analysis with Data from the Health and Retirement Study," *NBER Working Paper*, No. 6681, Cambridge, MA: National Bureau of Economic Research, August 1998.
- Holden, Sarah, and Jack VanDerhei. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2003," *ICI Perspective*, Vol. 10, No. 2, and *EBRI Issue Brief*, No. 272, Washington, DC: Investment Company Institute and Employee Benefit Research Institute, August 2004.
- Holden, Sarah, and Jack VanDerhei. "Can 401(k) Accumulations Generate Significant Income for Future Retirees?" *ICI Perspective*, Vol. 8, No. 3, and *EBRI Issue Brief*, No. 251, Washington, DC: Investment Company Institute and Employee Benefit Research Institute, November 2002.

- Holden, Sarah, and Jack VanDerhei. "Appendix: EBRI/ICI 401(k) Accumulation Projection Model," *ICI Perspective*, Vol. 8, No. 3A, Washington, DC: Investment Company Institute, November 2002—Appendix.
- Hrung, Warren B. "Information, the Introduction of Roths, and IRA Participation," *Contributions to Economic Analysis & Policy*, Vol. 3, Issue 1, Article 6, 2004.
- Hubbard, R. Glenn, and Jonathan S. Skinner. "Assessing the Effectiveness of Saving Incentives," *Journal of Economic Perspectives*, Vol. 10, No. 4, Fall 1996: pp. 73–90.
- Internal Revenue Code. 26 U.S.C. § 408(c).
- Internal Revenue Service. *Retirement Plans for Small Business (SEP, SIMPLE, and Qualified Plans)*, Publication 560. Washington, DC: U.S. Department of the Treasury, for use in preparing 2003 returns.
- Internal Revenue Service. *Individual Retirement Arrangements (IRAs)*, Publication 590. Washington, DC: U.S. Department of the Treasury, for use in preparing 2003 returns.
- Internal Revenue Service. *Individual Retirement Arrangements (IRAs)*, Publication 590. Washington, DC: U.S. Department of the Treasury, for use in preparing 1998 returns.
- Internal Revenue Service, Statistics of Income. *1987 Individual Income Tax Returns*, Publication 1304. Washington, DC: U.S. Government Printing Office, 1990.
- Internal Revenue Service, Statistics of Income. *1986 Individual Income Tax Returns*, Publication 1304. Washington, DC: U.S. Government Printing Office, 1989.
- Internal Revenue Service, Statistics of Income. *1982 Individual Income Tax Returns*, Publication 79 (10-84). Washington, DC: U.S. Government Printing Office, 1984.
- Investment Company Institute. "IRA Ownership in 2004," *Fundamentals*, Vol. 14, No. 1, Washington, DC: Investment Company Institute, February 2005.
- Investment Company Institute. "Profile of Mutual Fund Shareholders," *ICI Research Series*, Washington, DC: Investment Company Institute, Fall 2004.
- Investment Company Institute. "Mutual Funds and the U.S. Retirement Market in 2003," *Fundamentals*, Vol. 13, No. 2, Washington, DC: Investment Company Institute, June 2004.
- Investment Company Institute. "IRA Ownership in 2003," *Fundamentals*, Vol. 12, No. 3, Washington, DC: Investment Company Institute, September 2003.
- Investment Company Institute. "Profile of Households Saving for College," *ICI Research Series*, Washington, DC: Investment Company Institute, Fall 2003.
- Investment Company Institute. "IRA Ownership in 2002," *Fundamentals*, Vol. 11, No. 3, Washington, DC: Investment Company Institute, September 2002.
- Investment Company Institute. "IRA Ownership in 2001," *Fundamentals*, Vol. 10, No. 3, Washington, DC: Investment Company Institute, September 2001.
- Investment Company Institute. *Statement for the Hearing on Tax Code Simplification, Submitted to the House Committee on Ways and Means, Subcommittee on Oversight and Subcommittee on Select Revenue Measures*. Washington, DC: Investment Company Institute, July 31, 2001.
- Investment Company Institute. "Defined Contribution Plan Distribution Choices at Retirement," *ICI Research Series*, Washington, DC: Investment Company Institute, Fall 2000.
- Investment Company Institute and Securities Industry Association. *Equity Ownership in America, 2002*. Washington, DC: Investment Company Institute and Securities Industry Association, 2002.
- Ippolito, Richard A. *Pension Plans and Employee Performance, Evidence, Analysis, and Policy*. Chicago, IL: The University of Chicago Press, 1997.
- Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in the 107th Congress*, Washington, DC: U.S. Government Printing Office, January 24, 2003.
- Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in 1998*, Washington, DC: U.S. Government Printing Office, November 24, 1998.
- Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in 1997*, Washington, DC: U.S. Government Printing Office, December 17, 1997.

- Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in the 104th Congress*, Washington, DC: U.S. Government Printing Office, December 18, 1996.
- Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986 (H.R. 3838, 99th Congress; Public Law 99-514)*, Washington, DC: U.S. Government Printing Office, May 4, 1987.
- Joint Committee on Taxation. *General Explanation of the Economic Recovery Tax Act of 1981 (H.R. 4242, 97th Congress; Public Law 97-34)*, Washington, DC: U.S. Government Printing Office, December 29, 1981.
- Joint Economic Committee. *A Primer on Individual Retirement Accounts (IRAs)*, Washington, DC, March 10, 2004.
- Mazawey, Louis T. "ERISA at 30: A Brief Chronology of Significant Post-ERISA Pension Legislation," *Pension & Benefits Reporter*, Vol. 31, No. 36, September 14, 2004: pp. 2041–2043.
- Ozanne, Larry. "Individual retirement accounts," in *The Encyclopedia of Taxation and Tax Policy*, eds. Cordes, Joseph J., Robert D. Ebel, and Jane G. Gravelle, Washington, DC: Urban Institute Press, October 1, 1999: pp. 215–216.
- Parisi, Michael, and Scott Hollenbeck. "Individual Income Tax Returns, 2002," *SOI Bulletin*, Washington, DC: Internal Revenue Service, Statistics of Income Division, Fall 2004: pp. 8–45.
- Pence, Karen M. "Nature or Nurture: Why Do 401(k) Participants Save Differently than Other Workers?" *Finance and Economics Discussion Series Working Paper*, No. 2002-33, Washington, DC: Board of Governors of the Federal Reserve System, June 2002.
- Poterba, James M. "The Rise of the 'Equity Culture': U.S. Stockownership Patterns, 1989–1998," *Working Paper*, Cambridge, MA: Massachusetts Institute of Technology, Preliminary, January 2001.
- Poterba, James M., Steven F. Venti, and David A. Wise. "How Retirement Saving Programs Increase Saving," *Journal of Economic Perspectives*, Vol. 10, No. 4, Fall 1996: pp. 91–112.
- Purcell, Patrick J. "Pension Issues: Lump-Sum Distributions and Retirement Income Security," *CRS Report for Congress*, Washington, DC: Congressional Research Service, The Library of Congress, Updated June 30, 2003.
- Sailer, Peter, Kurt S. Gurka, and Sarah Holden. "Accumulation and Distributions of Retirement Assets, 1996–2000: Results From a Matched File of Tax Returns and Information Returns," *Special Studies in Federal Tax Statistics*, Washington, DC: IRS, Statistics of Income Division, 2003: pp. 53–61.
- Sailer, Peter, and Sarah Holden. "Use of Individual Retirement Arrangements to Save for Retirement—Results from a Matched File of Tax Returns and Information Documents for Tax Year 2001," *Presented at the 2004 American Statistical Association Meetings*, 2004.
- Sailer, Peter J., and Sarah E. Nutter. "Accumulation and Distribution of Individual Retirement Arrangements, 2000," *SOI Bulletin*, Washington, DC: Internal Revenue Service, Statistics of Income Division, Spring 2004: pp. 121–134.
- Sailer, Peter J., Michael E. Weber, and Kurt S. Gurka. "Are Taxpayers Increasing the Buildup of Retirement Assets? Preliminary Results from a Matched File of Tax Year 1999 Tax Returns and Information Returns," *National Tax Association Proceedings, Ninety-Fifth Annual Conference on Taxation, 2002, Orlando, Florida*, Washington, DC: National Tax Association, 2003: pp. 364–369.
- Shefrin, Hersch M., and Richard H. Thaler. "The Behavioral Life-Cycle Hypothesis," *Economic Inquiry*, Vol. 26, No. 4, October 1988: pp. 609–643.
- Skinner, Jonathan. "Individual Retirement Accounts: A Review of the Evidence," *Tax Notes*, January 13, 1992: pp. 201–211.
- Smith, Paul A. "Retirement Saving over the Long Term: Evidence from a Panel of Taxpayers," *Working Paper*, Washington, DC: Department of the Treasury and Federal Reserve Board, draft December 2002.
- U.S. Census Bureau. "America's Families and Living Arrangements: 2003," *Current Population Reports, P20-553*, Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, November 2004.
- U.S. Census Bureau. "Table HH-3. Households, by Age of Householder: 1960 to Present," *Annual Social and Economic Supplement, 2003 Current Population Survey, Current Population Reports, Series P20-553*, Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, September 15, 2004.

- U.S. Census Bureau. "Income, Poverty, and Health Insurance Coverage in the United States: 2003," *Current Population Reports*, P60–226, Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, August 2004.
- U.S. Department of Labor, Bureau of Labor Statistics. *National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2004*. Washington, DC: Summary 04–04, November 2004.
- U.S. Department of Labor, Bureau of Labor Statistics. *National Compensation Survey: Employee Benefits in Private Industry in the United States, 2000, Bulletin 2555*. Washington, DC: January 2003.
- U.S. Department of Labor, Employee Benefits Security Administration (formerly the Pension and Welfare Benefits Administration). *Private Pension Plan Bulletin, Abstract of 1999 Form 5500 Annual Reports*. Washington, DC: Summer 2004.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now the Employee Benefits Security Administration). *Private Pension Plan Bulletin, Abstract of 1998 Form 5500 Annual Reports*. Washington, DC: Winter 2001–2002.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now the Employee Benefits Security Administration). *Private Pension Plan Bulletin, Abstract of 1997, Form 5500 Annual Reports*. Washington, DC: Winter 2001.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now the Employee Benefits Security Administration). *Private Pension Plan Bulletin, Abstract of 1996, Form 5500 Annual Reports*. Washington, DC: Winter 1999–2000.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now the Employee Benefits Security Administration). *Private Pension Plan Bulletin, Abstract of 1995 Form 5500 Annual Reports*. Washington, DC: Spring 1999.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now the Employee Benefits Security Administration). *Private Pension Plan Bulletin, Abstract of 1994 Form 5500 Annual Reports*. Washington, DC: Spring 1998.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now the Employee Benefits Security Administration). *Private Pension Plan Bulletin Abstract of 1993 Form 5500 Annual Reports*. Washington, DC: Winter 1997.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now the Employee Benefits Security Administration). *Private Pension Plan Bulletin, Abstract of 1992 Form 5500 Annual Reports*. Washington, DC: Winter 1996.
- Venti, Stephen F. "Promoting Savings for Retirement Security," *Prepared Statement for the Senate Finance Subcommittee on Deficits, Debt Management and Long-Term Economic Growth*, in *U.S. Private Savings Crisis—Long-Term Economic Implications and Options for Reform*. Washington, DC: U.S. Government Printing Office, December 7, 1994: pp. 96–101.
- Venti, Stephen F., and David A. Wise. "Choice, Chance, and Wealth Dispersion at Retirement," *NBER Working Paper*, No. 7521, Cambridge, MA: National Bureau of Economic Research, February 2000.
- Weisbenner, Scott. "Do Pension Plans with Participant Investment Choice Teach Households to Hold More Equity?" *Finance and Economics Discussion Series Working Paper*, No. 1999-61, Washington, DC: Federal Reserve Board, October 1999.