

## 401(k) Plans: A 25-Year Retrospective

### KEY FINDINGS

- **401(k) plans have had a long and complicated legislative and regulatory history, during which these plans have been subject to a variety of significant constraints.** Only recently have legislative changes aimed to encourage growth in 401(k) plans.
- **Despite legislative and regulatory headwinds, 401(k) plans have proven popular among both employers and employees and are now the most prevalent retirement savings vehicles in the United States.**
- **401(k) plan design influences participation rates and retirement preparedness among participants.** As the 401(k) plan assumes a greater role in Americans' retirement planning, plan sponsors and policymakers have worked to improve the convenience and effectiveness of 401(k) saving for employees.
- **While employers play a key role as advocates of 401(k) savings plans, the services that mutual funds provide have been instrumental in facilitating access to securities markets for plan participants.** Offering diversified investment management and plan services, mutual fund and financial service industry innovations have fostered growth in 401(k) plan savings.
- **401(k) plans are a powerful savings tool that can provide significant income in retirement.** Because current retirees have not had a full career with 401(k) plans, their experience cannot be used to judge the ability of these plans to provide retirement income. The EBRI/ICI 401(k) Accumulation Projection Model forecasts that 401(k) plans can generate significant income in retirement for today's younger participants after a full career.

### 401(k) PLAN HISTORY

November 10, 2006 marks the 25<sup>th</sup> anniversary of the day that the Internal Revenue Service (IRS) proposed regulations that opened the door for 401(k) plans.

Although a tax code provision permitting cash or deferred arrangements (CODAs) was added in 1978 as Section 401(k), it was not until November 10, 1981

that the IRS formally described the rules for these plans. In the years immediately following the issuance of these rules, large employers typically offered 401(k) plans as supplements to their defined benefit (DB) plans, with few employers offering them to employees as stand-alone retirement plans.

From these modest beginnings, and despite a series of legislative changes aimed at curtailing their activities, 401(k) plans have grown to become the most common employer-sponsored retirement plan in the United States. At year-end 2005, these plans had more active participants and about as many assets as all other private pension plans combined (Figure 1). The importance of 401(k) plans in helping Americans prepare for retirement extends beyond their current assets and participants, because nearly half of individual retirement account (IRA) assets came from employees rolling over assets from their employer-sponsored retirement plans such as 401(k) plans.<sup>1</sup>

The expansion and evolution of 401(k) plans over the past quarter century did not occur without growing pains, however. Rules and regulations have a powerful influence on how these plans operate and, ultimately, on their ability to help Americans prepare for retirement. In the early years, 401(k) plans were subject to several legal measures aimed at restricting 401(k) plan participants' contribution activity. Only recently have legislators and regulators begun to loosen restrictions placed on these plans in order to encourage their growth.

The growth and increasing effectiveness of 401(k) plans also reflect 25 years of innovation in plan design. Employers that sponsor 401(k) plans and financial firms that provide services for the plans have used studies of participant activity and lessons from behavioral finance to understand how best to design 401(k) plans to meet workers' needs through the structuring of the participation, contribution, and investment choices provided to employees.

### ***Modern 401(k) Evolved from Early Types of Defined Contribution Plans***

Today's 401(k) plan has its origin in defined contribution (DC) plans created well before the passage of the Employee Retirement Income Security Act in 1974 (ERISA) or the addition of Section 401(k) to the tax code in 1978 (Figure 2). In the years before ERISA, many employers offered "thrift-savings plans," which allowed employees to make contributions to a plan—but only on an after-tax basis—and modern 401(k) plans picked up on the idea of participant contributions. At the same time, many

employers made before-tax employer contributions to tax-qualified profit-sharing plans, which allowed employers to contribute part of their profits to a trust and to allocate the monies to the accounts of eligible employees. Dating back almost to the introduction of the federal income tax in 1913,<sup>2</sup> tax rules allowed employees to defer taxation of employer profit-sharing contributions. In addition, taxation on investment earnings on employer and employee contributions were deferred until distributed from the plans.

In the 1950s, a number of companies, particularly banks, added to their profit-sharing plans a new feature that came to be called a "cash or deferred arrangement," or CODA. Each year, when employees were awarded profit-sharing bonuses, they were given the option to deposit some or all of the bonus into the plan instead of receiving the bonus in cash. Even though the employee had the right to receive the bonus in cash, which normally would trigger immediate income tax,<sup>3</sup> a CODA sought to treat any amount the employee contributed to the plan as if it were an employer contribution, and therefore tax-deferred.<sup>4</sup> In 1956, the IRS issued the first in a series of rulings allowing profit-sharing plans to include a CODA and still be eligible for the favorable tax treatment accorded employer contributions.<sup>5</sup> The IRS reaffirmed its favorable view of CODAs in 1963 after a court case that same year suggested that immediate taxation of employee contributions might apply.<sup>6</sup> These early IRS rulings required numerical testing of the contributions of highly and non-highly paid employees—the precursors of the nondiscrimination tests imposed on 401(k) plans today.

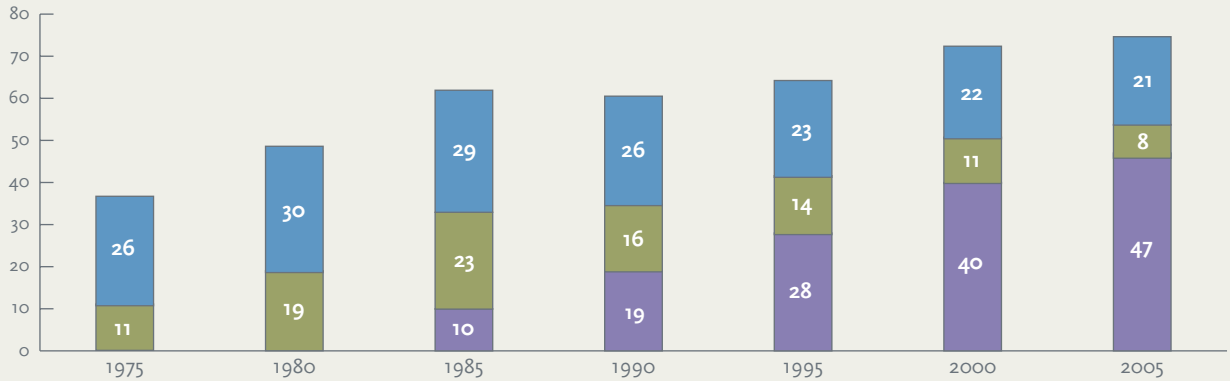
In late 1972, the IRS, concerned about whether workers should pay immediate income tax on their CODA contributions, proposed regulations that would have prohibited the favorable tax treatment of CODA contributions in some circumstances.<sup>7</sup> The IRS suggested that, even if the IRS did not overturn the 1956 and 1963 rulings regarding contributions on yearly profit-sharing bonuses, a CODA would not be allowed on basic or regular salary. The proposed regulation caused considerable controversy in the retirement plan community.

FIGURE 1

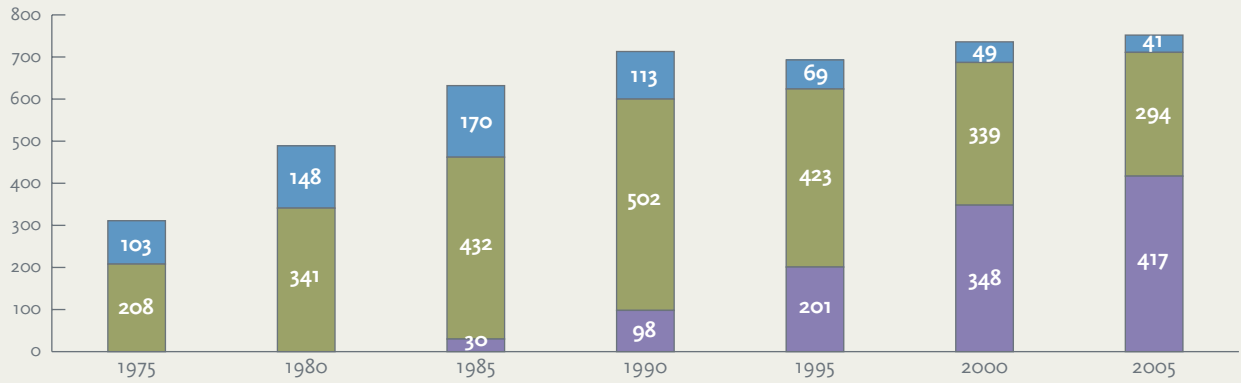
CHANGING U.S. PRIVATE-SECTOR PENSION LANDSCAPE

- Defined Benefit Plans
- Other Defined Contribution Plans
- 401(k) Plans

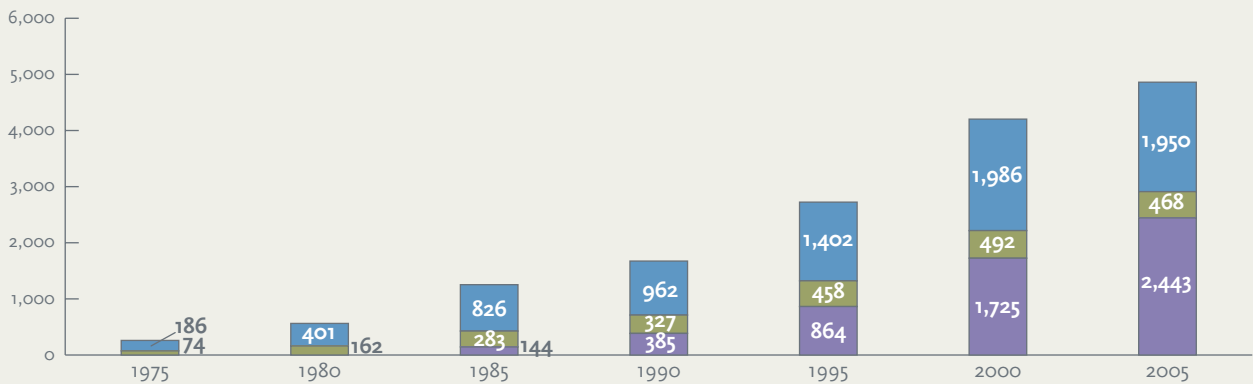
Active Participants  
(millions, selected years)



Number of Plans  
(thousands, selected years)



Assets  
(billions, selected years)



Sources: Investment Company Institute; U.S. Department of Labor, Form 5500 Annual Reports; and Cerulli Associates

## ERISA

The Employee Retirement Income Security Act of 1974 (ERISA) contained sweeping changes in the regulation of pension plans, and created rules regarding reporting and disclosure, funding, vesting, and fiduciary duties (Figure 2).<sup>8</sup> Although ERISA was aimed mostly at “assuring the equitable character” and “financial soundness” of DB pension plans,<sup>9</sup> the Act contained numerous provisions impacting DC plans (like profit-sharing plans, and eventually 401(k) plans). For example, ERISA contained

a provision that allowed DC plans to delegate investment responsibility to participants<sup>10</sup> and thereby relieve the plan sponsor from investment responsibility, which today is the basis for participant-directed 401(k) plans. Also included in ERISA was a provision Congress described as a “freeze of the status quo,”<sup>11</sup> which stated that the IRS could not disqualify any CODA plan adopted before June 27, 1974, but that no new plans could be created unless employee contributions were made solely on an after-tax basis.<sup>12</sup>

**FIGURE 2**

### TIME LINE FOR 401(k) PLANS

1913	16 <sup>th</sup> Amendment to Constitution Allows Personal Income Tax
1935	Social Security Act Creates Social Security
1942	Revenue Act Introduces Nondiscrimination Rules
1950s	Employers Introduce Cash or Deferred Arrangements (CODAs)
1956	IRS Revenue Ruling First Approves CODAs
1972	IRS Proposes Regulations to Eliminate CODAs
Labor Day, 1974	Employee Retirement Income Security Act (ERISA) Grandfathers Existing CODAs Until 1/1/1977; Prohibits Creation of New CODAs; Allows Plan Sponsors to Delegate Investment Responsibility to Participants; Creates Formal Pension Plan Contribution Limits
1976	Tax Reform Act of 1976 Extends Moratorium on CODAs
1978	Revenue Act of 1978 Creates New Section 401(k); Foreign Earned Income Act of 1978 Extends CODA Moratorium Again
November 10, 1981	IRS Proposes Regulations for 401(k)
1982	Tax Equity and Fiscal Responsibility Act Reduces Total DC Plan Contribution Limit and Imposes Required Minimum Distribution Rules on All Retirement Plans
1983	Social Security Amendments of 1983 Makes 401(k) Participant Contributions Subject to Employment Taxes
1984	Department of Treasury Proposes Repeal of 401(k)
1986	Tax Reform Act of 1986 Effectively Freezes Total DC Plan Contribution Limit; Places Additional Restrictions on Participant Contributions; Tightens Nondiscrimination Tests
1992	Department of Labor Releases Final 404(c) Regulations on Investments in Participant-Directed Plans
1996	401(k) Plan Assets Top \$1.0 Trillion
1996	Small Business Job Protection Act (SBJPA) Simplifies Rules to Encourage Employer Adoption of Plans
2001	Economic Growth and Tax Relief Reconciliation Act (EGTRRA) Loosens Restrictions on Participant Contributions; Creates Catch-Up Contributions; Increases Rollover Opportunities Between Plans; Creates Roth 401(k)
2005	401(k) Plan Assets Reach \$2.4 Trillion
August 17, 2006	Pension Protection Act (PPA) Makes Permanent EGTRRA's Higher Contribution Limits; Encourages Automatic Enrollment
November 10, 2006	▼ 25 <sup>th</sup> Anniversary of 401(k)

Sources: Investment Company Institute, Joint Committee on Taxation, Employee Benefit Research Institute (February 2005), Vine (Spring 1986), and Wooten (2004)

## Section 401(k)

In 1978, Congress, unhappy with the uncertainty surrounding CODAs,<sup>13</sup> added a new subsection (k) to Section 401 of the Internal Revenue Code (IRC).<sup>14</sup> Subsection (k) allowed profit-sharing plans to adopt CODAs, subject to certain requirements, including restrictions on distributions during employment, a requirement that an employee's contributions be fully vested, and a numerical nondiscrimination test.<sup>15</sup> Congress made the new law effective beginning in 1980. Likely under the impression that very few employers would add a 401(k) feature to their retirement plans, Congress estimated in 1978 that the loss in tax revenue would be "negligible."<sup>16</sup>

On November 10, 1981, the IRS proposed regulations under the new Section 401(k).<sup>17</sup> The regulations made it clear that 401(k) contributions could be made from an employee's ordinary wages and salary, not just from a profit-sharing bonus, as long as the employee agreed in advance to have the funds taken from his or her pay and contributed to the plan. Because the proposed regulations essentially opened up 401(k) plans to ordinary wages and salary, November 10, 1981 marks the birth of the modern 401(k) plan. After that date, companies began to add 401(k) contributions to their profit-sharing plans, convert after-tax thrift-savings plans to 401(k) plans, or create new 401(k)-type DC plans.<sup>18</sup>

### ***Did you know?***

*The 401(k) regulation proposed on November 10, 1981 was six pages long, including the preamble. The latest comprehensive final 401(k)/401(m) regulation, issued at the end of 2004, was 57 pages long.*

At the 401(k) plan's inception, employee before-tax contributions were also exempt from payroll, or Federal Insurance Contributions Act (FICA), taxes. Total employee and employer contributions were subject to an annual limit (\$45,475 in 1982), but there was not a separate limit for employee contributions. The original 401(k) rules also imposed limits based on nondiscrimination tests and permitted loans and withdrawals.

## Regulatory Headwinds

Congress has continued to amend the law for 401(k) plans since their inception. While many recent legislative and regulatory measures have sought to foster 401(k) plans, in the 1980s and early-to-mid 1990s the legislative and regulatory climate was not favorable to 401(k) plans.<sup>19</sup> Whether the intent was primarily to provide federal revenue to offset other tax or spending measures or explicitly to restrict their growth, Congress did not nurture 401(k) plans in their formative years.

For example, through the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), Congress reduced the maximum allowable annual contribution to a DC plan to \$30,000 in 1983. In 1983, furthermore, Congress removed the payroll tax exemption, requiring all employee pre-tax contributions to be subject to FICA taxes (Figure 2).<sup>20</sup>

In 1984, the Treasury Department proposed to eliminate Section 401(k) from the Internal Revenue Code.<sup>21</sup> Although this proposal was never implemented, the Tax Reform Act of 1986 (TRA '86) substantially tightened the rules governing 401(k) plans. Congress changed the rules because it thought that these plans did not provide adequately for rank-and-file employees and that these plans should be secondary, not primary, retirement plans.<sup>22</sup>

One of the new rules that Congress enacted with TRA '86 effectively froze the \$30,000 maximum annual amount of total contributions (employee and employer) to any type of DC plan, and this freeze was effective for 17 years. Another TRA '86 provision added a new, more restrictive annual limit that specifically applied to employee deferrals: an employee could contribute no more than \$7,000 pre-tax to 401(k) plans. This rule was a significant restriction on employee contributions in two ways. Previously, any combination of employee and employer contributions could be used to reach the \$30,000 contribution limit, now only a portion of the limit could be funded with employee pre-tax contributions. Also, whereas essentially all other restrictions on retirement plans are at the employer level, this new participant deferral limit was levied at the individual level.<sup>23</sup> TRA '86 also tightened further the nondiscrimination rules that applied specifically to 401(k) plans.<sup>24</sup>

### **Measures Taken to Strengthen 401(k) Plans**

It was not until the late 1990s that the regulatory climate began to change for 401(k) plans. In 1996, as part of a package of reforms aimed at bolstering small businesses—the Small Business Job Protection Act of 1996 (SBJPA)<sup>25</sup>—Congress acted to encourage employers to offer retirement plans, including 401(k) plans (Figure 2). The SBJPA simplified nondiscrimination tests<sup>26</sup> and repealed rules imposing limits on the contributions that could be made to a retirement plan by an employee that also participated in a DB plan.<sup>27</sup> In addition, starting in the late 1990s, the IRS issued a series of rulings allowing automatic enrollment.

In 2001, the Economic Growth and Tax Relief Reconciliation Act (EGTRRA) took another step to spur saving through 401(k) and other DC plans.<sup>28</sup> EGTRRA increased the annual DC plan contribution limit, albeit not higher than the \$45,475 limit in place in 1982. In addition, the restrictions placed on employee deferrals were loosened as the limit on pre-tax contributions was increased and additional “catch-up” contributions were allowed for employees age 50 and older. With the goal of preserving retirement accounts even when job changes occur, EGTRRA increased the opportunities for rollovers among various savings vehicles (401(k) plans, 403(b) plans, 457 plans, and IRAs). In addition, EGTRRA permitted 401(k) plans to offer a “Roth” feature for after-tax contributions.<sup>29</sup> Because of Congressional budget rules, these changes were set to expire after 2010.<sup>30</sup>

Legislation passed in August 2006, the Pension Protection Act (PPA), also aims to foster retirement savings and 401(k) plan participation. Among its many provisions, the Act makes the EGTRRA pension rule changes permanent and, additionally, makes some of the rules governing pension plans more flexible. For example, the PPA encourages employers to automatically enroll employees in their 401(k) plans and allows employers to offer appropriate default investments. These measures seek to increase participation in 401(k) plans and facilitate the best use of these plans’ options by workers.

### **401(k) PLAN PARTICIPATION RISES STEADILY DESPITE REGULATORY, LEGAL HURDLES**

Despite the legislative and regulatory measures aimed at restricting 401(k) plans in their early years, the number of firms offering 401(k) plans has grown dramatically since their formal introduction in 1981. The growth in participation rates among workers at employers sponsoring plans also has been considerable, likely reflecting improvements in plan design as well as the increasing importance of 401(k) plans to retirement saving.

### **More Employers Offer 401(k) Plans; More Employees Participate**

Decisions made by both employers and employees determine the rate of participation in retirement plans in the economy as a whole. Employers decide whether or not to sponsor plans—that is, whether or not to provide compensation in the form of retirement benefits<sup>31</sup>—and, if they choose to sponsor plans, which employees will be eligible to participate.<sup>32</sup> Once eligible, employees generally choose whether or not to participate. For many traditional DB and DC plans, there is little distinction between eligibility and participation—once eligible, an employee is included in the plan.<sup>33</sup> Given the importance of elective employee contributions, however, the decision of whether or not to participate is key for 401(k) plans.

On balance, over the past two decades, the percentage of private-sector employees who work for firms that offer a pension plan has been about unchanged.<sup>34</sup> This general trend, however, masks a variety of important changes: the move away from DB plans toward DC plans, the robust growth of 401(k) plans, and the rising trend in 401(k) plan participation by employees offered a plan. Twenty-five years ago, there were 30 million active participants in DB plans, 19 million in DC plans, and virtually no 401(k) plan participants (Figure 1). At year-end 2005, there were 47 million workers participating in 401(k) plans, compared with 21 million active participants in DB plans, and 8 million in other DC plans.

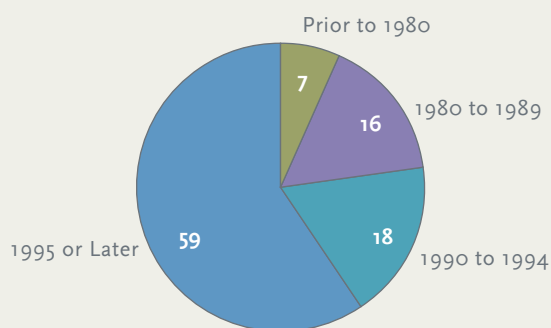
The growth in private-sector DC plans and the decline of DB plans do not appear to be due primarily to firms with existing DB pension plans dropping the plans and adopting 401(k) plans.<sup>35</sup> Instead, the change largely results from a combination of other factors. First, there has been a shift in the industrial composition of the U.S. economy, which has resulted in a decline in employment at firms that typically offer DB plans and an increase in employment at firms that typically offer DC plans. Second, firms that offer DB plans have adopted DC plans while still maintaining their DB plans.<sup>36</sup> Third, firms that had not previously offered any type of pension, particularly firms that have only come into existence recently, have tended to adopt DC plans.

Often it is argued that firms prefer to offer 401(k) plans because they have more predictable funding requirements than DB plans. Firms—especially new firms in growing industries—are also more likely to offer 401(k) plans because they provide benefits that vest quickly and are portable for workers, and thus are valued more highly than DB plans by mobile workers.<sup>37</sup> Early in its history, a 401(k) plan was generally offered as a supplemental plan, typically by a large employer that also offered a DB plan. Increasingly, 401(k) plans are the only retirement plan offered by an employer. By 2002, 90 percent of 401(k) plans were stand-alone plans,<sup>38</sup> with the bulk of stand-alone plans (59 percent) offered by employers that started their plans in 1995 or later (Figure 3).

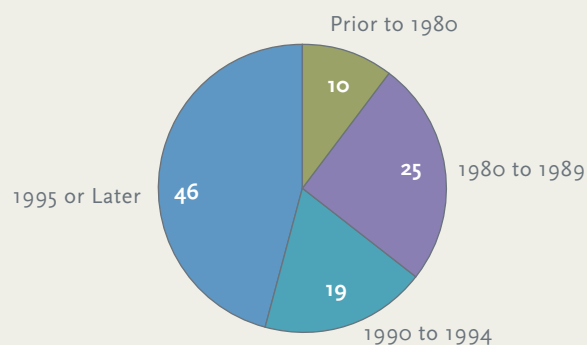
**FIGURE 3**

**STAND-ALONE 401(k) PLANS TEND TO BE YOUNGER PLANS**

*Percent of plans by plan effective date,<sup>1</sup> 2002*



**Employer Sponsors Stand-Alone 401(k) Plan**  
(350,000 plans)



**Employer Sponsors 401(k) and Other Retirement Plans**  
(39,000 plans)

<sup>1</sup>“Plan effective date” may be the date when the DC plan started rather than when it added the 401(k) feature.

Source: ICI Tabulation of U.S. Department of Labor Form 5500 Data

As noted above, employee access to 401(k) plans has increased since the early 1980s. In addition, there has been a remarkable upward trend in participation rates among workers whose employers sponsor a plan. Among workers at firms sponsoring 401(k)-type plans in 1983, only 38 percent participated, compared with 70 percent in 2003 (Figure 4). This upsurge in participation is likely due in part to employees becoming more comfortable with 401(k) plans over time, and in part to the fact that 401(k) plans are more likely to be the primary, rather than supplementary, retirement plan offered.

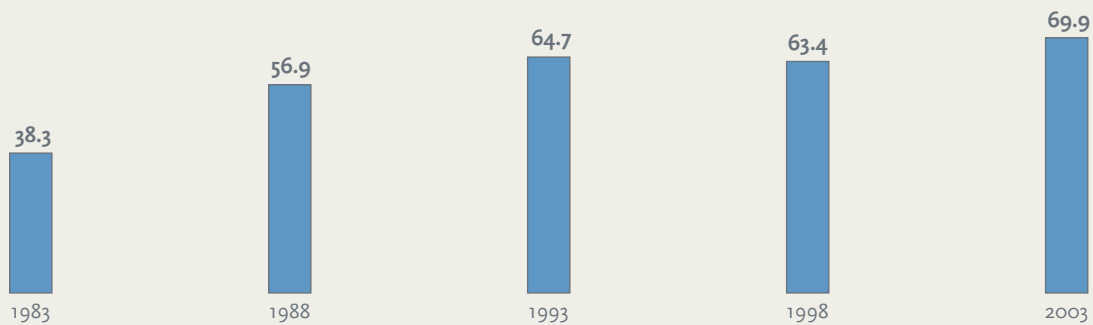
### 401(k) Plan Design Impacts Participation Rates

Plan design plays a key role in the participation rates achieved within a given 401(k) plan. Research generally indicates that offering employer matching contributions or a loan provision increases participation.<sup>39</sup> Furthermore, adding investment options to a plan's menu increases participation provided the options are not overly complex (Figure 5).<sup>40</sup> Other factors, such as opinions of family, friends, and colleagues; educational plan materials and seminars; the availability of other pension plans; and personal characteristics (e.g., age, job tenure, income) also influence an individual's participation decision.<sup>41</sup>

FIGURE 4

### MORE WORKERS PARTICIPATE IN 401(k) PLANS OVER TIME

Percent of workers at firms sponsoring a 401(k) plan who participate in a 401(k) plan, selected years

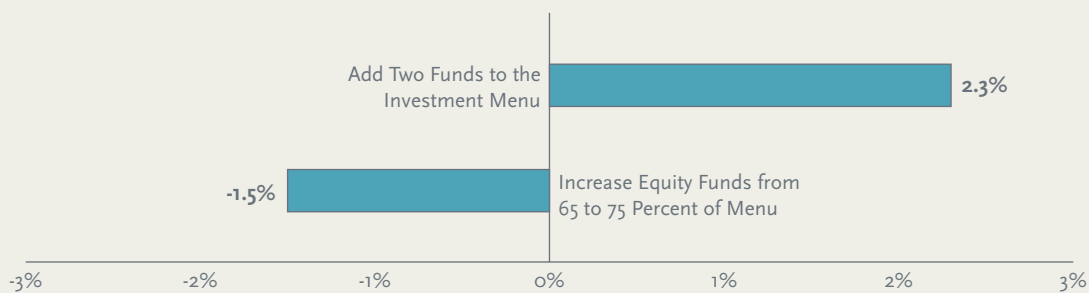


Sources: ICI Tabulation of Current Population Survey Data and Copeland (September 2005)

FIGURE 5

### MORE OPTIONS INCREASES PARTICIPATION; COMPLEXITY REDUCES PARTICIPATION

Change in non-highly compensated employees' participation rates, 2001



Source: The Vanguard Group, Inc., Vanguard Center for Retirement Research (see Utkus (December 2005))



Although aggregate participation rates among employees offered 401(k) plans have risen over time (Figure 4), some employers are acting to further improve participation in their plans by changing the dynamics of the participation decision itself. In most 401(k) plans, an employee must opt into the plan, that is, enroll by indicating the amount he or she wishes to contribute and selecting investment(s). With automatic enrollment, the worker does not have to choose to participate, but must choose not to participate in the plan. Research regarding several plans with automatic enrollment finds that automatic enrollment increases participation, particularly among lower income workers.<sup>42</sup>

Since the 401(k) plan was first introduced, neither the IRC nor ERISA specifically prohibited automatic enrollment, but legal and regulatory uncertainties impeded plan sponsor adoption of automatic enrollment features and only 17 percent of plans use automatic enrollment today (Figure 6).<sup>43</sup> Starting in 1998, regulatory and legislative changes generally have sought to remove any roadblocks that prevented employers from adopting automatic enrollment features in their 401(k) plans. For example, the IRS issued rulings that clarified that plans with automatic enrollment were qualified plans for tax purposes;<sup>44</sup> that automatic enrollment could be applied

to current employees;<sup>45</sup> and that any default contribution percentage could be used and a plan could increase the participant's contribution percentage over time.<sup>46</sup> In 2006, the PPA clarified that federal law preempted any state law that would prohibit automatic enrollment<sup>47</sup> and instructed the Department of Labor (DOL) to issue guidance on appropriate default investments.<sup>48</sup> The PPA also includes a provision that allows some relief from nondiscrimination testing for plans that adopt automatic enrollment.<sup>49</sup>

### WHAT INFLUENCES 401(k) PLAN CONTRIBUTION RATES?

Many factors influence the amounts employers and employees contribute to the plan, in addition to the legal limits placed on contributions. Whether evaluated in real or nominal terms, contribution limits today are more restrictive than when the 401(k) plan was created 25 years ago. Also affecting contribution behavior are so-called nondiscrimination rules, which link the amount of pension benefits that highly paid workers receive to the amount of benefits rank-and-file workers receive within a given firm. Intended in part to ensure that pension benefits are available to lower-paid workers, these rules are extremely complicated and may discourage the adoption of plans by firms.

FIGURE 6

#### AUTOMATIC ENROLLMENT IS INCREASINGLY AVAILABLE

Percent of plans implementing automatic enrollment, 2002–2005



Source: Profit Sharing/401(k) Council of America (Annual Surveys)

## History of Contribution Limits

Prior to ERISA in 1974, there was no specific limitation on contributions to pension plans.<sup>50</sup> ERISA created the first formal limit on DC plan contributions—IRC Section 415(c)—which applies to the sum of employer and employee contributions made to a plan during a given year. In 1974, Congress set the limit for total DC plan contributions per participant to the lesser of \$25,000 or 25 percent of an employee’s compensation (Figure 7). The \$25,000 limit was indexed to inflation, and by 1982, the limit had grown to \$45,475.

As noted earlier, however, fiscal concerns during the 1980s put downward pressure on retirement plan contribution limits. With the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA '82), Congress reduced the total DC plan contribution limit to \$30,000, and did not allow for inflation indexing until after 1985.<sup>51</sup> The Deficit Reduction Act of 1984 (DEFRA '84) postponed indexing for inflation until after 1987.<sup>52</sup> The Tax Reform Act of 1986 (TRA '86) effectively froze the DC total contribution limit, which as a result, remained unchanged (at \$30,000) through 2000.<sup>53</sup>

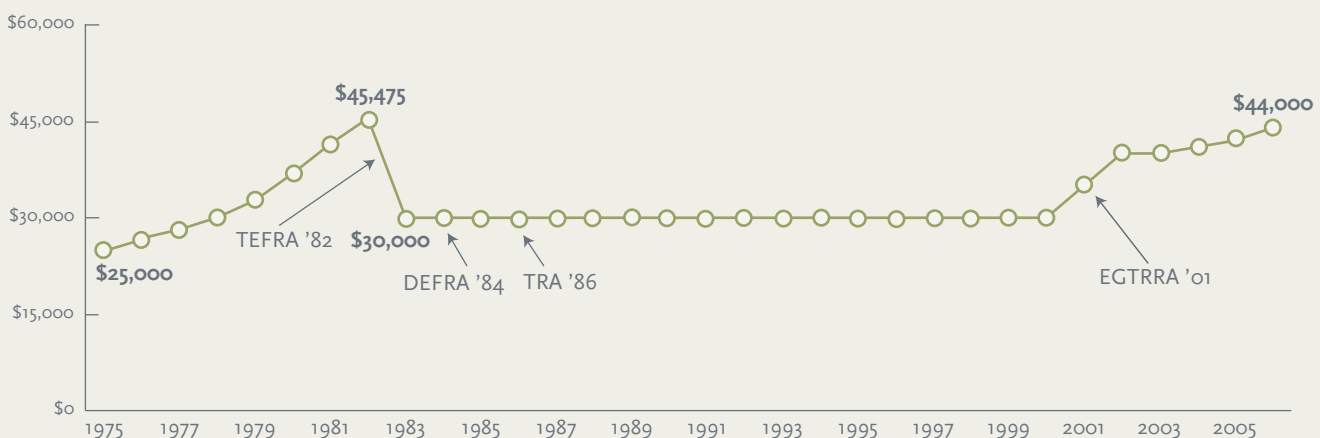
In the early years of the 401(k), the only limit on an employee’s contribution was that the total contribution by the employer and employee could not exceed the limit under IRC Section 415(c). As part of TRA '86, Congress added a separate limit (under IRC Section 402(g)) on employee before-tax contributions, or “deferrals.” The 402(g) limit was originally set at \$7,000 and indexed to inflation thereafter (Figure 8). In 1994, Congress added a new rounding rule for both the 415(c) and 402(g) limits so that increases tied to inflation occurred only in round increments.<sup>54</sup>

With EGTRRA in 2001, Congress increased both the participant deferral and total DC plan contribution limits. The total DC plan contribution limit, then at \$35,000, was increased to \$40,000 (starting in 2002 and indexed to inflation thereafter), and the 25 percent rule was increased to 100 percent of compensation (Figure 7).<sup>55</sup> Nevertheless, in real terms, the total DC plan contribution limit is below the level instituted by ERISA, and in nominal terms, today’s 415(c) limit of \$44,000 is below its 1982 level of \$45,475. The participant deferral limit was increased to \$11,000 in 2002 and increased \$1,000 per year until reaching \$15,000 in 2006 (Figure 8). After 2006, this limit will be indexed to inflation.

FIGURE 7

### TOTAL ANNUAL 401(k) PLAN CONTRIBUTION LIMIT

IRC § 415(c) limit, 1975–2006



Source: Investment Company Institute Summary of Internal Revenue Code

To encourage more saving by older workers,<sup>56</sup> EGTRRA also added catch-up contributions, which allow additional deferrals by participants age 50 or older.<sup>57</sup> The limit on catch-up contributions to 401(k) plans was \$1,000 in 2002 and increased \$1,000 per year until reaching \$5,000 in 2006, at which point it will be indexed for inflation (Figure 8). Because of Congressional budget rules,<sup>58</sup> the increased limits added in 2001 were due to sunset after 2010. The Pension Protection Act of 2006 (PPA) made these increased limits permanent.

### **Nondiscrimination Testing and Rules Are Very Complex**

In addition to contribution limits applicable to all participants, there are additional limits placed on workers with high earnings. For many workers, it is these limits, rather than the general limits, that constrain their contributions.

Concerned that firms were setting up plans primarily to shelter income for well-compensated executives, Congress included pension nondiscrimination provisions in the 1942 Revenue Act (Figure 2).<sup>59</sup> The Act sought to limit the ability of pensions to favor shareholders, officers, supervisors, and highly compensated workers with respect to coverage, benefits, or finances, by linking the amount

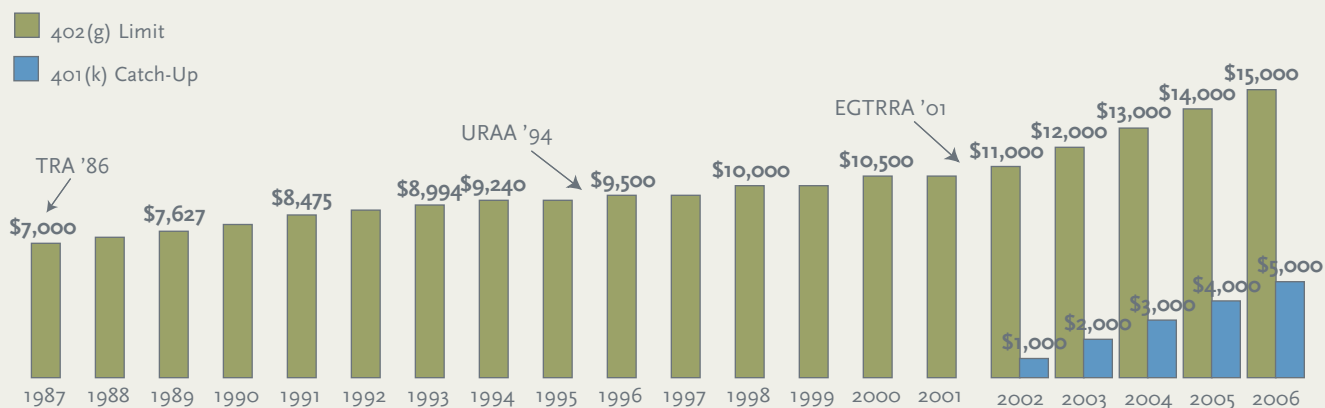
of pension benefits that highly paid workers receive to the amount of benefits rank-and-file workers receive. From this general provision, nondiscrimination rules and their associated regulations have become some of the lengthiest and most complicated rules for qualified plans. The online Appendix explains these rules and their development in more detail, but some aspects of the rules are highlighted below.

**Highly Compensated Employees.** The first step in applying nondiscrimination rules is to define the group of employees that are subject to benefit restrictions. Before 1986, the term “highly compensated” was not defined and was applied based on the facts and circumstances of each case. TRA '86 introduced a uniform definition of highly compensated employees (HCEs).<sup>60</sup> Included in this category were any workers who earned more than \$75,000 or who earned more than \$50,000 and were in the top 20 percent of workers at the firm when ranked by compensation. Whether these rules represented a tightening or loosening of the restrictions placed on plans varied from firm to firm. However, the complexity of the rules (described in more detail in the Appendix) increased the administrative burden of the rules, especially for small firms.

**FIGURE 8**

### **401(k) PARTICIPANT DEFERRAL LIMIT**

*IRC Section 402(g) and catch-up contribution limits, 1987–2006*



Source: Investment Company Institute Summary of Internal Revenue Code

**Minimum Coverage Test.** In general, the minimum coverage test aims to ensure that the employer offers participation in the retirement plan to a wide slice of the firm's workforce. Prior to TRA '86, the minimum coverage test could be met if the plan benefited either a significant percentage of a firm's employees or a classification of employees the Department of Treasury determined was not discriminatory.<sup>61</sup> TRA '86 tightened the coverage tests by specifying that a plan must meet one of three numerical tests (described in the Appendix).

**Benefits and Contributions Tests.** In general, plans may not discriminate in favor of HCEs in terms of benefits or contributions. DB plans typically apply the standard to the level of future retirement benefits earned in the plan. DC plans typically are evaluated on the basis of current contributions to the plan.

Under a 1956 revenue ruling issued by the IRS,<sup>62</sup> a CODA was able to meet the nondiscrimination requirements by passing a numerical test. Under this test, the plan could generally meet the nondiscrimination requirement if more than half of the employees who chose to contribute were among the lowest paid two-thirds of eligible employees. The test weighted employees based on the amount they chose to contribute. When 401(k) plans were created in 1978, the legislation added a modified version of this test to the IRC—the actual deferral percentage (ADP) test—which included a more complicated formula relating the contributions of the high paid and low paid that, in many cases, was more restrictive than the previous test.

TRA '86 further modified the ADP test. First, as described above, a new uniform definition of an HCE was implemented and the test now compared the contribution rate (ADP) of HCEs to the contribution rate of non-highly compensated employees (NHCEs). Second, the test formula was modified again so that, relative to previous law, the maximum allowable ADP for HCEs was reduced at all levels of NHCE ADP.<sup>63</sup> TRA '86 also instituted a new test—the actual contribution percentage (ACP) test under Section 401(m) of the IRC—that generally subjected the sum of matching employer contributions and after-tax employee contributions to the same test that applied to pre-tax employee contributions under the ADP test.

**Includable Compensation.** TRA '86 included a provision that limited the amount of compensation that can be taken into account under a plan to \$200,000, effective in 1989.<sup>64</sup> This new limit meant the benefits or contributions formula could only apply to the first \$200,000 of compensation, for example, when determining benefits under a DB plan or employer matching contributions under a 401(k) plan. In addition to the direct effect on the benefits or contributions formula, limiting includable compensation makes it more difficult for a firm to pass the ADP and ACP nondiscrimination tests when there are workers who earn more than the limit. This is because these workers' contributions are measured against a lower level of income, which raises their contribution ratios.<sup>65</sup> The \$200,000 limit was indexed to inflation and by 1993 had risen to \$235,840 (Figure 9). The Omnibus Budget Reconciliation Act of 1993 (OBRA '93) reduced the limit to \$150,000, effective in 1994, and indexed it to inflation.

## Nondiscrimination Rules Eased By More Recent Legislation

It wasn't until 1996 that the general trend toward more complicated and restrictive nondiscrimination rules was reversed. Under the Small Business Job Protection Act of 1996 (SBJPA), the definition of HCEs was greatly simplified. In particular, prior law set separate levels of compensation that qualified an employee as an HCE depending on the firm's overall level of compensation. Under SBJPA, an employee was considered an HCE if his or her compensation was greater than \$80,000, regardless of whether or not the employee was among the highest paid 20 percent of employees at the firm.<sup>66</sup> In addition, SBJPA made deferral and contribution tests less administratively burdensome. In particular, firms could avoid these tests altogether if they offered to all non-highly compensated workers a minimum level of either matching or non-matching employer contributions.<sup>67</sup>

In 2001, EGTRRA made changes that loosened the restrictions on employee contributions caused by nondiscrimination testing. For example, the limit on includable compensation, which had risen to \$170,000 by 2001, was increased to \$200,000 in 2002 and indexed for inflation (Figure 9). Although a substantial increase, the limit in 2006 (\$220,000) is still below the level it had reached in 1993 (\$235,840). In addition, EGTRRA allowed individuals age 50 or older to make catch-up contributions (up to \$5,000 in 2006; Figure 8), and catch-up contributions are not subject to nondiscrimination testing.

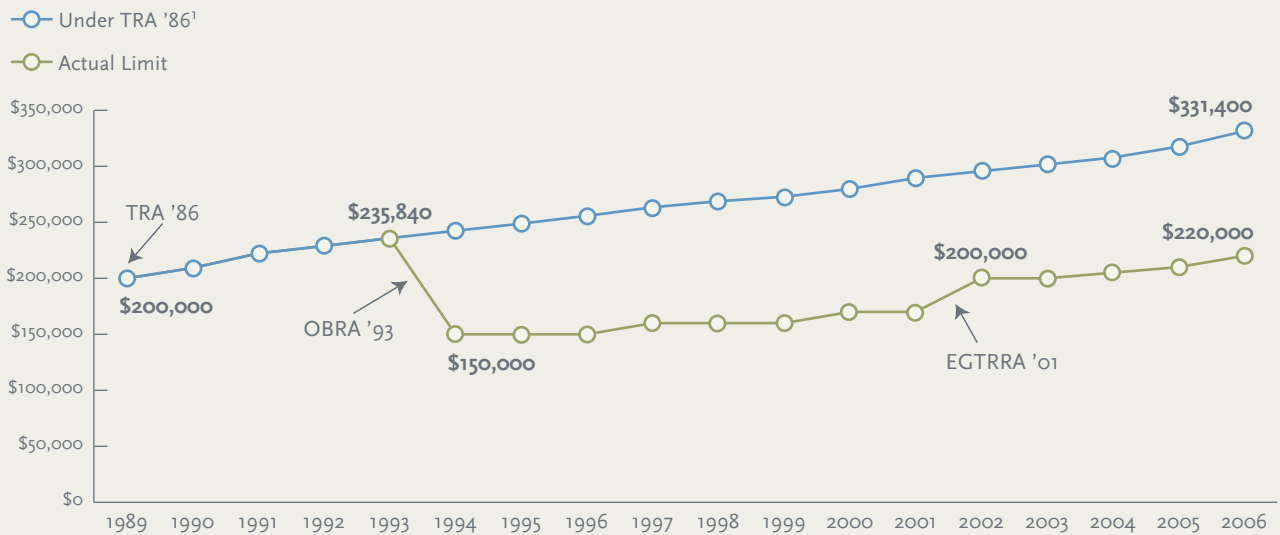
## Nondiscrimination Testing Restricts Many Participants

The effect of nondiscrimination rules likely varies from firm to firm. Some firms may respond to nondiscrimination rules primarily by providing more compensation to rank-and-file workers in the form of pension benefits, while

FIGURE 9

### INCLUDABLE COMPENSATION LIMIT

IRC § 401(a)(17) limit, actual and projected under TRA '86, 1989–2006



<sup>1</sup> Although passed in 1986, the TRA limit became effective in 1989. To determine the indexed value under TRA '86 for a given year after 1992, the value of the Consumer Price Index for All Urban Consumers (CPI-U) as of October of the prior year is compared to the value of the CPI-U as of October 1988. The percent change from October 1988 to the most recent October is rounded to the nearest tenth of a percent. The limit is then calculated as \$200,000 increased by the rounded percent change.

Sources: Investment Company Institute Tabulation and Summary of Internal Revenue Code

other firms' compensation packages may be largely unaffected by the rules. Some firms may respond primarily by restricting benefits paid to highly compensated workers. Several recent studies document the restrictions placed on participants by nondiscrimination testing. Many highly compensated workers have their before-tax contributions to the plan limited either by plan design or as testing goes on during the plan year (Figure 10).<sup>68</sup> Other workers see contributions removed from the plan when their plans fail the nondiscrimination tests. Unfortunately, these rules may cause still other firms to decide not to offer pension benefits to any employees.<sup>69</sup> Indeed, for smaller firms, the complexity and administrative burden imposed by the rules may be deterrent enough.

### Several Factors Affect 401(k) Participants' Contribution Activity

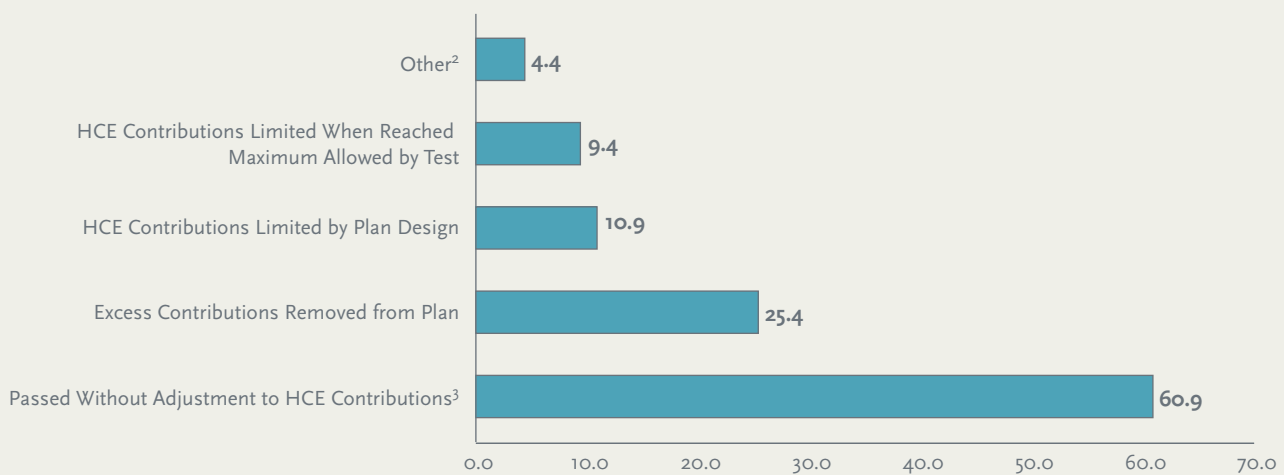
In addition to the IRC limits and limits imposed by plans, many of the same factors that influence an individual's decision to participate in a 401(k) plan also impact the amount that an individual will contribute. Research shows that the presence of a loan provision increases 401(k) participants' contribution rates.<sup>70</sup> (Although, as discussed below, few 401(k) plan participants take advantage of the loan option.)

Research on the impact of employer contributions on individual participants' contribution rates is mixed,<sup>71</sup> although participants in plans with employer contributions have higher total contribution rates, on average.<sup>72</sup>

FIGURE 10

#### NONDISCRIMINATION TESTING RESTRICTS MANY 401(k) PARTICIPANTS' CONTRIBUTIONS

Actual deferral percentage (ADP) test results, percent of plans,<sup>1</sup> 2005



<sup>1</sup> Multiple responses included; percentages do not add to 100 percent.

<sup>2</sup> For example, an employer can make additional contributions to NHCE accounts (called qualified nonelective contributions, or QNECs)

<sup>3</sup> Some plans reporting this result limited HCE contributions by plan design.

Source: Profit Sharing/401(k) Council of America (2006)

Nevertheless, there are some participants who tend to cluster at the employer match level, that is, the percentage of salary up to which the employer matches their contributions (Figure 11). For this group, the design of the employer contribution has an impact on their behavior. For example, if an employer designs an employer contribution with a match rate of 50 cents for each dollar contributed by the participant up to 6 percent of compensation, a participant contributing to the match level will have a 9 percent total contribution rate. If, on the other hand, the match formula is dollar-for-dollar up to 3 percent of pay, a participant choosing to contribute to the employer match will have a 6 percent total contribution rate. The employer's contribution is the same under these two formulas (3 percent of pay).

### INVESTMENT OPTIONS OFFERED BY 401(k) PLANS MEET INVESTORS' VARYING NEEDS

As noted earlier, ERISA allows participants to direct their retirement plan accounts, and the DOL requires that plan sponsors offer at least three investment options covering a range of risk and return.<sup>73</sup> Much has been learned from studying how 401(k) participants respond to the number of investment options offered and the types of

investments offered, as well as participants' management of their accounts over time. On average, younger 401(k) plan participants tend to be more concentrated in equity investments, while older participants tend to hold more of their accounts in fixed-income securities, in line with advice typically offered by financial planners. Nonetheless, asset holdings vary quite a bit from individual to individual. For example, analysis of the EBRI/ICI 401(k) plan participant data finds that 15 percent of participants hold no equity securities at all. Generally, participants select a few investments out of the line-up of options and rarely rebalance or change their selections. Over time, regulations and plan design have evolved to respond to the range of investing abilities of 401(k) plan participants.

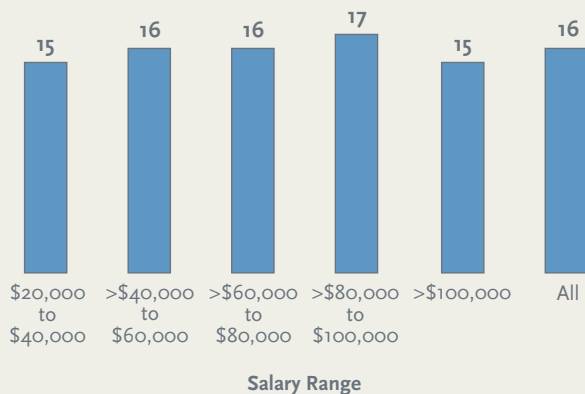
### Stocks Dominate 401(k) Participants' Investing

Over the past two decades, the composition of 401(k) plan assets has increasingly moved toward diversified stock investing, often through mutual funds. In 1989, only 8 percent of 401(k) plan assets were invested in mutual funds, compared with 45 percent by year-end 2002 (Figure 12). Guaranteed investment contracts (GICs)—insurance company products that guarantee a specific rate of return on the invested capital over the life of the

FIGURE 11

#### MANY 401(k) PARTICIPANTS CONTRIBUTE AT EMPLOYER MATCH LEVEL

Percent of participants in salary range contributing exactly at employer match level, 1999



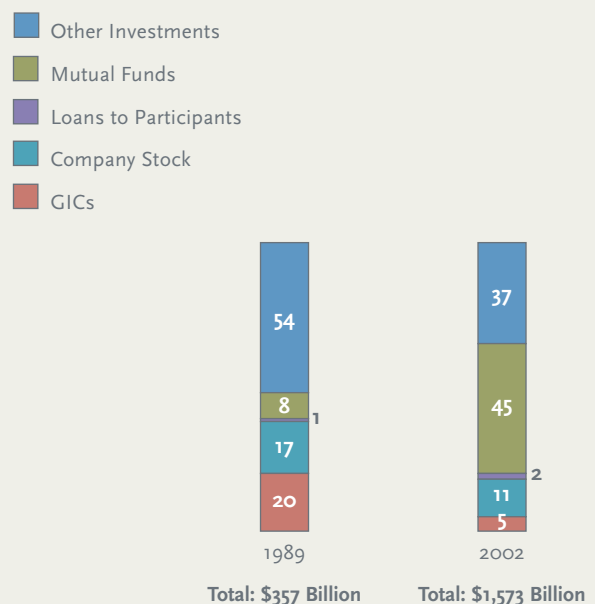
Note: Sample of nearly 1 million 401(k) participants (whether contributing or not) for whom employer matching contribution information was provided or derived.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project (see Holden and VanDerhei (October 2001))

FIGURE 12

#### ASSET COMPOSITION HAS SHIFTED OVER TIME

Percent of 401(k) plan assets, 1989 and 2002



Sources: Investment Company Institute and U.S. Department of Labor, Employee Benefits Security Administration

contract—fell as a share of total 401(k) plan assets. In part as a result of declining market interest rates over the past two decades, GICs fell from 20 percent of 401(k) plan assets in 1989 to 5 percent in 2002. Company stock—that is the stock of the employer/plan sponsor—has also fallen in share over the past decade or so, likely reflecting changes in plan design as well as participants' decisions regarding asset allocation to company stock.<sup>74</sup>

The EBRI/ICI 401(k) participant database, which analyzes large and representative cross-sections of 401(k) plan participants from 1996 through 2005, finds that the bulk of 401(k) plan assets are invested in equity securities, reflecting the long-term investment horizon of retirement savers. At year-end 2005, stock investments—equity funds (which include mutual funds, bank collective trusts, separate accounts, and any pooled investment primarily invested in stocks), company stock, and the equity

portion of balanced funds—represented about two-thirds of 401(k) participants' account balances.<sup>75</sup> The largest component was equity funds, which was nearly half of 401(k) participants' total holdings in 2005. This aggregate asset allocation reflects the shift toward diversification and equity investing.<sup>76</sup>

Aggregate measures of asset allocation mask the wide range of asset allocations chosen by individual participants. While younger participants have higher concentrations in equity securities than older participants, on average, nearly one-fifth of 401(k) participants in their twenties at year-end 2005 held no equity securities at all (Figure 13). Recent legislative changes have sought to expand the provision of advice to 401(k) plan participants and improve the selection of default investment options, such as lifestyle or lifecycle funds, when a participant has not made an investment decision.<sup>77</sup>

**FIGURE 13**

**ASSET ALLOCATION TO EQUITY INVESTMENTS VARIES WIDELY AMONG 401(k) PARTICIPANTS**

*Asset allocation distribution of 401(k) participant account balance to equity investments<sup>1</sup> by age; percent of participants,<sup>2,3</sup> 2005*

Age Group	Percentage of Account Balance Invested in Equity Investments <sup>1</sup>					
	Zero	1 to 20 percent	>20 to 40 percent	>40 to 60 percent	>60 to 80 percent	>80 percent
20s	18.5	2.6	4.7	8.8	30.8	34.6
30s	13.3	3.1	4.9	9.5	25.6	43.7
40s	13.1	4.1	5.7	10.4	24.3	42.5
50s	14.4	5.9	7.2	11.7	23.5	37.3
60s	19.8	8.3	8.0	11.2	19.9	32.6
All <sup>2</sup>	15.0	4.5	5.9	10.3	24.6	39.6

<sup>1</sup>Equity investments include equity funds (which include stock mutual funds, commingled trusts, separately managed accounts, and any pooled investment primarily invested in stocks), company stock, and the equity portion of balanced funds (which include hybrid mutual funds, commingled trusts, separately managed accounts, and any pooled investment invested in a mixture of stocks and bonds; lifestyle and lifecycle funds fall into this category).

<sup>2</sup>Participants include the 17.6 million 401(k) plan participants in the year-end 2005 EBRI/ICI database.

<sup>3</sup>Row percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project (see Holden and VanDerhei (August 2006))



### Recent Innovations Facilitate Asset Allocation

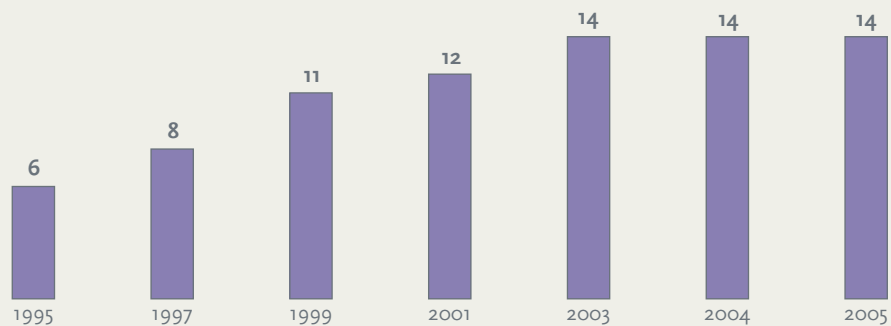
The trend toward diversification and increased investment in equities has occurred as the number of investment options offered to 401(k) plan participants has increased. In 1995, the average number of funds offered by 401(k) plans was six (Figure 14).<sup>78</sup> By 2005, the average number was 14 funds. Yet, even with all of this choice, research finds that 401(k) participants tend to invest in a few options<sup>79</sup> and rarely change their asset allocations.<sup>80</sup>

Thus, a recent trend toward maintaining diversification but facilitating asset allocation over time has led to the introduction of lifestyle funds, which allow participants to pick a diversified portfolio containing a mix of asset classes based on their tolerance for risk, and lifecycle funds, which offer a diversified portfolio that rebalances to be more conservative over time.<sup>81</sup> In 1996, only 12 percent of plans offered such funds in their investment line-up, today almost half of plans do (Figure 15).

FIGURE 14

#### NUMBER OF INVESTMENT OPTIONS OFFERED BY PLANS HAS RISEN

Average number of investment options offered by 401(k) plans, selected years

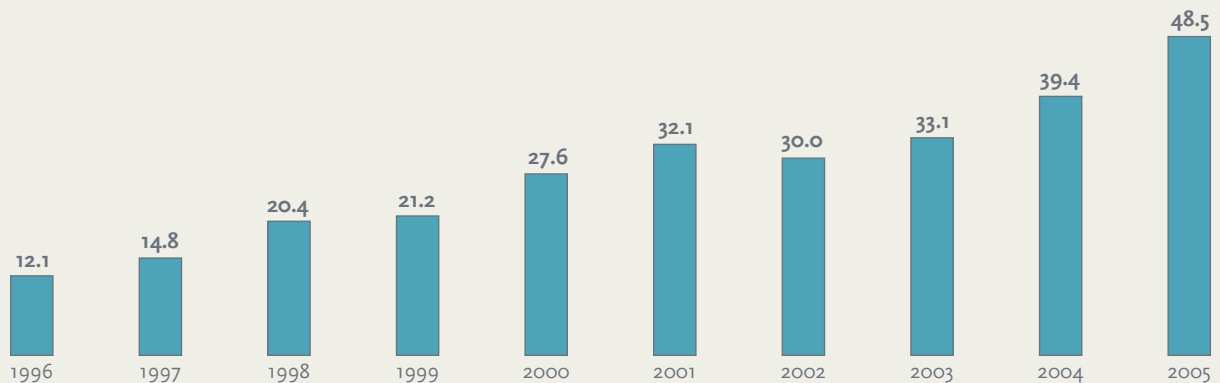


Source: Hewitt Associates (September 2005)

FIGURE 15

#### MORE 401(k) PLANS OFFER LIFESTYLE, LIFECYCLE FUNDS

Percent of plans offering lifestyle and/or lifecycle funds, 1996–2005



Source: Profit Sharing/401(k) Council of America (Annual Surveys)

Not only are more plan sponsors offering lifestyle and lifecycle funds, recently hired 401(k) plan participants are more likely to hold these funds. More than 40 percent of recently hired 401(k) plan participants were holding balanced funds (which include lifestyle and lifecycle funds) in 2005, compared with fewer than one-third of recently hired participants in 1998 (Figure 16).<sup>82</sup>

### FEW 401(k) PARTICIPANTS ACCESS FUNDS PRIOR TO RETIREMENT

Prior to retirement, 401(k) plan participants may access 401(k) plan assets through a plan loan, a hardship withdrawal, or a distribution upon leaving employment at the firm. Research finds that the presence of a loan provision generally increases participation and contribution rates in 401(k) plans, however, providing such liquidity raises the concern that participants will tap their account balances prior to retirement and diminish their retirement preparedness. Nevertheless, while most 401(k) participants are in plans that offer loans, few participants have 401(k) loans outstanding. Even fewer 401(k) participants take withdrawals from their accounts while still employed by the plan sponsor. In addition, the bulk of 401(k) assets are preserved as retirement assets when workers change jobs.

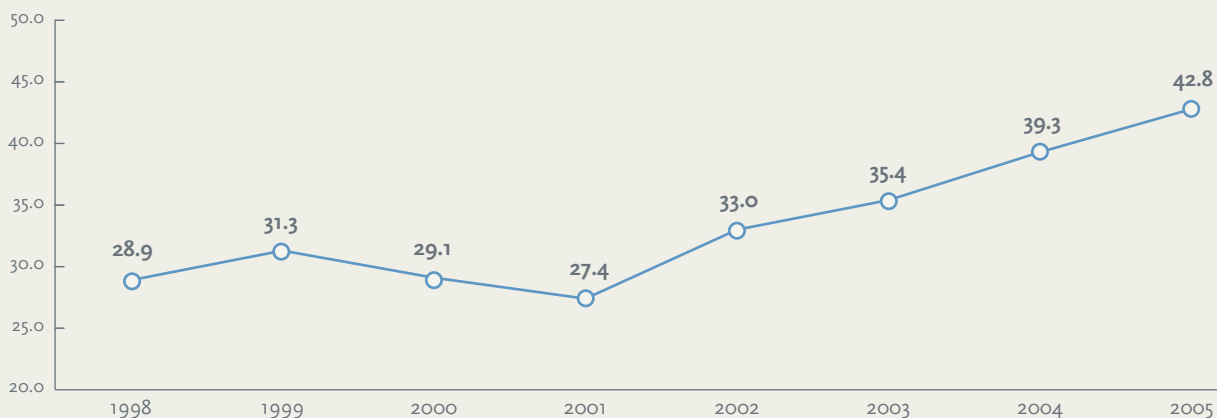
### Few Participants Have 401(k) Plan Loans

Prior to ERISA's passage in 1974, some plans allowed participants to take loans. ERISA contained rules allowing this practice to continue,<sup>83</sup> provided certain requirements are met.<sup>84</sup> In 1982, Congress added new tax rules regarding plan loans that restrict their amount and repayment terms<sup>85</sup> in order to seek a balance between concerns that widespread use of loans from retirement plans "diminishes retirement savings" but also that "an absolute prohibition against loans might discourage retirement savings by rank-and-file employees."<sup>86</sup> In 1986, Congress added a rule requiring that a loan's repayment schedule be level (that is, each repayment must generally be of the same size over the term of the loan—no balloon payments allowed). If a participant does not meet the rules governing loans or does not repay the loan, the loan is treated as a distribution from the plan and taxed accordingly.

FIGURE 16

### MORE RECENT HIRES HOLD BALANCED FUNDS

Percent of recently hired 401(k) participants holding balanced funds, 1998–2005



Note: The analysis includes participants with two or fewer years of tenure in the year indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project (see Holden and VanDerhei (August 2006))

Although the bulk of 401(k) plan participants are in plans that offer loans, few participants have 401(k) plan loans outstanding. In the 10 years that the EBRI/ICI 401(k) participant database has collected loan information, the percentage of participants with loans outstanding has ranged narrowly between 16 percent and 19 percent of those in plans offering loans (Figure 17). Furthermore, the outstanding loans tend to be a small percentage of the remaining account balances.<sup>87</sup>

#### 401(k) Participants Rarely Take Withdrawals

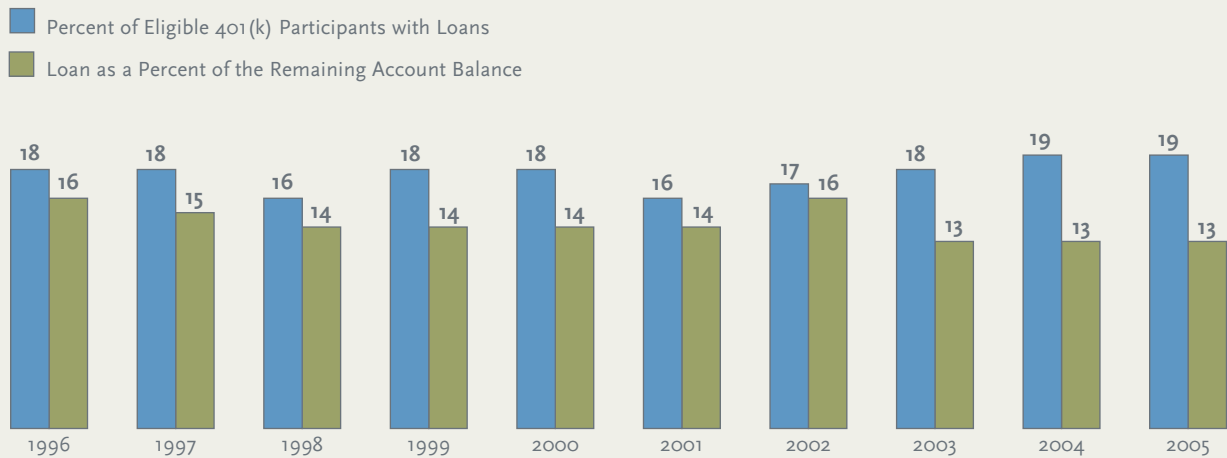
When Section 401(k) was added to the IRC in 1978, profit-sharing plans were generally allowed to distribute account

balances attributable to employer contributions as early as three years after a contribution was made, even if the employee was still working with the sponsoring firm. As a condition of the favorable tax treatment provided by Section 401(k), Congress required that an employee's pre-tax contributions (and earnings) not be distributable until the employee terminates employment. Congress included only two exceptions:<sup>88</sup> attainment of age 59 ½ and "hardship," which was defined in subsequent regulation.<sup>89</sup> As part of TRA '86, Congress added an additional 10 percent penalty tax<sup>90</sup> on early distributions<sup>91</sup> to discourage distributions of 401(k) plan accounts before retirement.

FIGURE 17

### FEW 401(k) PARTICIPANTS HAVE OUTSTANDING 401(k) LOANS; LOANS TEND TO BE SMALL

1996–2005



Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Given these restrictions designed to preserve 401(k) balances for retirement, 401(k) participant withdrawal activity during employment is even scarcer than 401(k) plan loan activity. Older participants are more likely to make withdrawals than younger participants. Indeed, participants in their sixties, who are not subject to the early distribution penalty tax, are twice as likely to make a withdrawal than younger participants: 8 percent of participants in their sixties had made a withdrawal compared with 5 percent of participants in their fifties and 4 percent of participants in their forties (Figure 18).<sup>92</sup>

### Rules Aim to Keep 401(k) Assets Invested at Job Change

As explained earlier, 401(k) plans always have been allowed to distribute a participant's account after termination of employment. Since the 401(k) plan was introduced, Congress has added various rules restricting the flexibility of plans as to when these distributions could occur. For example, in 1984, Congress required that participants in 401(k) plans be allowed to keep the accounts in the plan

after termination of employment prior to retirement,<sup>93</sup> with the exception of small account balances, which could be forced out by the employer.<sup>94</sup> Although the opportunity to perform a tax-free rollover dates back to ERISA, Congress in 1992 required plans to offer participants the option to have distributions directly rolled over to an IRA or another employer's plan.<sup>95</sup> In 2001, Congress acted again to preserve account balances for retirement: under EGTRRA, plans that cash out small account balances above \$1,000 must place the distribution into an IRA unless the participant chooses to receive the distribution directly.

Despite concerns that DC plan participants will tap their account balances at job change, research on the actual behavior of workers indicates that the bulk of the account dollars are, indeed, rolled over to IRAs or another plan at job change.<sup>96</sup> Furthermore, the EBRI/ICI 401(k) Accumulation Projection Model (discussed below) forecasts a moderate impact on replacement rates at retirement resulting from such "leakage" from 401(k) plans at job change.<sup>97</sup>

**FIGURE 18**

### FEW 401(k) PARTICIPANTS TAKE WITHDRAWALS

*Percent of participants in age and salary group with withdrawals, 2000*

Age Group	Salary Group		
	\$40,000 or less	>\$40,000 to \$80,000	>\$80,000
20s	3	2	1
30s	4	4	3
40s	4	5	4
50s	4	5	5
60s	8	9	8

*Note: Data taken from a sample of 1.1 million 401(k) plan participants at year-end 2000.*

*Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project (see Holden and VanDerhei (November 2002–Appendix))*

## MOST DC PLAN PARTICIPANTS DO NOT CASH OUT AT RETIREMENT

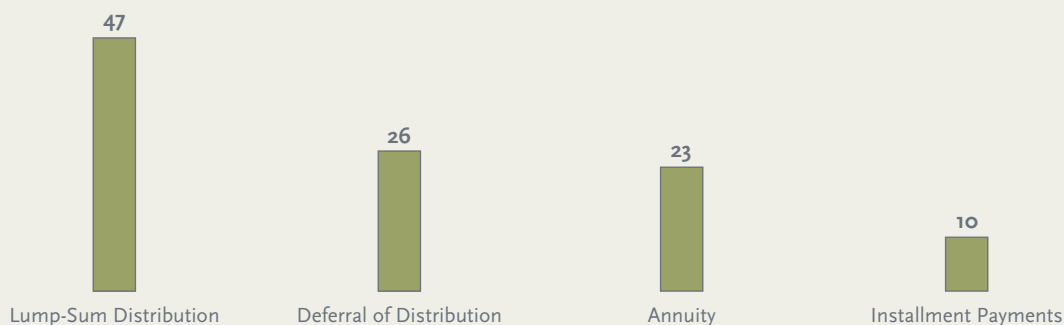
Along with leakage of 401(k) savings prior to retirement, concerns are raised that DC plan participants will completely spend down their plan assets early in retirement. Again, analysis of actual plan participants' behavior suggests that this is generally not the case. An ICI survey of households retiring with DC plan balances found that the bulk of respondents who had a choice preserved their DC plan accounts at retirement.<sup>98</sup> About one-quarter

of retirees with DC account balances indicated they were deferring distribution—leaving some or all of the account balance in the plan—and 10 percent of respondents opted for installment payments from their accounts (Figure 19). Nearly half took a lump-sum distribution of some or all of their account and 23 percent of respondents annuitized some or all of their account. Among retirees taking lump-sum distributions, 92 percent reinvested some or all of the proceeds, usually in IRAs (Figure 20).

FIGURE 19

### NEARLY HALF OF PARTICIPANTS OPT FOR LUMP-SUM DISTRIBUTION AT RETIREMENT

Percent of respondents who had multiple options—multiple responses

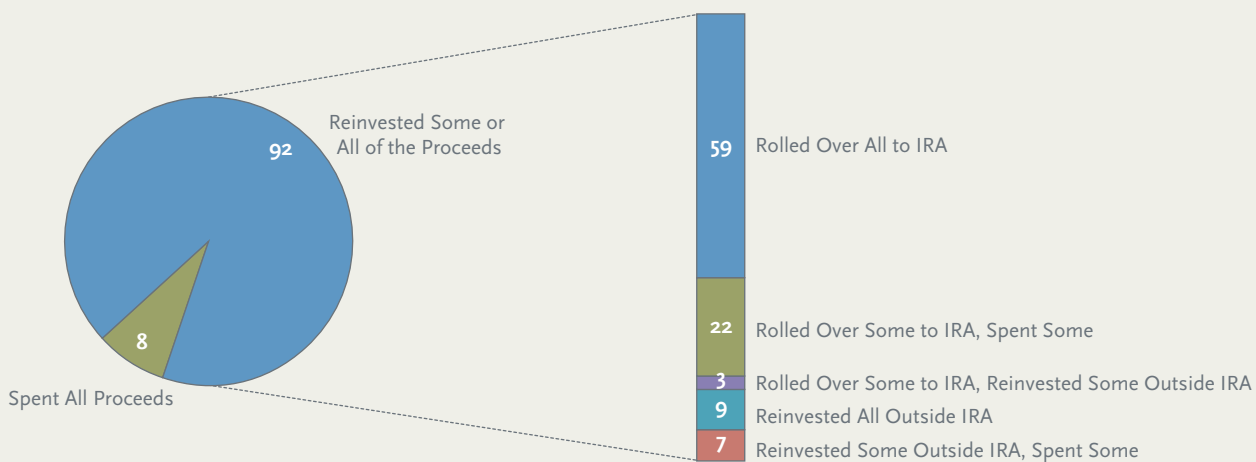


Note: Individuals retired from a DC plan between 1995 and 2000. Data as of May 2000.

Source: Investment Company Institute, "Financial Decisions at Retirement," Fundamentals, November 2000

FIGURE 20

### BULK OF LUMP-SUM DISTRIBUTIONS ROLLED OVER AT RETIREMENT



Note: Individuals retired from a DC plan between 1995 and 2000. Data as of May 2000.

Source: Investment Company Institute, "Financial Decisions at Retirement," Fundamentals, November 2000

## Required Minimum Distributions

The IRC requires retirees to withdraw funds at a certain point: a participant must begin receiving distributions of his or her account upon reaching age 70 ½ if the individual is no longer employed by the plan sponsor. Each year thereafter, at a minimum, the plan must distribute a percentage of the account based on the participant's life expectancy.<sup>99</sup> These distributions, known as required minimum distributions (RMDs), originally applied only to pension plans covering owner-employees (also known as Keogh or "H.R. 10" plans), but in 1982, Congress applied this rule to all qualified retirement plans.<sup>100</sup>

Data are available to track IRA investors' "spend-down" activity. Research shows that the bulk of IRA owners rarely tap their IRAs until age 70 ½, when the IRC mandates that they must take RMDs.<sup>101</sup> In addition, distributions from IRAs tend to be small relative to the account balance.<sup>102</sup> Nevertheless, the average account balance among IRA owners rises with age through owners in their early seventies and then falls among older owners.<sup>103</sup>

## 401(k) ACCOUNTS CAN PROVIDE SIGNIFICANT RETIREMENT INCOME

Saving for retirement is a priority for many individuals<sup>104</sup> and by year-end 2005, U.S. retirement assets were \$14.5 trillion.<sup>105</sup> 401(k) plan assets represented 17 percent of that total (Figure 1). Although some express concern regarding 401(k) plans' accumulation ability,<sup>106</sup> analysis of a group of consistent participants with account balances from year-end 1999 through year-end 2005 highlights the retirement saving power of ongoing participation in 401(k) plans. The average account balance for this consistent group increased 50 percent between 1999 and 2005 despite one of the worst bear markets since the Great Depression (Figure 21).

Nevertheless, it is not possible to judge the 401(k) plan's ability to provide retirement income based on participants' current account balances, because many of them are decades away from retirement. Current retirees are also not a good measure: 401(k) plans have existed for, at most, only about half of these individuals' careers and many plans were created only in the last 10 years. When today's young workers reach retirement, they will have had a much longer experience with 401(k) plans that reflect today's plan design features and recent legislative and regulatory changes. Today's workers have the possibility of benefiting from lessons learned from behavioral finance and participant studies.<sup>107</sup>

FIGURE 21

### CONSISTENT 401(k) PARTICIPATION BUILDS ACCOUNT BALANCES

Average 401(k) account balances among 401(k) participants present from year-end 1999 through year-end 2005,<sup>1</sup> 1999–2005<sup>2</sup>



<sup>1</sup> Account balances are participant account balances held in 401(k) plans at the participants' current employers and are net of plan loans. Retirement savings held in plans at previous employers or rolled over into IRAs are not included.

<sup>2</sup> Figure analyzes a sample of 3.5 million participants with account balances at the end of each year from 1999 through 2005.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project (see Holden and VanDerhei (August 2006))

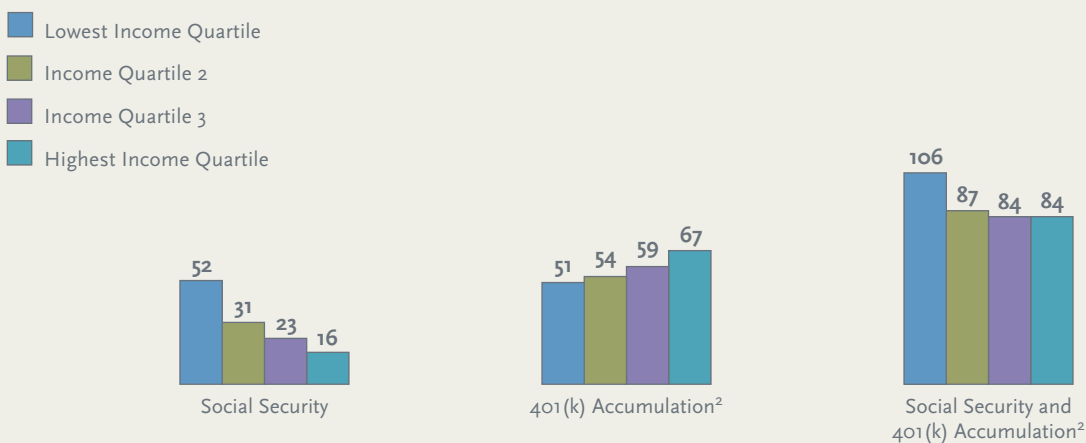
In order to examine the ability of 401(k)-generated savings to provide income for future retirees, the EBRI/ICI 401(k) Accumulation Projection Model was developed.<sup>108</sup> The model takes a group of participants in their late twenties and early thirties at year-end 2000, and projects savings accumulations through a career including hypothetical continuous employment, continuous coverage by 401(k) plans, and investment returns based on the U.S. experience between 1926 and 2001. The model uses behaviors typical to today's 401(k) participants with respect to contributions, asset allocation, job change, cash-out or rollover, and loans and withdrawals, to move this group through their careers. These 401(k) participants reach age 65 between 2030 and 2039, at which point each individual's 401(k) accumulation—which includes 401(k) balances at current and previous employers, as well as rollover IRA balances that resulted from 401(k) plans—is converted into an income replacement rate.<sup>109</sup>

Among individuals turning 65 between 2030 and 2039 and in the lowest income quartile at age 65, the median replacement rate is 51 percent of pre-retirement salary in the first year of retirement (Figure 22). For the highest income quartile, the projected median replacement rate is 67 percent of pre-retirement salary. For comparison, the model also projects Social Security benefits in the first year of retirement. By design, Social Security replaces a higher proportion of lower income participants' pay—52 percent of pre-retirement salary for the median individual in the lowest income quartile at age 65—compared with higher income participants—a median replacement rate of 16 percent for the highest income quartile in the first year of retirement.

FIGURE 22

**401(k) ACCUMULATIONS CAN PROVIDE SIGNIFICANT RETIREMENT INCOME**

Median replacement rates<sup>1</sup> for participants turning 65 between 2030 and 2039 by income quartile at age 65, percent of final five-year average salary



<sup>1</sup>The replacement rate is the portion of pre-retirement income that a 401(k) plan participant is projected to be able to replace by drawing from his or her 401(k) accumulations at age 65. The median replacement rate is the point where half of 401(k) plan participants in a given income group will be able to replace more than this amount and half will replace less than this amount.

<sup>2</sup>The 401(k) accumulation includes 401(k) balances at employer(s) and rollover IRA balances. The 401(k) distribution is not indexed for inflation in retirement, while Social Security payments are.

Source: EBRI/ICI 401(k) Accumulation Projection Model (see Holden and VanDerhei (November 2002))

The baseline results from the EBRI/ICI 401(k) Accumulation Projection Model suggest that 401(k) plans can generate significant income in retirement for today's participants after a full career. As discussed earlier, however, some workers offered 401(k) plans do not participate. When eligible workers who do not participate are included in the model, replacement rates at retirement are lower, particularly in the lower income quartiles. For example, the median replacement rate among eligible workers in the lowest income quartile at age 65 is 23 percent of pre-retirement salary in the first year of retirement (Figure 23), compared with 51 percent among participants (Figure 22).

The EBRI/ICI 401(k) Accumulation Projection Model can also be used to assess the potential impact of automatic enrollment on retirement preparedness. Using experience with employee responsiveness to automatic

enrollment and assuming workers are offered 401(k) plans with automatic enrollment throughout their careers, the model generates replacement rates among eligible workers at retirement under four different automatic enrollment scenarios.<sup>110</sup>

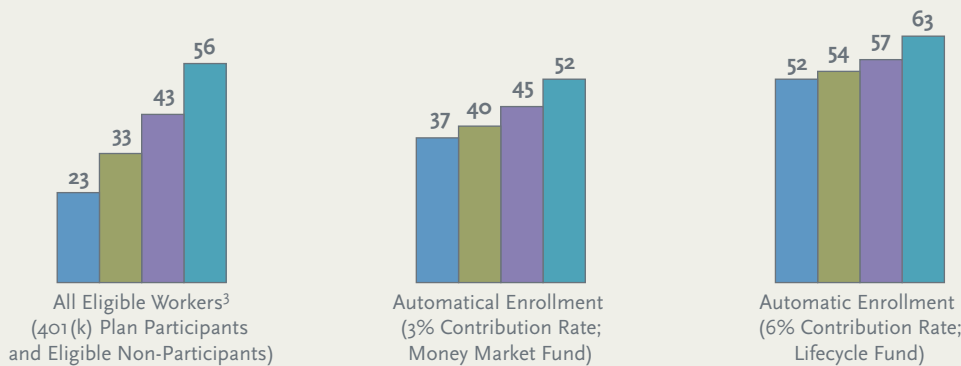
When all 401(k) plans in the model have automatic enrollment with a 3 percent default contribution rate and a money market fund as the default investment, the median replacement rate among the lowest income group of workers at retirement increases from 23 percent of pre-retirement income to 37 percent (Figure 23). If the default contribution rate is 6 percent and the default investment option is a lifecycle fund, their median replacement rate rises to 52 percent of pre-retirement pay. Although much of the dramatic rise results from increased participation by this income group, the default contribution rate and investment option are also important.

**FIGURE 23**

**AUTOMATIC ENROLLMENT CAN INCREASE PROJECTED REPLACEMENT RATES AT RETIREMENT**

Median replacement rates<sup>1</sup> from 401(k) accumulations<sup>2</sup> for workers turning 65 between 2030 and 2039 by income quartile at age 65, percent of final five-year average salary

- Lowest Income Quartile
- Income Quartile 2
- Income Quartile 3
- Highest Income Quartile



<sup>1</sup>The replacement rate is the portion of pre-retirement income that a worker is projected to be able to replace by drawing from his or her 401(k) accumulations at age 65. The median replacement rate is the point where half of 401(k) plan participants in a given income group will be able to replace more than this amount and half will replace less than this amount.

<sup>2</sup>The 401(k) accumulation includes 401(k) balances at employer(s) and rollover IRA balances. The 401(k) distribution is not indexed for inflation over retirement.

<sup>3</sup>In all three simulations, workers experience continuous employment, continuous 401(k) plan coverage, and investment returns based on average annual returns between 1926 and 2001.

Source: EBRI/ICI 401(k) Accumulation Projection Model (see Holden and VanDerhei (July 2005))



## CONCLUSION

Reflecting on 25-years' experience with 401(k) plans, this paper has looked back to the origins of the 401(k) and forward to what these plans might produce for future retirees. The early history of the 401(k) plan is one of regulatory and legislative changes that did not nurture the new retirement savings plan. Nevertheless, 401(k) plans have grown to become the most common employer-sponsored retirement plan in the United States. Learning from participant and behavioral finance studies, recent regulatory and legislative changes have aimed to make it easier for employers to set up these plans and for employees to participate in them more effectively. These measures, as well as continuous innovation in plan design, hold the promise of improved retirement preparedness for millions of workers.

## NOTES

- <sup>1</sup> Rollovers are possible from defined benefit as well as defined contribution plans. However, it is not possible to distinguish rollovers from qualified employer-sponsored retirement plans into traditional IRAs by type of plan. At year-end 2004, 45 percent of the \$3.3 trillion in IRA assets resulted from rollovers (see Brady and Holden (July 2006)). West and Leonard-Chambers (January 2006) find that 43 percent of U.S. households that owned traditional IRAs in 2005 had traditional IRAs that included rollover assets.
- <sup>2</sup> Abraham Lincoln and Congress instituted the first income tax to pay for expenses related to the U.S. Civil War. The Supreme Court ruled income taxes unconstitutional in 1895 (at least to the extent not apportioned according to population within each state), which led to the 16th Amendment to the U.S. Constitution, ratified in 1913. For a brief history of the IRS, and to see a copy of the first Form 1040 issued in 1913, see U.S. Internal Revenue Service, “Brief History of IRS.”
- <sup>3</sup> Under the principle of constructive receipt, a taxpayer must pay income tax on income earned in a tax year even if the income is not actually received in that year, so long as the income is available to the taxpayer without substantial restriction. See Treas. Reg. § 1.451-2. Accordingly, if an employee is given a choice between receiving compensation now or deferring it until a later tax year, the constructive receipt rule requires immediate taxation regardless of the choice made. A 401(k) plan is at its heart an exception to this rule, because it allows an employee to choose to contribute compensation right before the compensation would otherwise have been paid in cash.
- <sup>4</sup> This was achieved because CODAs were treated technically as employer contributions, which are deductible as an expense to the employer and are not included in the income of the employee until distributed from the plan. In contrast, employee contributions are included in the income of the employee. Distributions of funds attributable to employer contributions are subject to limitations; distributions of funds attributable to employee after-tax contributions are permissible any time the plan allows them.
- <sup>5</sup> Rev. Rul. 56-497, 1956-2 CB 284 (July 1956). See also Cohen (1994).
- <sup>6</sup> Rev. Rul. 63-180, 1963-2 CB 189 (July 1963). See *Hicks v. United States*, 205 F. Supp. 343 (W.D. Va. 1962), aff’d 314 F.2d 180 (4th Cir. 1963).
- <sup>7</sup> Specifically, the proposed regulations provided that if workers were given the option to receive cash compensation or to have the employer make a contribution to a CODA plan on their behalf, the contribution could be considered an employee contribution, and thus would not be excludable from the worker’s income. See U.S. Internal Revenue Service, “Salary Reduction Agreements,” 37 Fed. Reg. 25938 (December 6, 1972). See also U.S. Internal Revenue Service, Technical Information Release No. 1217, 7 Stand. Fed. Tax Rep. (CCH) ¶ 6257 (December 7, 1972).
- <sup>8</sup> For a detailed history of ERISA, see Wooten (2004); for a history of private pensions, see Sass (1997). For brief histories of pension regulation, see Employee Benefit Research Institute (February 2005), Mazaway (September 14, 2004), and Salisbury (2001 and January 2001).
- <sup>9</sup> ERISA § 2.
- <sup>10</sup> ERISA § 404(c). The Department of Labor (DOL) did not issue final regulations defining the scope and requirements of ERISA § 404(c) until 1992 (Figure 2). See DOL Reg. § 2550.404c-1. However, even before these regulations were issued, 401(k) plans commonly allowed participant direction of investment. See U.S. Securities and Exchange Commission, Division of Investment Management (May 1992), which cites Profit Sharing/401(k) Council’s 34th Annual Survey of Profit Sharing and 401(k) Plans (1991) to show that 82 percent of 401(k) plan participants invest their own contributions and 54 percent invest employer contributions. However, 401(k) plan holdings of mutual funds—which offer a range of diversified investment options—grew rapidly after 1994 (see Investment Company Institute (2006)).
- <sup>11</sup> U.S. House of Representatives (August 12, 1974).
- <sup>12</sup> The status quo freeze in ERISA was originally set to expire on December 31, 1976, but was extended through the end of 1977 by the Tax Reform Act of 1976 (P.L. 94-455) and again through year-end 1979 by the Foreign Earned Income Act of 1978 (P.L. 95-615).
- <sup>13</sup> See Joint Committee on Taxation (March 12, 1979): “The Congress concluded that uncertainty caused by the state of the law had created the need for a permanent solution which would permit employers to establish new cash or deferred arrangements. Also, the Congress believed that prior law discriminated against employers who had not established such arrangements by June 27, 1974.”
- <sup>14</sup> Prior to 1978, there was a subsection (k) to Section 401, but it was simply a cross reference to the qualified trust rules in IRC § 501(a). The cross reference was redesignated as subsection (l).
- <sup>15</sup> At the same time, Congress added IRC § 402(a)(8) (now located at § 402(e)(3)), which provided that an employee would not be taxed on compensation contributed to the plan pursuant to a CODA, thereby explicitly trumping the constructive receipt rule (described in endnote 3).
- <sup>16</sup> Joint Committee on Taxation (March 12, 1979).
- <sup>17</sup> U.S. Internal Revenue Service, “Certain Cash or Deferred Arrangements Under Employee Plans,” 46 Fed. Reg. 55544 (November 10, 1981).

- <sup>18</sup> Whitehouse (December 2003) describes the process of adoption of a new 401(k) plan at one large U.S. corporation during this time.
- <sup>19</sup> For example, see Mazaway (September 14, 2004). For a description of the history of 401(k) plans and the proposals for reform in the years leading up to the Tax Reform Act of 1986, see Vine (Spring 1986). For data on 401(k) plans' early years, see Andrews (1992).
- <sup>20</sup> Social Security Amendments of 1983, § 324 (P.L. 98-21). In addition, see U.S. Social Security Administration, "What does FICA mean and why are Social Security taxes called FICA contributions?"
- <sup>21</sup> See U.S. Department of the Treasury (November 1984b): "Proposals: The provisions of the tax law authorizing CODAs would be repealed."
- <sup>22</sup> In its Committee report on TRA '86, the U.S. Senate Committee on Finance (May 29, 1986) stated: "The committee is concerned that the rules relating to qualified [CODAs] under present law encourage employers to shift too large a portion of the share of the cost of retirement savings to employees. The committee is also concerned that the present-law nondiscrimination rules and permissible contribution levels permit significant contributions by highly compensated employees without comparable participation by rank-and-file employees. The committee recognizes that individual retirement savings play an important role in providing for the retirement income security of employees. The committee also believes that excessive reliance on individual retirement savings (relative to employer-provided retirement savings) can result in inadequate retirement income security for many rank-and-file employees. In particular, the committee believes that qualified [CODAs] should be supplementary retirement savings arrangements for employees; such arrangements should not be the primary employer-maintained retirement plan." See also Joint Committee on Taxation (May 4, 1987), which ascribes the same motivations to Congress as a whole. In addition, since 1986, state and local governments have not been allowed to offer 401(k) plans although existing governmental 401(k) plans were grandfathered (Tax Reform Act of 1986 § 1116 (P.L. 99-514)).
- <sup>23</sup> Thus, while a worker could potentially accrue maximum DB benefits or traditional DC benefits at two different employers, a worker could contribute no more than \$7,000 before tax to all 401(k) plans, even if employed at multiple employers who offered a plan. In addition, the limit is coordinated with other salary deferral plans. That is, contributions made through a second employer to a SEP, a 457 plan, a 403(b) plan, or the Federal Thrift Savings Plan would reduce the maximum \$7,000 contribution that could be made to the 401(k) plan.
- <sup>24</sup> See endnote 22. Also, Joint Committee on Taxation (May 4, 1987) notes: "In addition, Congress believed that the prior-law nondiscrimination rules for qualified [CODAs] permitted excessive tax-favored benefits for highly compensated employees without ensuring that there was adequate saving by rank-and-file employees. Because Congress believed that a basic reason for extending the significant tax incentives to qualified pension plans was the delivery of comparable benefits to rank-and-file employees who may not otherwise save for retirement, Congress concluded that it was appropriate to revise the nondiscrimination rules for qualified [CODAs] in order to more closely achieve this goal."
- <sup>25</sup> The Small Business Job Protection Act (SBJPA) also created SIMPLE IRAs and SIMPLE 401(k) plans. The motivation behind creating SIMPLE plans was summarized as follows: "Retirement plan coverage is lower among small employers than among medium and large employers. The Congress believed that one of the reasons small employers do not establish tax-qualified retirement plans is the complexity of the rules relating to such plans and the cost of complying with such rules." See Joint Committee on Taxation (December 18, 1996). In addition, SBJPA made 401(k) plans available to tax-exempt employers.
- <sup>26</sup> As Joint Committee on Taxation (December 18, 1996) explains: "Under prior law, the administrative burden on plan sponsors to determine which employees were highly compensated could be significant. The various categories of highly compensated employees required employers to perform a number of calculations that for many employers had largely duplicative results." In addition, the Act also introduced safe harbor rules for nondiscrimination testing, which "permit a plan to satisfy the special nondiscrimination tests through plan design, rather than through the testing of actual contributions."
- <sup>27</sup> SBJPA also repealed the family aggregation rule, which had been instituted by TRA '86 (see former IRC § 414(q)(6) in effect prior to SBJPA). Although it applied to all employers, the rule was thought to have particularly affected small business and to have limited the adoption of qualified plans by small businesses. Under the rule, if an employee was either a 5-percent owner of the firm or one of the top 10 highly compensated employees by compensation, then any family members that also worked for company (spouse, lineal ascendant or descendent, or spouse of lineal ascendant or descendent) would be aggregated for nondiscrimination purposes. That is to say, when applying nondiscrimination tests, such as the special numerical tests applicable to 401(k) plans, all family members of employees meeting this standard would be considered one employee and contributions made on the behalf of all family members would be totaled and compared to the total compensation of all family members, with compensation in excess of the includable compensation limit (\$150,000 in 1996) disregarded.

- <sup>28</sup> EGTRRA also enacted numerous other changes, including increasing IRA contribution limits and allowing catch-up contributions for IRAs. For a history of IRAs, see Holden, Ireland, Leonard-Chambers, and Bogdan (February 2005).
- <sup>29</sup> Similar to a Roth IRA, a Roth 401(k) allows an employee to contribute to the 401(k) plan on an after-tax basis. So long as the contributions remain in the plan for five years and are not distributed until the employee reaches age 59 ½, dies, or becomes disabled, both the contributions and earnings are free from federal income tax when distributed. See IRC § 402A.
- <sup>30</sup> Commonly known as the “Byrd rule,” Section 313 of the Congressional Budget Act of 1974 allows a Senator to raise a point of order striking “extraneous matter” from legislation created in the budget reconciliation process. This point of order can only be overcome by a three-fifths vote. See Keith (updated February 19, 2004). Any increased plan limits past 2010 would have been outside the budget reconciliation window and therefore “extraneous.” In short, EGTRRA’s 2010 sunset was designed to avoid having to garner 60 votes in the Senate for its passage. See Esenwein (March 4, 2005).
- <sup>31</sup> See Brady (forthcoming); Ippolito (1997); and Gustman, Mitchell, and Steinmeier (April 1994) for discussion of considerations and firm motivations in this decision.
- <sup>32</sup> A plan sponsor is allowed to offer a retirement plan to only a segment of its workforce, such as employees in one division, although the IRC, ERISA, and other laws impose restrictions. The IRC and ERISA prohibit conditioning participation, with certain exceptions, on attaining more than one year of service or an age greater than 21. See IRC § 410(a); ERISA § 202. In addition, the IRC imposes a numerical nondiscrimination test, called the minimum coverage test, to ensure that the group selected for participation is not disproportionately highly paid workers in comparison to the plan sponsor’s entire workforce. See IRC § 410(b). Of course civil rights laws prohibit distinctions based on race, gender, and similar categories.
- <sup>33</sup> Although not common, some early DB plans required employees to make after-tax contributions to buy “credits” in the plan.
- <sup>34</sup> See the Appendix, which is available online at: [www.ici.org/pdf/per12-02\\_appendix.pdf](http://www.ici.org/pdf/per12-02_appendix.pdf). In addition, see Purcell (August 31, 2006), Copeland (September 2005), and Brady and Lin (May 2005 and Fall 2003–Winter 2004) for historical analysis of such trends in coverage and participation.
- <sup>35</sup> Analyzing the time period between 1977 and 1985, Gustman and Steinmeier (Spring 1992) and Ippolito (January 1995) conclude that the decline in the portion of the workforce covered by DB plans was not due primarily to the dropping of DB plans by firms, but rather to a shift in employment from firms that tend to offer DB plans to firms that tend to offer DC plans. Using panel data, Kruse (April 1995) confirms that between 1981 and 1985 the growth in DC plans came mainly from the adoption of DC plans by both firms that had not previously offered a pension plan and firms that maintained their DB plan. Investigating the period from 1985 to 1992, Papke (Spring 1999) finds that only a fraction of ongoing sponsors, approximately 20 percent, dropped DB plans entirely and adopted DC plans.
- <sup>36</sup> This increases the number of DC plans relative to the number of DB plans.
- <sup>37</sup> Although technically a DB plan, cash balance plans have many of the attributes of a DC plan. Coronado and Copeland (November 2004) analyze firms that have converted traditional DB plans to cash balance plans. They find that firms in competitive industries with tight labor markets and highly mobile workers are more likely to undertake conversions and conclude that the conversions are largely due to workers demanding more portable pension benefits. Extending the analysis to DC plans, Aaronson and Coronado (February 2005) also conclude that worker demand for portable benefits is an important factor in the shift from DB to DC plans.
- <sup>38</sup> Because larger employers tend to offer multiple retirement plans, a lower proportion of 401(k) participants are in stand-alone plans: although 90 percent of 401(k) plans were stand-alone plans in 2002, only 59 percent of active 401(k) plan participants were in stand-alone plans (see U.S. Department of Labor, Employee Benefits Security Administration (July 2006)). In addition, Hewitt Associates (September 2005), which concentrates on large plan experience, also finds this trend: nearly two-thirds of companies considered their 401(k) plans to be their “primary” plans in 2005, compared with a little more than one-third in 1995.
- <sup>39</sup> For example, see Dworak-Fisher (2006; preliminary); Utkus (December 2005); Mitchell, Utkus, and Yang (October 2005); Utkus (July 21, 2005); Choi, Laibson, Madrian, and Metrick (July 19, 2004); Choi, Laibson, and Madrian (May 2004); Munnell, Sundén, and Taylor (December 2000); and U.S. Government Accountability Office (October 1997).
- <sup>40</sup> Mitchell, Utkus, and Yang (October 2005) find that more choice expands participation provided there is not too much complexity in the choices, which is measured by the percentage of funds offered that are equity funds. Huberman, Iyengar, and Jiang (April 2006) find that the presence of company stock as an investment option increases participation and suggest that “familiarity breeds investment” (see also Huberman (Fall 2001)). Sethi-Iyengar, Huberman, and Jiang (2004) conclude that participants can feel overwhelmed by too many investment options and Agnew and Szykman (2005) suggest that participants can experience “information overload.” In addition, Investment Company Institute (Spring 2000) finds that about one-third of nonparticipants indicated confusion over plan features was a “very” or “somewhat” important reason for not participating (multiple reasons could be given).

- <sup>41</sup> For example, see Mitchell, Utkus, and Yang (October 2005); Duflo and Saez (April 2002); Munnell, Sundén, and Taylor (December 2000); Duflo and Saez (June 2000); Investment Company Institute (Spring 2000); Clark and Schieber (1998); and Bernheim and Garrett (July 1996).
- <sup>42</sup> For example, Kelly (May 18, 2006) discusses the automatic enrollment motivation and experience of a large U.S. company; Choi, Laibson, Madrian, and Metrick (July 19, 2004) analyze automatic enrollment at four large U.S. corporations; and Madrian and Shea (November 2001) analyze automatic enrollment at another large U.S. corporation. Furthermore, workers who are automatically enrolled tend to stay enrolled (see Cornell (May 18, 2006); and Choi, Laibson, Madrian, and Metrick (July 19, 2004)).
- <sup>43</sup> Purcell (October 14, 2004) also discusses automatic enrollment over time.
- <sup>44</sup> Rev. Rul. 98-30, 1998-1 CB 1273 (June 2, 1998).
- <sup>45</sup> Rev. Rul. 2000-8, 2000-1 CB 617 (January 27, 2000). Around the same time, the IRS approved automatic enrollment for 403(b) plans and 457(b) plans. Rev. Rul. 2000-35, 2000-2 CB 138 (July 17, 2000); Rev. Rul. 2000-33, 2000-2 CB 142 (July 18, 2000).
- <sup>46</sup> In both the 1998 and 2000 rulings (see endnotes 44 and 45), the IRS used as an example a default contribution rate of 3 percent, which led many plan sponsors to adopt 3 percent as the plan's default. IRS General Information Letter to J. Mark Irwy (March 17, 2004) clarified that the 3 percent was merely an example. This position was also reflected in proposed regulations issued by the Treasury in 2003 (68 Fed. Reg. 42476 (July 17, 2003)). In addition, the IRS General Information Letter indicated that automatic increases in a participant's contribution rate are permitted. Academic research (Thaler and Benartzi (2004)) and empirical application of this principle (Utkus (November 2002) and Cornell (May 18, 2006)) indicate the power of this simple idea.
- <sup>47</sup> Pension Protection Act § 902(f). Some states have laws prohibiting an employer from making deductions from wages without the written consent of the employee. Although ERISA generally preempts state laws that "relate to" an employee benefit plan, ERISA does not preempt state criminal laws, and some of these state wage deduction laws have criminal penalties.
- <sup>48</sup> Pension Protection Act § 624. In most cases, an employee who is automatically enrolled would not have designated how the contributions should be invested. ERISA allows employers to give participants the right to invest their own 401(k) plan accounts, but DOL previously took the position that, unless the employer had received an *affirmative* investment election from participants, the employer retained the fiduciary responsibility to invest the account prudently. See U.S. Department of Labor, "Participant Directed Individual Account Plans (ERISA § 404(c) Plans)," 57 Fed. Reg. 56906 (October 13, 1992). As a result, employers often made the default investment a conservative investment. DOL issued on September 27, 2006 proposed rules pursuant to the PPA defining qualifying default investments. The rules would generally encourage plans to offer a default better suited for a long-term investment horizon. See U.S. Department of Labor, "Default Investment Alternatives Under Participant Directed Individual Account Plans," 71 Fed. Reg. 56806 (September 27, 2006).
- <sup>49</sup> Pension Protection Act § 902. As described in the Appendix, there is a design-based safe harbor that allows an employer to avoid certain numerical nondiscrimination tests. Among the requirements of the safe harbor design, the employer must offer either non-elective employer contributions or matching employer contributions according to a certain schedule, and all employer contributions must vest immediately. Under the new PPA provision, if an employer offers a qualified automatic contribution arrangement, it can avoid the same nondiscrimination tests by adopting an alternative design-based safe harbor that allows a slightly less generous matching formula, and allows employer contributions to have up to a two-year vesting schedule.
- <sup>50</sup> See U.S. House of Representatives Committee on Ways and Means (February 21, 1974); and Clark, Mulvey, and Schieber (August 31, 2000).
- <sup>51</sup> Tax Equity and Fiscal Responsibility Act of 1982 § 235 (P.L. 97-248).
- <sup>52</sup> Deficit Reduction Act of 1984 § 15 (P.L. 98-369)
- <sup>53</sup> TRA '86 retained indexing for inflation but introduced a new rule coordinating the \$30,000 limit in 415(c) with a separate limit for DB plans. Under IRC § 415(b), the annuity benefit that a DB plan provides cannot exceed a set dollar amount (\$175,000 in 2006, but at that time, \$90,000), which is itself indexed to inflation. (In other words, the limit under § 415(c) for DC plans is a limit on the contributions that can go into the plan each year, while the § 415(b) limit is a limit on the amount a DB plan can pay out when the employee retires.) TRA '86 provided that the \$30,000 limit in 415(c) would not be increased until 415(b) limit rose past \$120,000. In 1994, Congress repealed the link between the 415(c) and 415(b) limits, but kept the 415(c) limit at \$30,000, indexed for inflation in \$5,000 increments (Uruguay Round Agreements Act (URAA) of 1994 § 732 (P.L. 103-465)). The net effect of all of these changes was to keep the 415(c) limit at \$30,000 all the way through the end of 2000 (Figure 7).
- <sup>54</sup> See URAA § 732. In 1994, the rounding increments were \$5,000 for 415(c) and \$500 for 402(g). EGTRRA changed the 415(c) rounding increment to \$1,000; the 402(g) rounding increment continues to be \$500 (EGTRRA § 611).

- <sup>55</sup> In other words, the maximum combined employer and employee contribution for a given participant is the lesser of \$40,000 (in 2002; indexed for inflation) or 100 percent of compensation earned during the year.
- <sup>56</sup> The life-cycle pattern of savings suggests that older individuals are able to save at higher rates because they no longer have the expense of buying a home and/or paying for education of themselves or their children. An augmented version of the life-cycle theory predicts that an individual's optimal savings pattern rises with age. For discussion of life-cycle models, see Browning and Crossley (Summer 2001) and Engen, Gale, and Uccello (December 1999).
- <sup>57</sup> The catch-up contribution amount is in addition to IRC § 402(g) deferrals and the nondiscrimination tests do not cover catch-up contributions. Catch-up contributions are also not counted against the IRC § 415(c) limit.
- <sup>58</sup> See endnote 30.
- <sup>59</sup> See Clark, Mulvey, and Schieber (August 31, 2000) for a discussion of the history of nondiscrimination rules.
- <sup>60</sup> HCEs are determined on a company-wide basis even if the plan in question covers only a portion of employees, such as a specific line of business within the firm. See additional details in the Appendix.
- <sup>61</sup> For example, a business may limit a pension plan to a specific line of business within a company or limit the plan to certain professions. See endnote 32.
- <sup>62</sup> Rev. Rul. 56-497, 1956-2 CB 284 (July 1956).
- <sup>63</sup> Because the new uniform definition of HCEs was generally less restrictive than the old standard—in the sense that typically fewer employees were designated as HCEs than were in the top one-third of employees by compensation—it is not clear if the overall impact of rule changes with respect to the ADP test was to restrict contributions made by HCEs. See the Appendix for a more detailed discussion.
- <sup>64</sup> This provision originally entered the IRC when a provision that classified some plans as “top heavy” was included in TEFRA '82. A plan was considered top heavy if a significant portion of plan benefits accrued to “key” employees. If a plan was determined to be top heavy it was subject to certain additional requirements, including a provision that limited the amount of compensation that can be taken into account under a plan to \$200,000.
- <sup>65</sup> For example, suppose an executive earns more than the includable compensation limit and contributes the maximum allowed employee contribution of \$15,000 to a 401(k) in 2006. If the includable compensation limit is set at \$150,000, the executive's ADP, or saving rate for purposes of the plan, is 10 percent. If the includable compensation limit is set at \$200,000, the executive's ADP is 7 ½ percent.
- <sup>66</sup> Under prior law, the criteria instituted in TRA '86 had increased (due to indexing) to \$100,000 or \$66,000 and in the top 20-percent of employees ranked by compensation. Under the new law, plan sponsors could elect to limit HCEs to employees earning more than \$80,000 and in the top 20 percent of employees ranked by compensation. This is known as the “top paid group” election. In addition to simplifying the rules, the new definition of HCE generally resulted in fewer employees being designated as HCEs.
- <sup>67</sup> See the Appendix for more detailed discussion of these changes and the so-called design-based safe harbor provision.
- <sup>68</sup> Studying a 401(k) plan at one large firm, Kelly (May 18, 2006) reports that failure of nondiscrimination tests resulted in no HCEs in the plan reaching the IRC § 402(g) limit from 1998 through 2005. Holden and VanDerhei (October 2001) find that among participants not contributing at the IRC § 402(g) limit (of \$10,000 in 1999), 52 percent could not have done so because of formal plan-imposed contribution limits below the IRC limit. For a listing of techniques, in addition to making safe harbor contributions, an employer may use to reduce the possibility of the plan not meeting the ADP and ACP tests, see Allen, Melone, Rosenbloom, and VanDerhei (1997).
- <sup>69</sup> See Brady (forthcoming) for a discussion of the incentives faced by firms under 401(k) nondiscrimination rules.
- <sup>70</sup> Utkus (December 2005); Holden and VanDerhei (October 2001); Munnell, Sundén, and Taylor (December 2000); and U.S. Government Accountability Office (October 1997) find that the presence of a loan provision increases participant contribution rates.
- <sup>71</sup> Huberman, Iyengar, and Jiang (April 2006) report that the presence of an employer match increases contribution rates, particularly among lower income workers. Munnell, Sundén, and Taylor (December 2000) find that the presence of an employer match strongly increases contribution rates, while the level of the match is less important. U.S. Government Accountability Office (October 1997) also finds that employer matching increases average contributions in 401(k) plans. Holden and VanDerhei (October 2001) find that the presence of an employer contribution reduces participants' before-tax contribution rates. Utkus (December 2005) reports that employer match formulas have little impact on plan contribution rates. Other research that disentangles the impact of the match rate and the match level also finds mixed results (see Mitchell, Utkus, and Yang (October 2005) and Holden and VanDerhei (October 2001) for discussion of that research).



- <sup>72</sup> For example, Holden and VanDerhei (October 2001) find that the average total contribution rate among participants with any contributions in plans that have an employer contribution was 10.0 percent of salary (in 1999), compared with a total average contribution rate of 7.4 percent of salary among participants with any contributions in plans that do not have an employer contribution.
- <sup>73</sup> Specifically, ERISA § 404(c) gives plan fiduciaries legal protection for the investment decisions of participants in self-directed plans. DOL has issued extensive regulations implementing 404(c) that impose numerous conditions for plan fiduciaries to receive the legal relief. See DOL Reg. § 2550.404c-1. One of the conditions is that the plan offer at least three investment alternatives with materially different risk and return characteristics, each of which is itself diversified, and which taken together enable the participant to minimize risk through diversification and achieve appropriate aggregate overall risk and return characteristics in the account.
- <sup>74</sup> See discussion in Holden and VanDerhei (August 2006). For example, recently hired 401(k) participants in 2005 are less likely to hold company stock and tend to invest lower concentrations of their account balances in company stock, compared with recently hired participants in 1998.
- <sup>75</sup> See Holden and VanDerhei (August 2006) for the complete year-end 2005 update on 401(k) plan participants' asset allocations, account balances, and loan activity.
- <sup>76</sup> Index mutual funds, which are stock, hybrid, and bond mutual funds that target specific market indexes with the general objective of meeting the performance of that index, have also grown. In 1996, DC plans held \$32 billion in index mutual funds, compared with \$167 billion in 2005 (see Brady and Holden (July 2006—Appendix)).
- <sup>77</sup> PPA § 601 covers advice and PPA § 624 covers default investment options (see endnote 48). In addition, PPA § 621 covers the mapping of investment options when a plan's options are changed.
- <sup>78</sup> In addition, Profit Sharing/401(k) Council of America (1996 and 2006) report that the average number of funds available for participants' contributions was six in 1995, compared with 19 options in 2005. Furthermore, Fidelity Investments (2001 and 2005) report that participants were offered an average of seven investment options in 1995, compared with an average of 20 options in 2004.
- <sup>79</sup> Utkus and Young (March 2006) report that DC participants in plans that are recordkept by The Vanguard Group are offered 19 funds, on average, but invest in three funds, on average (in 2005). Fidelity Investments (2005) reports for their recordkept DC plans that participants are offered 20 investment options, on average, and invest in 3.7 options, on average (in 2004).
- Holden and VanDerhei (May 2001), analyzing 1.4 million participants drawn from the 2000 EBRI/ICI database, find that the sheer number of investment options presented does not influence participants. On average, participants have 10.4 distinct options but, on average, choose only 2.5. In addition, they find that 401(k) participants are not naïve—that is, when given “n” options they do not divide their assets among all “n.” Indeed, less than 1 percent of participants followed a “1/n” asset allocation strategy.
- <sup>80</sup> In any given year, 401(k) plan participants generally do not rebalance in their accounts. For example, Mitchell, Mottola, Utkus, and Yamaguchi (2006) report that 80 percent of 401(k) participants initiated no trades in the two years observed (2003–2004). In addition, Hewitt Associates (2006) finds that 11.9 percent of participants made both a transfer and an investment change in 2005; Utkus and Young (March 2006) find that 13 percent of The Vanguard Group's DC plan participants made a trade in 2005 (not counting plan-sponsor-induced investment option changes); and Fidelity Investments (2005) reports that 13 percent of DC plan participants made exchanges in 2004. For additional research references, see Holden and VanDerhei (August 2006).
- <sup>81</sup> A lifestyle fund is a fund that maintains a predetermined risk level and generally contains “conservative,” “moderate,” or “aggressive” in the fund's name. A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund (mentioned in its name) approaches. Generally, in 401(k) plans, the participant selects the target-date fund based on their expected retirement date.
- <sup>82</sup> Balanced funds also represent a higher proportion of the account balance of recently hired participants in 2005 compared with earlier years (see Holden and VanDerhei (August 2006)). For additional research and statistics on lifestyle and lifecycle funds see Profit Sharing/401(k) Council of America (2006); Brady and Holden (July 2006); Hewitt Associates (2006); Mottola and Utkus (November 2005); and Fidelity Investments (2005).
- <sup>83</sup> To avoid conflicts of interest, ERISA contains rules prohibiting transactions between a plan and “parties-in-interest” to the plan, which include all of the employees of the plan sponsor. However, ERISA from its inception contained a number of exceptions, including one for loans between plans and participants and beneficiaries of the plan. See ERISA § 408(b)(1). Congress stated that by adding this exception it was simply “[f]ollowing current practice.” See U.S. House of Representatives (August 12, 1974).
- <sup>84</sup> ERISA requires that loans must be available to all participants on a reasonably equivalent basis (and not in a greater amount to highly paid employees) and bear a reasonable rate of interest. DOL has issued regulations implementing these rules. See DOL Reg. § 2550.408b-1.

<sup>85</sup> Under IRC § 72(p), a plan loan cannot exceed the lesser of (a) \$50,000 or (b) the greater of one-half of the participant's vested account balance or \$10,000. In 1986, Congress added a rule requiring that a new loan from a plan, when added to all other outstanding loans from the same employer, cannot exceed the \$50,000 limit reduced by the excess of highest outstanding balance during the preceding one-year period over the outstanding balance of loans from the plan on the date the loan is made. The purpose of this rule was to prevent employees from "effectively maintaining a permanent outstanding \$50,000 loan balance." For an example of this rule in practice, see Joint Committee on Taxation (May 4, 1987). In addition, IRC § 72(p) requires that the term of the loan not exceed five years (unless the loan is used to acquire a principal residence).

<sup>86</sup> Joint Committee on Taxation (December 31, 1982).

<sup>87</sup> In addition, DOL Form 5500 data indicate that loans have been a negligible percentage of plan assets. For example, loans were about 2 percent of 401(k)-type plan assets from 1996 through 2002 (see U.S. Department of Labor, Employee Benefits Security Administration (July 2006 and earlier years)). Among DC plans more broadly, the Form 5500 data indicate that loans have ranged from 1.3 percent of plan assets in 1990 to 1.7 percent of plan assets in 2002 ((see U.S. Department of Labor, Employee Benefits Security Administration (July 2006 and Summer 1993)). Individual participant loan activity varies with participant age, job tenure, salary, and account size (see Holden and VanDerhei (August 2006) for the 2005 analysis of loan activity). Furthermore, unpublished ICI data from a 401(k) household survey (see Investment Company Institute (Spring 2000) for published survey results) find that most 401(k) participants repay their 401(k) plan loans within five years, and Holden and VanDerhei (November 2002) forecast that 401(k) loan activity has a very small impact on replacement rates at retirement.

<sup>88</sup> Congress provided that, along with a formal termination of employment, 401(k) contributions can also be distributed upon the death or disability of the participant. Since 1978, Congress has added a few additional distributable events. In 1986, Congress added plan termination as a distributable event (Tax Reform Act of 1986 § 1116 (P.L. 99-514)). In 2005, Congress created a special exception for distributions to help victims of Hurricane Katrina (Katrina Emergency Tax Relief Act of 2005 § 101 (P.L. 109-73)). In 2006, Congress allowed distributions to military reservists called to active duty (Pension Protection Act of 2006 § 827).

<sup>89</sup> Congress did not define what it meant by "hardship," and the November 10, 1981 proposed regulations simply stated that the distribution can be made on account of hardship only if it is necessary in light of the immediate and heavy financial needs of

the employee. In 1988, when the IRS issued final regulations, it provided a list of circumstances deemed to constitute a hardship: medical expenses for the employee, spouse or dependents; purchase of a principal residence; payment of tuition for post-secondary education for the employee, spouse or dependents; and payment of amounts necessary to prevent the eviction or foreclosure of the employee's principal residence (53 Fed. Reg. 29658 (August 8, 1988)). Although this list was provided as essentially a safe harbor (i.e. other hardships might qualify depending on the circumstances), many plans have since been written to allow hardship distributions only in these cases. In its 1988 regulations, the IRS also required that a participant receive all other possible distributions and loans from the plan before a hardship distribution could be made, and required that a participant be suspended from making pre-tax contributions for twelve months after the hardship distribution was made. With EGTRRA in 2001, Congress directed the IRS to lessen this suspension period to six months (EGTRRA § 636). In 2004, the IRS added funeral expenses and repair of a principal residence to the list of approved hardships (69 Fed. Reg. 78144 (December 29, 2004)). The PPA of 2006 requires the IRS to amend its rules to provide that an event that would constitute a hardship if it occurred with respect to a participant's spouse or dependent, then such event will constitute a hardship if it occurs to a person who is a participant's beneficiary under the plan (Pension Protection Act § 826). In other words, a hardship distribution could be made to pay, for example, post-secondary education expenses of a domestic partner who is the participant's beneficiary but does not qualify as a dependent.

<sup>90</sup> The penalty tax applies to the taxable portion of the withdrawal (after-tax contribution amounts are not subject to income tax or penalty tax).

<sup>91</sup> Although the rules have been modified since 1986 somewhat, generally an early distribution is one made before the participant attains age 59 ½ (or age 55 if the employee has terminated employment), dies, or becomes disabled. The additional 10 percent tax is also not imposed if the distribution is paid in a series of periodic payments made over the life expectancy of the employee or the employee and beneficiary. Congress included in 1986 a number of exceptions, such as for deductible medical expenses, and has added a number of exceptions over the years. Most recently, the PPA of 2006 added an exception for distributions made to reservists called to active duty after September 11, 2001 and before December 31, 2007 (see Pension Protection Act § 827).

<sup>92</sup> Investment Company Institute (Spring 2000) reports that only 4 percent of 401(k) participants whose current plan allowed hardship withdrawals had taken such a withdrawal since joining the plan.



- <sup>93</sup> Retirement Equity Act (REA) of 1984 § 205 (P.L. 98-397). Prior to REA '84, IRC § 411(a)(7) contained a rule regarding cash-out and repayment, for vesting purposes, of a participant's accrued benefit, if the benefit did not exceed \$1,750. REA added IRC § 411(a)(11), which provided that a participant's benefit would be treated as forfeitable (not vested) unless the plan restricted mandatory cash-out to accounts below \$3,500. Therefore REA effectively make explicit that DC plans could not cash out an account without consent. Under current rules a plan must allow a participant to keep his or her account in the plan until at least age 62 (Treas. Reg. § 1.411(a)-11).
- <sup>94</sup> Under REA '84, if the account balance was below \$3,500, the employer could cash out the participant. This amount was increased to \$5,000 in 1997 by the Taxpayer Relief Act of 1997 (P.L. 105-34), and is not indexed with inflation. Copeland (January 2006) reports that 37.7 percent of lump-sum recipients (through 2003) indicated they were required to take their most recent distribution, while 62.3 percent indicated they took the lump-sum distribution voluntarily.
- <sup>95</sup> To encourage participants to have distributions directly rolled over to an IRA or another employer's plan, Congress also required 20-percent withholding on a distribution eligible to be rolled over that is paid to the participant.
- <sup>96</sup> Although most lump-sum distribution dollars are rolled over, many small account balances are cashed out (see Stevens (July 21, 2005)). Nevertheless, among lump-sum distribution recipients, there generally has been an upward trend in the percentage of people that roll the lump-sum distribution into another tax-qualified plan (IRA, individual annuities, or another employment-based retirement plan) over time (see Copeland (December 2005)).
- <sup>97</sup> See Holden and VanDerhei (November 2002). For example, the EBRI/ICI 401(k) Accumulation Projection Model predicts that the median replacement rate in the lowest income quartile at age 65 would be 13 percentage points higher if 401(k) participants never cashed out at job change (moving it from 51 percent of pre-retirement salary to 64 percent). The impact declines with salary: the median replacement rate in the highest income quartile at age 65 would be 5 percentage points higher if 401(k) participants never cashed out at job change (moving it from 67 percent of pre-retirement salary to 72 percent).
- <sup>98</sup> See Investment Company Institute (Fall 2000 and November 2000).
- <sup>99</sup> Prior to 1986, distributions did not need to begin if the participant was still working (other than for certain owner-employees). Congress changed this rule in 1986 (Tax Reform Act of 1986 § 1121 (P.L. 99-514)), requiring distributions to begin at age 70 ½ regardless of whether the participant was still working for the employer, and then changed it back in 1996 (Small Business Job Protection Act of 1996 § 1404 (P.L. 104-188)).
- <sup>100</sup> Tax Equity and Fiscal Responsibility Act of 1982 § 242 (P.L. 97-248).
- <sup>101</sup> Holden, Ireland, Leonard-Chambers, and Bogdan (February 2005) report that 16 percent of traditional IRA owners in 2004 took a withdrawal from their IRA over 1999 through 2003. West and Leonard-Chambers (January 2006) find that 18 percent of traditional IRA owners in 2005 had taken a withdrawal in 2004.
- <sup>102</sup> Holden, Ireland, Leonard-Chambers, and Bogdan (February 2005) find that the median traditional IRA withdrawal made by households between 1999 and 2003 was \$5,000. West and Leonard-Chambers (January 2006) report that median traditional IRA withdrawal in 2004 was \$3,300.
- <sup>103</sup> For example, the average IRA balance among taxpayers age 70 to 74 with IRAs in 2002 was \$123,270; the average IRA balance among taxpayers age 75 to 79 was \$80,617; and the average IRA balance was \$53,914 among taxpayers age 80 or older with IRAs (see Bryant and Sailer (Spring 2006)).
- <sup>104</sup> For example, the 2004 Survey of Consumer Finances finds that nearly 35 percent of households indicate saving for retirement is their most important reason for saving (see Bucks, Kennickell, and Moore (March 2006)). In addition, 92 percent of mutual fund shareholders indicate that saving for retirement is one of their financial goals, and 72 percent indicate that it is their primary financial goal (see Investment Company Institute (Fall 2004)).
- <sup>105</sup> See Brady and Holden (July 2006).
- <sup>106</sup> For example, see Munnell and Sundén (2004).
- <sup>107</sup> For example, see Mitchell and Utkus (2004).
- <sup>108</sup> Holden and VanDerhei (November 2002 and November 2002—Appendix) describe the model and present several different future projection scenarios. The baseline case is discussed in this paper. Holden and VanDerhei (July 2005) adds all eligible workers, in addition to 401(k) plan participants, to the model and forecasts the impact of working a full career with the offer of 401(k) plans with automatic enrollment.
- <sup>109</sup> The 401(k) accumulations are converted into an income stream—an annuity or set of installment payments—using current life expectancies at age 65 and discount rates. The replacement rate compares the income or installment payment generated in the first year of retirement to the individual's five-year average pre-retirement income (reported as a percentage). While Social Security payments are indexed with inflation, the 401(k) distributions are not.
- <sup>110</sup> See Choi, Laibson, Madrian, and Metrick (July 19, 2004) for employees' responses to automatic enrollment. See Holden and VanDerhei (July 2005) for more details on automatic enrollment in the EBRI/ICI 401(k) Accumulation Projection Model.

## BIBLIOGRAPHY

- Aaronson, Stephanie, and Julia Coronado. "Are Firms or Workers Behind the Shift Away from DB Pension Plans?" *Finance and Economics Discussion Series (FEDS) Paper*, No. 2005-17, Washington, DC: Board of Governors of the Federal Reserve System, February 2005.
- Agnew, Julie R., and Lisa R. Szykman. "Asset Allocation and Information Overload: The Influence of Information Display, Asset Choice, and Investor Experience," *Journal of Behavioral Finance*, Vol. 6, No. 2, 2005: pp. 57–70.
- Allen, Everitt T., Jr., Joseph J. Melone, Jerry S. Rosenbloom, and Jack L. VanDerhei. *Pension Planning: Pension, Profit-Sharing, and Other Deferred Compensation Plans, Eighth Edition*. Burr Ridge, IL: Irwin/McGraw Hill, Inc., 1997.
- Andrews, Emily S. "The Growth and Distribution of 401(k) Plans," in John A. Turner and Daniel J. Beller, eds., *Trends in Pensions, 1992*, Washington, DC: U.S. Department of Labor, Pension and Welfare Benefits Administration, 1992.
- Bernheim, B. Douglas, and Daniel M. Garrett. "The Determinants and Consequences of Financial Education in the Workplace: Evidence from a Survey of Households," *NBER Working Paper*, No. 5667, Cambridge, MA: National Bureau of Economic Research, July 1996.
- Brady, Peter J. "Pension nondiscrimination rules and the incentive to cross subsidize employees," *Journal of Pension Economics and Finance*, forthcoming.
- Brady, Peter, and Sarah Holden. "The U.S. Retirement Market, 2005," *ICI Fundamentals*, Vol. 15, No. 5, Washington, DC: Investment Company Institute, July 2006.
- Brady, Peter, and Sarah Holden. "Appendix: Additional data on the U.S. Retirement Market," *ICI Fundamentals*, Vol. 15, No. 5A, Washington, DC: Investment Company Institute, July 2006—Appendix.
- Brady, Peter J., and Emily Y. Lin. "Explaining Trends in Employment-Based Health Insurance and Pension Benefits, 1987–2001," *Working Paper*, Washington, DC: U.S. Department of Treasury, May 2005.
- Brady, Peter J., and Emily Y. Lin. "Employment-Based Health Insurance and Pension Benefits: Trends and Inequalities in Accessibility and Participation, 1987–2001," *Journal of Income Distribution*, Vol. 12, No. 3–4, Fall 2003–Winter 2004: pp. 79–107.
- 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.
- Bryant, Victoria L., and Peter J. Sailer. "Accumulation and Distribution of Individual Retirement Arrangements, 2001–2002," *SOI Bulletin*, Washington, DC: IRS Statistics of Income Division, Spring 2006.
- Bucks, Brian K., Arthur B. Kennickell, and Kevin B. Moore. "Recent Changes in U.S. Family Finances: Evidence from the 2001 and 2004 Survey of Consumer Finances," *Federal Reserve Bulletin*, March 2006: pp. A1–A38.
- Cerulli Associates. "Retirement Markets, 2005," *Cerulli Quantitative Update*, Boston, MA: Cerulli Associates, Inc., 2005.
- Choi, James J., David Laibson, and Brigitte C. Madrian. "Plan Design and 401(k) Savings Outcomes," *NBER Working Paper*, No. 10486, Cambridge, MA: National Bureau of Economic Research, May 2004.
- Choi, James J., David Laibson, Brigitte C. Madrian, and Andrew Metrick. "Saving For Retirement on the Path of Least Resistance," originally prepared for *Tax Policy and the Economy 2001*, updated draft: July 19, 2004.
- Clark, Robert L., Janemarie Mulvey, and Sylvester J. Schieber. "The Effects of Pension Nondiscrimination Rules on Private Sector Pension Participation," presented at *Conference On Public Policies and Private Pensions, sponsored by The Brookings Institution, Stanford Institute for Economic Policy Research, and TIAA-CREF Institute*, in Washington, DC: September 21, 2000: Draft, August 31, 2000.
- Clark, Robert L., and Sylvester J. Schieber. "Factors Affecting Participation Rates and Contribution Levels in 401(k) Plans," in Olivia S. Mitchell and Sylvester J. Schieber, eds., *Living with Defined Contribution Pensions: Remaking Responsibility for Retirement*, Philadelphia, PA: The Wharton School at the University of Pennsylvania, Pension Research Council and University of Pennsylvania Press, 1998: pp. 69–97.
- Cohen, Edwin S. *A Lawyer's Life: Deep in the Heart of Taxes*. Arlington, VA: Tax Analysts, 1994.
- Copeland, Craig. "Retirement Plan Participation and Retirees' Perception of Their Standard of Living," *EBRI Issue Brief*, No. 289, Washington, DC: Employee Benefit Research Institute, January 2006.
- Copeland, Craig. "Lump-Sum Distributions," *EBRI Notes*, Vol. 26, No. 12, Washington, DC: Employee Benefit Research Institute, December 2005: pp. 7–17.
- Copeland, Craig. "Retirement Plan Participation: Survey of Income and Program Participation (SIPP) Data," *EBRI Notes*, Vol. 26, No. 9, Washington, DC: Employee Benefit Research Institute, September 2005: pp. 2–12.

- Cornell, Jamie. "The Next-Generation of Defined Contribution Plans [Drawing from Experience at Fidelity Investments]," prepared for *Encouraging Savings: Helping Workers Save, session at the Investment Company Institute's General Membership Meeting*, Washington, DC: May 18, 2006 (available at: [www.ici.org/pdf/o6\\_gmm\\_cornell.pdf](http://www.ici.org/pdf/o6_gmm_cornell.pdf)).
- Coronado, Julia Lynn, and Philip C. Copeland. "Cash balance pension plan conversions and the new economy," *Journal of Pension Economics and Finance*, Vol. 3, No. 3, November 2004: pp. 297–314.
- Duflo, Esther, and Emmanuel Saez. "The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment," *NBER Working Paper*, No. 8885, Cambridge, MA: National Bureau of Economic Research, April 2002.
- Duflo, Esther, and Emmanuel Saez. "Participation and Investment Decisions in a Retirement Plan: The Influence of Colleagues' Choices," *NBER Working Paper*, No. 7735, Cambridge, MA: National Bureau of Economic Research, June 2000.
- Dworak-Fisher, Keenan. "New Evidence on the Determinants of 401(k) Participation," *Working Paper*, Washington, DC: U.S. Bureau of Labor Statistics, Office of Compensation and Working Conditions, Preliminary Draft, 2006.
- Employee Benefit Research Institute. "History of 401(k) Plans: An Update," *FACTS from EBRI*. Washington, DC: Employee Benefit Research Institute, February 2005.
- 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.
- Esenwein, Gregg. "Extending the 2001, 2003, and 2004 Tax Cuts," *CRS Report for Congress*, Washington, DC: Congressional Research Service, March 4, 2005.
- Fidelity Investments. *Building Futures, Volume VI: How Workplace Savings Are Shaping the Future of Retirement (A Report on Corporate Defined Contribution Plans)*. Boston, MA: Fidelity Investments, 2005.
- Fidelity Investments. *Building Futures, Volume III: How Workplace Savings Are Shaping the Future of Retirement (A Report on Corporate Defined Contribution Plans)*. Boston, MA: Fidelity Investments, 2001.
- Gustman, Alan L., Olivia S. Mitchell, and Thomas L. Steinmeier. "The Role of Pensions in the Labor Market: A Survey of the Literature," *Industrial and Labor Relations Review*, Vol. 47, No. 3, April 1994: pp. 417–438.
- Gustman, Alan L., and Thomas L. Steinmeier. "The Stampede Toward Defined Contribution Pension Plans: Fact or Fiction?" *Industrial Relations*, Vol. 31, No. 2, Spring 1992: pp. 361–369.
- Hewitt Associates. *How Well Are Employees Saving and Investing in 401(k) Plans: 2006 Hewitt Universe Benchmarks*. Lincolnshire, IL: Hewitt Associates, LLC, 2006.
- Hewitt Associates. *A Decade of Trends and Experiences in 401(k) Plans*. Lincolnshire, IL: Hewitt Associates, LLC, September 2005.
- Holden, Sarah, Kathy Ireland, Vicky Leonard-Chambers, and Michael Bogdan. "The Individual Retirement Account at Age 30: A Retrospective," *ICI Perspective*, Vol. 11, No. 1, Washington, DC: Investment Company Institute, February 2005.
- Holden, Sarah, and Jack VanDerhei. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2005," *ICI Perspective*, Vol. 12, No.1, and EBRI Issue Brief, No. 296, Washington, DC: Investment Company Institute and Employee Benefit Research Institute, August 2006.
- Holden, Sarah, and Jack VanDerhei. "Appendix: Additional Figures for the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project for Year-End 2005," *ICI Perspective*, Vol. 12, No.1A, Washington, DC: Investment Company Institute, August 2006—Appendix.
- Holden, Sarah, and Jack VanDerhei. "Appendix: Additional Figures for the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project for Year-End 2004," *ICI Perspective*, Vol. 11, No.4A, Washington, DC: Investment Company Institute, September 2005—Appendix.
- Holden, Sarah, and Jack VanDerhei. "The Influence of Automatic Enrollment, Catch-Up, and IRA Contributions on 401(k) Accumulations at Retirement," *ICI Perspective*, Vol. 11, No.2, and *EBRI Issue Brief*, No. 283, Washington, DC: Investment Company Institute and Employee Benefit Research Institute, July 2005.
- 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. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2002," *ICI Perspective*, Vol. 9, No.5, and *EBRI Issue Brief*, No. 261, Washington, DC: Investment Company Institute and Employee Benefit Research Institute, September 2003.
- Holden, Sarah, and Jack VanDerhei. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2001," *ICI Perspective*, Vol. 9, No.2, and *EBRI Issue Brief*, No. 255, Washington, DC: Investment Company Institute and Employee Benefit Research Institute, March 2003.

- 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.
- Holden, Sarah, and Jack VanDerhei. "Contribution Behavior of 401(k) Plan Participants," *ICI Perspective*, Vol. 7, No. 4, and *EBRI Issue Brief*, No. 238, Washington, DC: Investment Company Institute and Employee Benefit Research Institute, October 2001.
- Holden, Sarah, and Jack VanDerhei. "The Impact of Employer-Selected Investment Options on 401(k) Plan Participants' Asset Allocations: Preliminary Findings," *Working Paper prepared for The Center for Pension and Retirement Research (CPRR) Current Pension Policy Issues Conference, at Miami University, Oxford, OH, June 8–9, 2001: Draft, May 2001*.
- Huberman, Gur. "Familiarity Breeds Investment," *The Review of Financial Studies*, Vol. 14, No. 3, Fall 2001: pp. 659–680.
- Huberman, Gur, Sheena S. Iyengar, and Wei Jiang. "Defined Contribution Pension Plans: Determinants of Participation and Contribution Rates," *Working Paper*, New York, NY: Columbia Business School, Draft: April 2006.
- Investment Company Institute. *2006 Investment Company Fact Book, 46<sup>th</sup> Edition*. Washington, DC: Investment Company Institute, 2006.
- Investment Company Institute. "Profile of Mutual Fund Shareholders," *ICI Research Series*, Washington, DC: Investment Company Institute, Fall 2004.
- Investment Company Institute. "Financial Decisions at Retirement," *ICI Fundamentals*, Vol. 9, No. 6, Washington, DC: Investment Company Institute, November 2000.
- Investment Company Institute. "Defined Contribution Plan Distribution Choices at Retirement: A Survey of Employees Retiring Between 1995 and 2000," *ICI Research Series*, Washington, DC: Investment Company Institute, Fall 2000.
- Investment Company Institute. "401(k) Plan Participants: Characteristics, Contributions, and Account Activity," *ICI Research Series*, Washington, DC: Investment Company Institute, Spring 2000.
- Ippolito, Richard A. *Pension Plans and Employee Performance, Evidence, Analysis, and Policy*. Chicago, IL: The University of Chicago Press, 1997.
- Ippolito, Richard A. "Toward Explaining the Growth of Defined Contributions Plans," *Industrial Relations*, Vol. 34, No. 1, January 1995, pp. 1–20.
- Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in the 107<sup>th</sup> 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 104<sup>th</sup> 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, 99<sup>th</sup> Congress; Public Law 99–514)*. Washington, DC: U.S. Government Printing Office, May 4, 1987.
- Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984 (H.R. 4170, 98<sup>th</sup> Congress; Public Law 98–369)*. Washington, DC: U.S. Government Printing Office, December 31, 1984.
- Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Tax Equity and Fiscal Responsibility Act of 1982 (H.R. 4961, 97<sup>th</sup> Congress; Public Law 97–248)*. Washington, DC: U.S. Government Printing Office, December 31, 1982.
- Joint Committee on Taxation. *General Explanation of the Economic Recovery Tax Act of 1981 (H.R. 4242, 97<sup>th</sup> Congress; Public Law 97–34)*. Washington, DC: U.S. Government Printing Office, December 29, 1981.
- Joint Committee on Taxation. *General Explanation of the Revenue Act of 1978 (H.R. 13511, 95<sup>th</sup> Congress; Public Law 95–600)*. Washington, DC: U.S. Government Printing Office, March 12, 1979.
- Keith, Robert. "The Budget Reconciliation Process: The Senate's 'Byrd Rule'," *CRS Report for Congress*, Washington, DC: Congressional Research Service, Updated February 19, 2004.
- Kelly, Barbara A. "BlueCross BlueShield of South Carolina," prepared for *Encouraging Savings: Helping Workers Save, session at the Investment Company Institute's General Membership Meeting*, Washington, DC: May 18, 2006 (available at: [http://www.ici.org/pdf/o6\\_gmm\\_kelly.pdf](http://www.ici.org/pdf/o6_gmm_kelly.pdf)).
- Kruse, Douglas L. "Pension Substitution in the 1980s: Why the Shift toward Defined Contribution?" *Industrial Relations*, Vol. 34, No. 2, April 1995: pp. 218–241.

- Madrian, Brigitte C., and Dennis F. Shea. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *The Quarterly Journal of Economics*, Vol. CXVI, Issue 4, November 2001: pp. 1149–1187.
- 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.
- Mitchell, Olivia S., Gary R. Mottola, Stephen P. Utkus, and Takeshi Yamaguchi. "The Inattentive Participant: Portfolio Trading Behavior in 401(k) Plans," *Pension Research Council Working Paper*, No. 2006–5, Philadelphia, PA: The Wharton School, University of Pennsylvania, Pension Research Council, 2006.
- Mitchell, Olivia S., and Stephen P. Utkus. "Lessons from Behavioral Finance for Retirement Plan Design," in Olivia S. Mitchell and Stephen P. Utkus, eds., *Pension Design and Structure: New Lessons from Behavioral Finance*, Oxford, UK: Oxford University Press, 2004: pp. 3–41.
- Mitchell, Olivia S., Stephen P. Utkus, and Tongxuan (Stella) Yang. "Turning Workers into Savers? Incentives, Liquidity, and Choice in 401(k) Plan Design," *NBER Working Paper*, No. 11725, Cambridge, MA: National Bureau of Economic Research, October 2005.
- Mottola, Gary R., and Stephen P. Utkus. *Life-Cycle Funds Mature: Plan Sponsor and Participant Adoption*. Valley Forge, PA: The Vanguard Center for Retirement Research and The Vanguard Group, November 2005.
- Munnell, Alicia H., and Annika Sundén. *Coming Up Short: The Challenge of 401(k) Plans*. Washington, DC: Brookings Institution Press, 2004.
- Munnell, Alicia H., Annika Sundén, and Catherine Taylor. "What Determines 401(k) Participation and Contributions?" *CRR Working Paper*, No. 2000-12, Chestnut Hill, MA: Center for Retirement Research at Boston College, December 2000.
- Papke, Leslie E. "Are 401(k) Plans Replacing Other Employer-Provided Pensions? Evidence from Panel Data," *The Journal of Human Resources*, Vol. 34, Spring 1999: pp. 346–368.
- Profit Sharing/401(k) Council of America (PSCA). *49<sup>th</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2005 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 2006.
- Profit Sharing/401(k) Council of America (PSCA). *48<sup>th</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2004 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 2005.
- Profit Sharing/401(k) Council of America (PSCA). *47<sup>th</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2003 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 2004.
- Profit Sharing/401(k) Council of America (PSCA). *46<sup>th</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2002 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 2003.
- Profit Sharing/401(k) Council of America (PSCA). *45<sup>th</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2001 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 2002.
- Profit Sharing/401(k) Council of America (PSCA). *44<sup>th</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2000 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 2001.
- Profit Sharing/401(k) Council of America (PSCA). *43<sup>rd</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 1999 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 2000.
- Profit Sharing/401(k) Council of America (PSCA). *42<sup>nd</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 1998 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 1999.
- Profit Sharing/401(k) Council of America (PSCA). *41<sup>st</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 1997 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 1998.
- Profit Sharing/401(k) Council of America (PSCA). *40<sup>th</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 1996 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 1997.
- Profit Sharing/401(k) Council of America (PSCA). *39<sup>th</sup> Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 1995 Plan Year Experience*. Chicago, IL: Profit Sharing/401(k) Council of America, 1996.
- Purcell, Patrick. "Pension Sponsorship and Participation: Summary of Recent Trends," *CRS Report for Congress*, Washington, DC: Congressional Research Service, August 31, 2006.
- Purcell, Patrick. "Automatic Enrollment in Section 401(k) Plans," *CRS Report for Congress*, Washington, DC: Congressional Research Service, October 14, 2004.
- Salisbury, Dallas. "Regulatory Environment of Employee Benefit Plans," in Jerry S. Rosenbloom, ed., *The Handbook of Employee Benefits: Design, Funding and Administration, Sixth Edition*, New York, NY: McGraw-Hill, 2001: pp. 57–74.



- Salisbury, Dallas. "EBRI Research Highlights: Retirement and Health Data," *EBRI Special Report SR36*, and *EBRI Issue Brief*, No. 229. Washington, DC: Employee Benefit Research Institute, January 2001.
- Sass, Steven A. *The Promise of Private Pensions: The First Hundred Years*. Cambridge, MA: Harvard University Press, 1997.
- Sethi-Iyengar, Sheena, Gur Huberman, and Wei Jiang. "How Much Choice is Too Much? Contribution to 401(k) Retirement Plans," in Olivia S. Mitchell and Stephen P. Utkus, eds., *Pension Design and Structure: New Lessons from Behavioral Finance*, Oxford, UK: Oxford University Press, 2004: pp. 83–95.
- Stevens, Paul Schott. "Flexibility and Retirement Savings in the United States," presented at *US-UK Dialogue on Pensions, July 19–21, 2005*, in Washington, DC: July 21, 2005.
- Thaler, Richard H., and Shlomo Benartzi. "Save More Tomorrow™: Using Behavioral Economics to Increase Employee Savings," *Journal of Political Economy*, Vol. 112, No. 1, Pt. 2, 2004: pp. S164–S187.
- U.S. Department of Labor, Employee Benefits Security Administration (EBSA). *Private Pension Plan Bulletin, Abstract of 2002 Form 5500 Annual Reports*. Washington, DC: July 2006.
- U.S. Department of Labor, Employee Benefits Security Administration (EBSA). *Private Pension Plan Bulletin, Abstract of 2001 Form 5500 Annual Reports*. Washington, DC: February 2006.
- U.S. Department of Labor, Employee Benefits Security Administration (EBSA). *PRELIMINARY Private Pension Plan Bulletin, Abstract of 2000 Form 5500 Annual Reports*. Washington, DC: July 2005.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now Employee Benefits Security Administration (EBSA)). *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 Employee Benefits Security Administration (EBSA)). *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 Employee Benefits Security Administration (EBSA)). *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 Employee Benefits Security Administration (EBSA)). *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 Employee Benefits Security Administration (EBSA)). *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 Employee Benefits Security Administration (EBSA)). *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 Employee Benefits Security Administration (EBSA)). *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 Employee Benefits Security Administration (EBSA)). *Private Pension Plan Bulletin, Abstract of 1992, Form 5500 Annual Reports*. Washington, DC: Winter 1996.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now Employee Benefits Security Administration (EBSA)). *Private Pension Plan Bulletin, Abstract of 1991, Form 5500 Annual Reports*. Washington, DC: Winter 1995.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now Employee Benefits Security Administration (EBSA)). *Private Pension Plan Bulletin, Abstract of 1990, Form 5500 Annual Reports*. Washington, DC: Summer 1993.
- U.S. Department of Labor, Pension and Welfare Benefits Administration (now Employee Benefits Security Administration (EBSA)). *Private Pension Plan Bulletin, Abstract of 1989, Form 5500 Annual Reports*. Washington, DC: Winter 1993.
- U.S. Department of the Treasury. *Tax Reform for Fairness, Simplicity, and Economic Growth: The Treasury Department Report to the President, Volume 1, Overview*. Washington, DC: U.S. Department of the Treasury, November 1984a.
- U.S. Department of the Treasury. *Tax Reform for Fairness, Simplicity, and Economic Growth: The Treasury Department Report to the President, Volume 2, General Explanation of the Treasury Department's Proposals*. Washington, DC: U.S. Department of the Treasury, November 1984b.
- U.S. Government Accountability Office (GAO; formerly General Accounting Office). "401(k) Pension Plans: Loan Provisions Enhance Participation But May Affect Income Security for Some," *Letter Report*, 10/01/97, GAO-HEHS-98-5, Washington, DC, October 1997.
- U.S. House of Representatives. *Joint Explanatory Statement of the Committee of Conference, to Accompany H.R. 2, H.R. Rep. 93-1280*. Washington, DC: U.S. Government Printing Office, August 12, 1974.

- U.S. House of Representatives Committee on Ways and Means. *Report of the Committee on Ways and Means to Accompany H.R. 12855, H.R. Rep. 93-807*. Washington, DC: U.S. Government Printing Office, February 21, 1974.
- U.S. Internal Revenue Service. "Certain Cash or Deferred Arrangements Under Employee Plans," *Federal Register*, Vol. 46, No. 217, November 10, 1981: p. 55544–55549.
- U.S. Internal Revenue Service. "Brief History of IRS," available at: <http://www.irs.gov/irs/article/0,,id=149200,00.html> (accessed 10/12/2006).
- U.S. Securities and Exchange Commission, Division of Investment Management. *Protecting Investors: A Half-Century of Investment Company Regulation*. Washington, DC: U.S. Government Printing Office, May 1992.
- U.S. Senate Committee on Finance. *Report of the Committee on Finance, U.S. Senate, to Accompany H.R. 3838, S. Rep. 99-313*. Washington, DC: U.S. Government Printing Office, May 29, 1986.
- U.S. Social Security Administration. "What does FICA mean and why are Social Security taxes called FICA contributions?" available at: [www.ssa.gov/mystatement/fica.htm](http://www.ssa.gov/mystatement/fica.htm) (accessed 09/25/06).
- Utkus, Stephen P. *401(k) Plan Design: Match, Loan, and Investment Menu Effects*. Valley Forge, PA: The Vanguard Center for Retirement Research and The Vanguard Group, December 2005.
- Utkus, Stephen P. "The question of loans," presented at 2005 *US-UK Dialogue on Pensions, July 19–21, 2005*, in Washington, DC: July 21, 2005.
- Utkus, Stephen P. *A Recent Successful Test of the SMarT Program*. Valley Forge, PA: The Vanguard Center for Retirement Research and The Vanguard Group, November 2002.
- Utkus, Stephen P., and Jean A. Young. *Retirement Investor Report Card for December 2005: Returns remain positive, activity muted*. Valley Forge, PA: The Vanguard Center for Retirement Research and The Vanguard Group, March 2006.
- Vine, John M. "Cash or Deferred Arrangements: What's the Beef? What's at Stake?" *Virginia Tax Review*, Vol. 5, Spring 1986: pp. 855–910.
- West, Sandra, and Victoria Leonard-Chambers. "The Role of IRAs in Americans' Retirement Preparedness," *ICI Fundamentals*, Vol. 15, No. 1, Washington, DC: Investment Company Institute, January 2006.
- Whitehouse, Herbert A. "Toward a More Complete History: Johnson & Johnson's 401(k) Nursery," *EBRI Notes*, Vol. 24, No. 12, Washington, DC: Employee Benefit Research Institute, December 2003: pp. 1–4.
- Wooten, James A. *The Employee Retirement Income Security Act of 1974: A Political History*. Berkeley, CA: University of California Press, New York, NY: Milbank Memorial Fund, and Washington, DC: Employee Benefit Research Institute, 2004.

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