401(k) plans move away from employer stock as investment vehicle

Increasingly, employees are given the option to choose how their 401(k)plan funds are invested; this greater choice is one factor in the decreased exposure to investment in employer stock

William J. Wiatrowski

he Pension Protection Act of 2006 seeks to encourage expanded participation in 401(k) plans by allowing new employees to be automatically enrolled in such plans, and, in the absence of an employee decision, clarifying the rules for investment of plan assets. Regulations to implement this law, finalized by the U.S. Department of Labor in October 2007, specify that a "participant in a participant directed individual account pension plan will be deemed to have exercised control over assets in his or her account if, in the absence of investment directions from the participant, the plan invests in a qualified default investment alternative," which establishes a general prohibition against holding or permitting acquisition of employer securities.1 This effort to ensure that employee accounts are invested in a diversified portfolio is a change from the earlier history of 401(k) plans, when investment in employer stock was prevalent. As plans begin to adapt to these new regulations, a look at the trend in 401(k) investment options over the past two decades shows a steady move away from employer stock as an investment vehicle. Should plans choose to expand the use of automatic enrollment features as a means of further encouraging participation, the regulations requiring the use of qualified investments might result in further movement away from investment in employer stock.

William J. Wiatrowski is an economist in the Office of Compensation and Working Conditions, Bureau of Labor Statistics. E-mail: Wiatrowski.william@ bls.gov.

401(k) plans, in brief

Internal Revenue Code section 401(k) was introduced as part of the Revenue Act of 1978.2 Commonly known as "401(k) plans," these kinds of plans first came into prominence in the early 1980s. Section 401(k) defines a feature of a defined contribution plan that allows employees to choose to defer some income (and, consequently, defer current taxation of that income) into a retirement account. In general, defined contribution plans are individual accounts that accumulate employer and employee contributions, plus earnings, the result of which is available to the employee at retirement. The most prevalent 401(k) plan is known as a savings and thrift plan (or some variant such as a thrift-savings plan), which gives the employee the option to invest some percent of earnings that is then matched by employer funds. For example, a plan might allow the employee to contribute from 1-10 percent of their earnings, tax deferred, with the employer matching 50 percent of the first 6 percent of earnings contributed. If the employee chose to contribute 10 percent, the employer would add 3 percent (50 percent of the first 6 percent). The total of 13 percent of earnings would then be invested in the employee's account.³

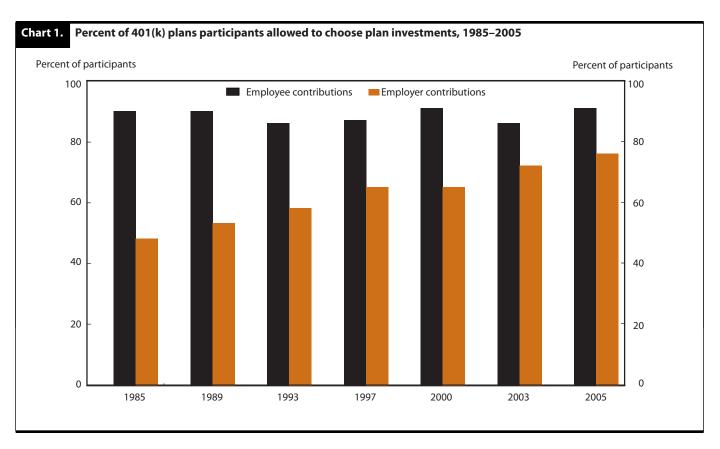
There are other types of defined contribution plans and other ways that section 401(k) is used to allow pretax contributions. In all cases, the total employee and employer contributions are invested, with the employee bearing the risk of investment gains and losses. The investment choices for 401(k) plans have changed considerably over the past 20 years, reflecting changes in law and regulation, the expanded use of 401(k) plans as the primary vehicle for providing retirement income, and heightened concern that employees should be properly educated about investment choices.⁴

401(k) investment options

The Bureau of Labor Statistics (BLS) tracks the percent of workers who participate in various types of employee benefits, as well as the details of those benefits. Following the introduction of 401(k) plans, BLS expanded its benefits survey in the mid-1980s to incorporate defined contribution plans. Since then, BLS data have tracked the increased participation in defined contribution plans and the decreased participation in defined benefit plans. By capturing the provisions of 401(k) plans, BLS has also tracked the movement toward allowing employees to choose their own investments and the decline in the use of employer stock as an investment vehicle.⁵

The typical plan consists of employee contributions and employer matching contributions, each of which can be invested in a variety of vehicles. A plan may give participants the choice of investment options for the employee contributions, the employer matching contributions, or both, or the plan may specify the investments without providing a choice to the employee. Early 401(k) plans often allowed participants to choose how to invest their own funds, but the plan designated how employer matching funds were invested. For example, among plan participants in 1985, 90 percent could elect how their own contributions were invested while only 48 percent could elect how employer funds were to be invested. Two decades later, while the same percent could elect how their own contributions were invested, those who could elect how employer funds were invested had risen gradually to 76 percent of participants. Chart 1 shows the percentage of participants who could choose their own investments over time.⁶ (Note that the intervals between data in the chart vary based on the availability of data.)

New tabulations from the most recent BLS data indicate that most plans treat the investment of employee and employer funds the same way. These 2005 data show that, in the minority of cases where investment provisions differed, typically employees could choose how to invest their own funds, but they had no choice in the investment of employer matching funds. This could be due



in part to regulations restricting plan investments when no employee choice is offered.8

Using stock as an investment vehicle

Although plans are allowing participants to make their own investment choices more frequently than in the past, the use of employer stock as one of those choices has become less prevalent. The widespread prevalence of investment in employer stock in the 1980s may be related to how 401(k) plans were first introduced—as supplements to existing defined benefit plans. Because these plans were not considered the employee's primary source of retirement income, employers had the opportunity to use the plans to serve other purposes, such as building loyalty through employee ownership. At roughly the same time, labor-management agreements were introducing more cooperative provisions intent on building employee loyalty, ranging from statements of cooperation and joint efforts to address safety issues up to union-management participation in strategic decision making.9

There are drawbacks to investments in company stock, however, such as lack of investment diversity and the potential for financial improprieties, both of which can affect the value of an employee's account. Consider the following examples:

- In 1996, the Color Tile Company filed for bankruptcy. The company's 401(k) plan was invested largely in employer stock, which lost much of its value. Because the risk of investment gains and losses is borne by the plan participant, individual employees lost much of their retirement savings.
- The highly publicized case of financial mismanagement at Enron Corporation also had implications for the company's 401(k) plan. The plan, which was invested largely in employer stock, declined significantly in value. The plan allowed participants to choose among several investment options for their own contributions, but required that all company matching contributions be invested in employer stock. The company did have a provision that allowed employees to switch investment vehicles, but company matching contributions could not be switched out of employer stock until an employee reached age 50.
- More recently, employees at Countrywide Finance and Bears-Stern saw their plan balances drop with the price of their employer's stock. In the case of

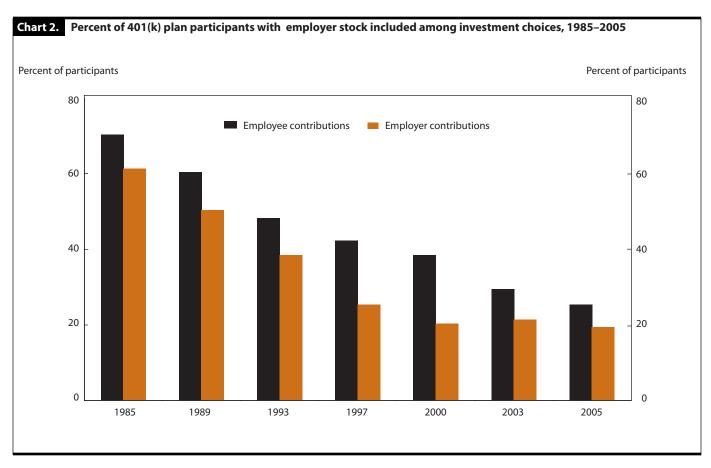
Countrywide, employees filed suit against their employer because company financial problems related to the loan business led to a decline in the value of their 401(k) plan.¹⁰

Issues such as these, occurring at a time when 401(k) plans were increasingly becoming the primary employersponsored retirement vehicle for many employees, resulted in increased scrutiny of 401(k) investments and a number of changes in the regulatory environment surrounding 401(k) plans. One result was the introduction of rules regarding investment education and diversity by the U.S. Department of Labor.¹¹

BLS data provide some indication of the use of employer stock as a 401(k) investment vehicle. They indicate that workers' exposure to own-employer stock has declined substantially since 1985. Among funds contributed by employers, a significant fraction of this decline was likely caused by the increased control of the funds given to workers, as documented in chart 1. Since employer stock was more prevalent among employer-provided funds with no investment choice than among employer-provided funds in which employees chose investment allocation—NCS data from 1993 indicate that these fractions were 64 percent and 38 percent, respectively—the increasing fraction of funds having employee choice caused employer stock exposure to decline. Less change is observed among employee-provided funds, where investment choice was and continues to be widespread.

Another source of decline in workers' exposure to own-employer stock was that, within those plans allowing choice, there was a marked decline in the fraction allowing employer stock as a possibility. This trend applied to both employer- and employee-provided funds. Among employee-provided funds, the proportion of workers that had the choice to invest in employer stock was 70 percent in 1985, but that figure had declined to 25 percent by 2005. Among employer-provided funds, the percent of those who could choose employer stock as an investment declined sharply from 1985 to 1997 (61 percent to 25 percent), and then continued to drop after that, reaching 19 percent in 2005. 12 (See chart 2.)

Tabulations from the 2005 BLS benefits survey give details on whether those able to choose their investments have the same choices for employee and employer contributions. In nearly every plan, the availability of employer stock as an investment choice was treated the same for employee and employer contributions—either all contributions could be invested in employer stock or no contributions could be invested in employer stock.



Calculating potential stock exposure

These data alone do not provide a complete look at the potential exposure of own-employer stock in 401(k) investments. In this article, potential exposure is defined as the percent of participants that could have their account invested in employer stock, either automatically (in plans that do not give employees the ability to make investment decisions) or at the participant's choosing. 13 Such a figure cannot be calculated in most years because data are not available on the proportion of plans invested in employer stock where no investment choice is given. Nonetheless, available data can be used to estimate the lower and upper bounds of possible employer stock exposure by assuming that none or all of these funds, respectively, are exposed to employer stock. Additionally, some assumptions and a little algebra can be used to provide an estimate of where the true exposure figure is likely to lie within those bounds.

The lower bound, or minimum stock exposure, is derived from those participants that had a choice of investments that included employer stock. It assumes that none of the participants with no investment choice held employer stock. Because the potential to invest in employer stock among those with a choice is known, consider this

proportion to be the lower bound of overall stock exposure, as follows:

- In 1985, 48 percent of 401(k) participants were given an investment choice for employer matching funds and 61 percent of them had employer stock as one of the choices. Thus, about 29 percent (0.48 × 0.61 = 0.29) of all participants had a choice and could choose employer stock.
- The comparable figures in 2005 are 76 percent and 19 percent, yielding about 14 percent (0.76 × 0.19 = 0.14) of all participants who had a choice and could choose employer stock.
- Using the same calculation, the lower bound for employee funds was 63 percent in 1985, and it had fallen to 23 percent by 2005.

The upper bound, or maximum stock exposure, assumes that participants who are not given a choice of investments have potentially all their funds invested in own-employer stock. This was the case in the Color Tile plans, for example, but it might not be the case in all plans. Looking at the investment of employer matching funds, 52 percent did not have an investment choice in 1985, and 24 percent

did not have an investment choice in 2005. Adding those with no choice to those whose choices included employer stock (the lower bound computed on page 6) yields the upper bound of potential employer stock exposure. For employer matching funds, that upper bound was 81 percent of all participants in 1985 (0.52 + 0.29), but it had fallen to 38 percent of all participants in 2005 (24 plus 14). The upper bound for employee funds was 73 percent in 1985 and 32 percent in 2005.

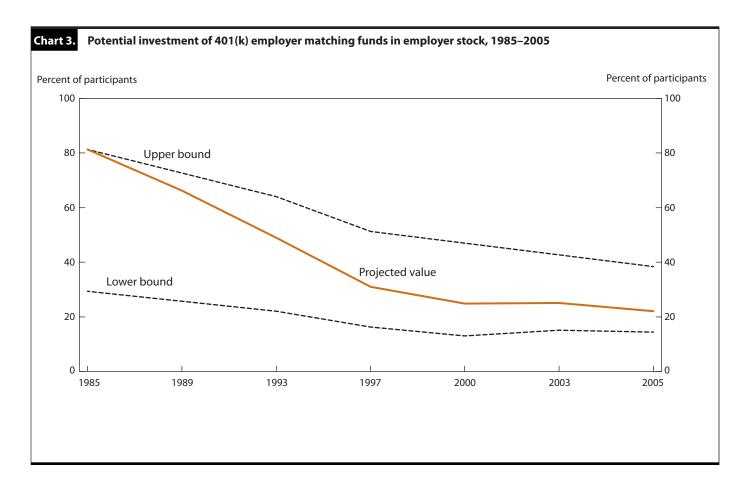
Mirroring the increase in investment choice and the decline in the choice of employer stock, the decline in the upper bound for employer funds is driven by increased investment choice, while the decline in the upper bound for employee funds is driven by the decreased opportunity to choose employer stock. Charts 3 and 4 depict the lower and upper bound for employee and employer funds.

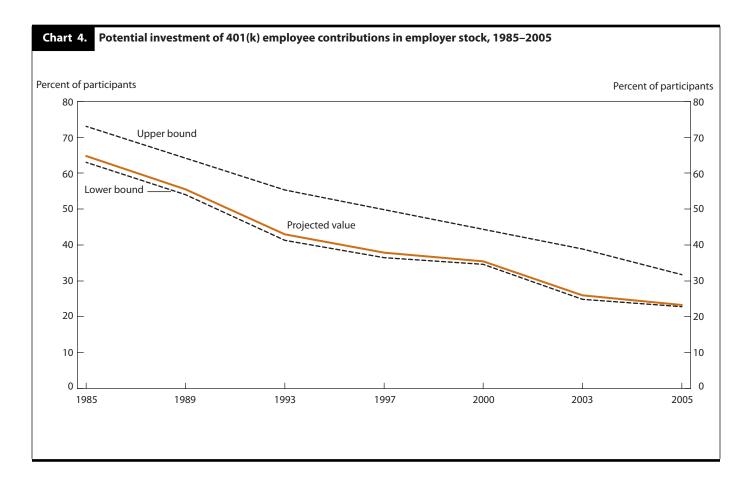
Where, between these upper and lower bounds, did the true percent of workers with exposure to company stock lie? NCS data in most years do not allow the direct measurement of this figure. In 1993, however, the BLS benefits survey compiled data on the available investment vehicles for 401(k) funds, regardless of whether participants were allowed to direct their investments. Such data can be difficult to capture from written plan descriptions, which often do not provide details of investments when no choice is provided. Nonetheless, this 1 year of data provides a small piece of information to anchor projections of the exposure in the surrounding years.

Among all plan participants in 1993, 43 percent were in plans that allowed investment of employee contributions in employer stock; the total potential exposure of employer stock was 43 percent. This compares with about 41 percent of participants who could choose employer stock as an investment (86 percent with choice multiplied by 48 percent with stock as one of the choices). This suggests that only about 2 percent of all participants had plans that offered no choice and were invested in employer stock.

The story is quite different for employer matching contributions. In this case, the exposure for all participants was 49 percent. This compares with 22 percent who could choose employer stock as an investment (0.58×0.38) . Thus, about 27 percent of participants had plans in which employer matching funds were automatically invested in employer stock.

Some assumptions are used to project what this exposure number might have been in other years between 1985





and 2005, as shown in table 1. To make this calculation, start by determining, for 1993, the percentage of participants having employer stock among those in which the employee had no choice over investment allocation; these figures were 12.29 percent $(1.72 \div 14)$ for employee contributions and 64.19 percent $(26.96 \div 42)$ for employer contributions. Apply to these numbers the rate of change in employer stock observed between 1993 and the other years among contributions where the employee did choose the investment allocation. The overall employer stock exposure was calculated from this projection.

These results provide a point estimate that lies between the upper and lower bounds. For employee funds, this point estimate straddles the lower bounds throughout the period, demonstrating that only a small proportion of the funds invested without employee choice went into employer stock. As employer stock as a choice declined, the overall exposure declined at a comparable rate. Conversely, for employer funds, the point estimate begins at the upper bound in 1985, as nearly all funds invested without employee choice went into employer stock. The effect of an increase in employee choice and a decrease in stock as a choice is seen as the point estimate declines sharply

over the two decades, ultimately nearing the lower bound. Decomposing this change, the decline can largely be attributed to the decline in the availability of stock as an investment choice. ¹⁴ The middle lines in charts 3 and 4 identify the estimates of total employer stock exposure.

Data by worker and establishment characteristics

Although the BLS benefits program regularly updates the data that are collected and the methods of presentation, emphasis over the past few years has been on presenting data for subgroupings within the private sector economy. Data on 401(k) investment choices for 2005 are available by occupational group (white collar, blue collar, and service workers), industry group (goods producing and service producing), establishment employment (1 to 99 workers and 100 or more workers), and whether the workers are union or nonunion. Table 2 provides data on whether employees can choose their investments and whether their choices include employer stock for each of these categories.

The data in many of these categories show little variation, with a couple of exceptions. Looking at the availabil-

Calculation of employer stock penetration in 401(k) plans, 1985-2005 Characteristic 1985 1989 1993 1997 2000 **Employee contributions**

Share with investment choice	90.0	90.0	86.0	87.0	91.0	86.0	91.0
Percent of share with employer stock as a choice	70.0	60.0	48.0	42.0	38.0	29.0	25.0
Percent of total with employer stock as a choice	63.0	54.0	41.3	36.5	34.6	24.9	22.8
Share without investment choice Percent of share receiving employer stock	10.0	10.0	14.0	13.0	9.0	14.0	9.0
(projected)	17.9	15.4	¹12.3	10.8	9.7	7.4	6.4
Percent of total receiving employer stock with no choice (projected)	1.8	1.5	¹1.7	1.4	.9	1.0	.6
Total penetration (projected)	64.8	55.5	¹43.0	37.9	35.5	26.0	23.3
Employer contributions							
Share with investment choice	48.0	53.0	58.0	65.0	65.0	72.0	76.0
Percent of share with employer stock as a choice	61.0	50.0	38.0	25.0	20.0	21.0	19.0
Percent of total with employer stock as a choice	29.3	26.5	22.0	16.3	13.0	15.1	14.4
Share without investment choice	52.0	47.0	42.0	35.0	35.0	28.0	24.0
Percent of share receiving employe stock (projected)	100.0	84.5	¹64.2	42.2	33.8	35.5	32.1
Percent of total receiving employer stock with no choice (projected)	52.0	39.7	¹27.0	14.8	11.8	9.9	7.7

81.3

Total penetration (projected)..

Note: Results are rounded for presentation.

Characteristic Al	All workers	Occupational group			Industry group		Establishment size		Union status	
		White collar	Blue collar	Service workers	Goods producing	Service producing	1 to 99 workers	100 or more workers	Union	Nonunion
Employee contributions										
Investment choice allowed Choice includes company stock	91 25	91 26	92 24	91 21	89 22	92 26	91 19	92 29	97 42	91 24
Employer contributions										
Investment choice allowed Choice includes company stock	76 19	75 19	77 18	84 19	72 16	78 20	71 14	79 22	82 31	76 18

ity of investment options for employee contributions, 97 percent of union participants have such options, compared with 91 percent of nonunion participants. (For all participants, the comparable figure is 91 percent and most other subgroupings show similar results.) Looking at the investment choices available among those allowed to choose, 42 percent of union participants who could choose their investments had a choice of employer stock, compared with 24 percent of nonunion participants. (Again, comparable numbers for all participants and most other subgroupings were similar to the nonunion figures.) Looking at investment options for employer contributions, once again union participants more often had plans that allowed investment choice (82 percent of union participants

versus 76 percent of nonunion participants) and included employer stock among the choices (31 percent, compared with 18 percent).

24.8

25.1

22.1

Although these patterns warrant further study, two factors might contribute to the difference between union and nonunion workers. First, union workers are much more likely to be in a defined benefit plan than are their nonunion counterparts—67 percent of union workers participate in a defined benefit plan, compared with 15 percent of nonunion workers. 15 Second, union workers are more likely to be offered defined contribution plans in addition to a defined benefit plan, while nonunion workers might only be offered defined contribution plans. Thus, for union workers, 401(k) plans might be consid-

2003

2005

¹ Estimated from 1993 data; other figures projected as discussed in text...

ered supplemental plans, which may in turn give employers more latitude to invest in employer stock.

THE 401(K) PLAN HAS BECOME THE MOST PROMINENT type of employer-provided retirement benefit plan-more than twice as many employees participate in such plans (or in similar defined contribution plans) as participate in defined benefit plans. As such, these plans have changed many of their provisions over time, in recognition that investment risk is borne by the employee. The steady increase in the percent of participants who have investment choices for both employee and employer funds, and the steady decrease in the percent who may choose employer stock as one of those options, reflect both changes in law and regulation, concerns based on high-profile plans, and an increase in investment education among employers and employees. Experimental tabulations further demonstrate that the upper bound of employer stock exposure has declined steadily in the past two decades as plans move toward putting all investment decisions in the hands of employees and providing education to help make those decisions.

Notes

ACKNOWLEDGMENT: The author would like to thank Keenan Dworak-Fisher, an economist in the BLS Office of Compensation and Working Conditions, for his advice and assistance with tabulations and analysis.

- ¹ On October 24, 2007, the U.S. Department of Labor published final regulations (72 Federal Register 60452, October 24, 2007) related to the default investment of retirement plan assets. These regulations, which result from provisions of the Pension Protection Act of 2006 (Public Law 109-280), are codified in 29 Code of Federal Regulations 2550.404c-5.
 - ² See Public Law 95-600, 92 Stat. 2763 (Nov. 6, 1978).
- ³ For a discussion of employer matching contributions in 401(k) plans, see Keenan Dworak-Fisher, "Employer Generosity in Employer-Matched 401(k) plans, 2002-03," Monthly Labor Review, September 2007, pp. 11-19.
- ⁴ The U.S. Department of Labor, through its Employee Benefits Security Administration, provides guidance to employers on investment education for their employees. See, for example, http://www.dol.gov/dol/allcfr/title_29/ part_2509/29CFR2509.96-1.htm, as well as http://www.dol.gov/ebsa/publications/AC-1107a.html (both visited Jul. 7, 2008).
- ⁵ For the most recent data on detailed provisions of employee benefits, including defined contribution plans, see National Compensation Survey: Employee Benefits in Private Industry in the United States, 2005, Bulletin 2589 (Bureau of Labor Statistics, May 2007).
- ⁶ Collection and tabulation of BLS benefits data have undergone several changes over the two decades covered in this study. Data for 1985 through 1997 are for full-time workers in medium and large private establishments, which generally are those with 100 or more workers. Data for 2000 are for full-time workers in all private establishments, regardless of the number of workers in the establishment. Data for 2003 and 2005 are for all workers in all private establishments. Because of these changes, the analysis presented here is limited to details of plan provisions. While participation in 401(k) plans may differ by employee group (such as full-time versus part-time workers), past studies of changes in survey coverage have shown that plan provisions are often similar among all groups. Data by worker and establishment characteristics at the end of this article confirm this lack of variation. In addition, tabulation methods have changed over the period of this study; most notable, unknown plan provisions have been treated in different ways. In this study, every effort was made to compare similar data. However, no estimates of sampling error were calculated for estimates in this article. Therefore, statements of comparison could not be validated with a statistical test.
- These new tabulations of the investment choice provisions for employee and employer funds are incomplete because data are missing for some plan provisions
- 8 See U.S. Code of Federal Regulations, 29 CFR 2550.404c-1. For further discussion, see Report of the Working Group on Employer Assets in ERISA Employer-Sponsored Plans (U.S. Department of Labor, Advisory Council on Employee Welfare and Pension Benefits Plans, Nov. 13, 1997), on the Internet at http:// www.dol.gov/ebsa/publications/acemer.htm (visited Jul. 7, 2008).

- ⁹ For more information on labor-management cooperative agreements, see George R. Gray, Donald W. Myers, and Phyllis S. Myers, Cooperative provisions in labor agreements: a new paradigm?" Monthly Labor Review, January 1999, pp. 29-45.
- ¹⁰ These are just a few examples of issues related to the use of employer stock as a 401(k) investment. For more information on these and other examples, see Report of the Working Group on Employer Assets in ERISA Employer-Sponsored Plans, on the Internet at http://www.dol.gov/ebsa/publications/acemer.htm (visited Jul. 7, 2008); Eileen Alt Powell, "Holding too much company stock can hurt workers if company falters," San Diego Union Tribune, Mar. 19, 2008, on the Internet at http://www.signonsandiego.com/news/business/20080319-1429-onthemoney.html (visited Jul. 8, 2008); and "Countrywide Sued Over 401(k)s," The Washington Post, Sept. 13, 2007, p. D2 (visited Jul. 8, 2008).
- 11 For more on investment education requirements, see Report of the Working Group on Employer Assets in ERISA Employer-Sponsored Plans, on the Internet at http://www.dol.gov/ebsa/publications/acemer.htm (visited Jul. 7, 2008).
- 12 The availability of employer funds as an investment choice may be related to the type of company sponsoring the benefit plan. For example, smaller companies may be owned by a single proprietor or small number of owners; there may be no employer stock. In addition, some companies may have stock holders but the stock is not publicly traded and not available for benefit plan participants. In such cases, employer stock may not be an investment option. Looking at data for smaller versus larger establishments, the proportion of plan participants who had investment choice was similar while the proportion that could investment in employer stock was greater among larger employers.
- 13 It is important to recognize that the BLS data are limited to the benefit plan provisions; data do not include information on employee investment decisions. Information on actual employee investments is available from other sources, such as the Employee Benefit Research Institute (EBRI) and the Survey of Consumer Finance. EBRI data on 401(k) assets indicate that the portion of assets in employer stock has dropped in recent years, from 19 percent in 1999 to 11 percent in 2006. Changes in asset proportions may be due to investment choices, investment returns, fund transfers, and other items. Information from EBRI may be found at www.ebri.org (visited Jul. 3, 2008). Data from the Survey of Consumer Finance are available on the Internet at www.federalreserve.gov/ pubs/oss/oss2/scfindex.html (visited Jul. 3, 2008).
- ¹⁴ Holding the availability of stock as an investment constant at 1993 levels, the decline in stock exposure from 1993 to 2005 is slight—only about 4 percentage points. Conversely, holding the availability of investment choice constant at 1993 levels, the decline in stock exposure mirrors the decline shown in chart 3. These tests indicate that, among employer funds, eliminating stock as an investment choice has by far the greater effect on overall stock exposure.
- 15 For recent BLS data on participation in benefit plans, see National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2007, Summary 07-05 (Bureau of Labor Statistics, August 2007); available on the Internet at http://www.bls.gov/ncs/ebs/sp/ebsm0006.pdf. (visited Sept. 8, 2008).