

The Changing Role of Employer Pensions:
Tax Expenditures, Costs and Implications for Middle-Class Elderly

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Abstract:

By any measure, pension participation should be at an all-time high: the nation is richer and workers are older, however, the pension world is in turmoil. Pension participation rates have not budged in decades, while pension spending is increasing. In the United States, government spending on the elderly consists of direct support and indirect support through the tax code, whose favored treatment subsidizes employer-based pension plans. Using tax expenditure data from the federal budget, employer cost data from the Chamber of Commerce, employer benefit data from the National Compensation Survey, and coverage data from the CPS, this paper identifies the tax expenditures for old-age pensions; documents trends in employer pension spending; assesses employers' motives for pension changes; speculates on the match between older workers and their jobs; and, last, reflects on alternative pension policies, paying special attention to the loss of pension security of middle-class workers.

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Executive Summary:

- Tax favoritism and, consequently tax expenditures, are key pieces of federal retirement income security policy. The tax expenditures for employer pensions are the largest of any category and their composition is changing from subsidizing DB plans to 401(k) plans. See Section 1.
- Employer pensions are institutionalized savings and the key component of American household savings to a middle-class retiree standard of living. See Section 2.
- Paradoxically, pension participation is stagnating despite the rapid increase in: DC coverage, tax expenditures, and pension spending, which increased faster than cash compensation and medical insurance. See Section 4.
- The participation/spending paradox may be explained by the distribution of pension coverage shifting to higher income workers and away from middle-class workers and the motives of employers to make the shift. See Section 5.
- The proposed “so-called” winning solution to strained pension budgets of people working until age 70 may not be favorable to the elderly. Though some elderly may find work attractive; if retirement income fails, their labor force participation may not lean towards the elderly worker’s terms. See Section 6.1 and 6.2.
- There are good reasons employer-based pension plans may and should survive: retirement financing is inextricably tied to work; there are productivity effects gleaned from occupational plans; and, retaining older workers will be a major human resource challenge for employers and workers.
- Younger workers could be worse off with the typical 401(k) plan than the typical DB plan because job tenure is not diminishing (see Section 6.3.) and 401(k) plans are used mostly as severance plans, rather than as pension plans. See the appendix.

What puzzles the nation is why pensions can be so expensive and deliver so little. All workers are feeling the pension pinch: those without pensions, those with pensions, and those who have lost pensions. The stagnation in pension coverage, coupled with employer adoption of 401(k) plans, means the hopes of those without pensions are smaller; those with pensions have experienced more risks and responsibilities for saving and investing; and those who have lost pensions feel robbed and forced to work longer.

1. Government Spending on the Elderly and Tax Expenditures

Every year the federal government spends a little over one-third of its budget on programs and transfer payments for people 65 years old and over. Most of the spending is on entitlement programs—programs whose expenditures are based on the costs of the services or transfers to those eligible and collecting. Of these, Social Security and Medicare take up the lion's share. In 2010, projected spending on the elderly is \$471 billion for Social Security, \$10 billion for Supplemental Security, and \$377 billion for Medicare. Total federal spending for the elderly is \$ 1,026 billion (Congressional Budget Office 2000). Other federal spending for the elderly includes pensions for federal and military personnel; the portions of the food stamp and Medicaid (the federal share) programs spent on the elderly, elder housing assistance, veterans' compensation and pensions, and Home Energy Assistance Program spending for the elderly.

Although only Jack Kemp may think that tax policy can meet all social goals (as Maureen Dowd (1987) observed of him, "His House colleagues still call him 'Jackie One Note' joking that if you ask him how to solve the problem of teenage pregnancy, he'll tell you to cut taxes."), the use of tax policy through "tax expenditures" is a well-used tool designed to boost private spending in socially approving ways. Tax expenditures are the value of the tax code's exemption of income that is generated for certain activities. Tax expenditures for private retirement plans include the revenue not collected by exempting the earnings and contributions in traditional employer pensions, known as defined benefit (DB) plans; in 401k plans; in Individual Retirement Accounts (IRAs); and in similar savings vehicles dedicated for disbursement at older ages. The tax expenditures for retirement plans were a full fourth of total annual Social Security contributions—\$114 billion in 2004. Even more amazing, total household saving, at \$102 billion, was lower than the federal pension tax expenditure (Bell, Carasso,

Steuerle 2005). Federal spending in the form of tax expenditures for 401(k) plans is expected to grow 28 percent by 2009, which is about the rate of growth in tax expenditures for medical insurance plans. On the other hand, expenditures for defined benefit type plans are expected to decrease by 2.1 percent. The large growth predicted for 401(k) plans and the decline in employer pensions yields a net increase in tax expenditures for employer pensions of a little under 26 percent.

Table 1
Selected Tax Expenditures for the U.S. Budget

	2005	2009	growth rate
	(billions \$)		
Net exclusion of pension contributions and earnings: 401(k) plans	58.9	75.4	28.0%
Net exclusion of pension contributions and earnings: Employer plans	61.7	60.4	-2.1%
Exclusion of employer contributions for medical insurance premiums and medical care (the largest)	112.9	150.3	33.1%
Deductibility of mortgage interest on owner-occupied homes	69.7	87.9	26.1%

Source: U.S. Budget 2004. Analytical Perspectives, Table 18-3 Income tax expenditures

There are important distributional considerations in tax expenditures. Since higher income individuals have more income and pay higher marginal tax rates, they have the greatest financial incentive to take advantage of this source of federal spending. Many blame tax policy for the small rates of pension coverage among low-income workers. On the other hand, limits on the amounts that can be contributed to tax-sheltered pension plans constrain tax expenditures to the upper tiers. Therefore, tax qualified retirement plans benefit the middle class the most. This can be seen by examining the sources of income to the elderly.

2. Middle Class Retirement Income and Household Saving

Social Security replaces about 41 percent of income for average career earners¹ but financial planners recommend a minimum 70 percent replacement rate. Currently, employer pensions are the middle class's only hope for supplementing Social Security. In 2002, elderly households in the middle of the income distribution (the middle 20 percent) received 9.2 percent

of their total retirement income from private-employer pensions, which is similar to the 13.8 percent the top quintile receives (see the table in the endnote²). In contrast, the same households obtained 7.4 percent of their income from personal assets, including 401(k) plans. The 20 percent with the highest incomes acquired two-and-one-half times more, 18.9 percent, from personal assets. It seems the top-heavy distribution of personal assets is caused partly by 401(k) plans being more unevenly distributed than private pension plans. Wolff (2005) reports the Gini coefficient among households with pension wealth is .741 for DC accounts and .638 for DB accounts (the larger the Gini, the higher the inequality). It is clear, combined with Social Security, employer pensions are the key to middle-class status in old age.

The bad news is that this source of retirement income is drying up and is related to a great mystery to economists. Namely, why do Americans today spend more than their income when 20 years ago they saved 10 percent of their income? (Munnell, Sass and Varani 2005) Mysteriously, savings are falling when savings should be increasing. Middle-age workers save more, and more workers are middle-age. Educated people save more, and more workers are educated. Most savings comes from the households at the top of the income distribution, and these have had the most gains (Bosworth and Bell 2005). The mystery is less inscrutable when we realize that virtually all household savings are in contractual and institutionalized forms, which include both defined benefit and defined contribution plan assets (Bosworth and Bell 2005; Munnell et al. 2005). American spendthrift spending habits (household savings started to decline in the 1980s) are legendary, but up until the 1990s, contractual or institutionalized savings, again, mainly pensions, helped stanch the red ink. Now a deep decline in contractual savings, especially by employer-financed DB pension plans, explains a large part of the savings rate decline.

The bottom line is the decline in savings is directly caused by the decline in pensions, which is dimming the retirement prospects for many workers. Yet, tax expenditures for retirement plans are going up by almost 26 percent! Part of the paradox is explained by stagnating coverage among low-income and middle-class workers and increasing coverage and tax deductible limits increasingly utilized by upper-income workers.

3. Employer Pension Coverage is Shrinking among Middle-Class Workers

Despite considerable federal tax incentives to employer-provided pensions, pension coverage has stagnated for the last decade; it has not grown for the bulk of the workforce. The Commerce Department's survey of people (Current Population Survey [CPS]) reveals the share of workers whose employers sponsor a pension plan actually has been falling for years: most recently declining from 62.7 percent in 2003 to 61.8 percent in 2004. The pension participation of workers who work full-time and for an entire year also fell from 54.1 to 53.4 percent between 2003 to 2004 (Purcell 2005a).

The Department of Labor's survey of private employers, the 2005 National Compensation Survey (NCS), also reports stagnation, although pension coverage and participation rates recently rose slightly. In 2005, employers reported that 60 percent of private-sector workers have employers who offer a retirement plan and 50 percent (up from 48 percent in 1999) actually participate in them (see Table 2). (The comparable coverage and participation figures—for all workers, not just full-time—for private sector workers from the 2005 CPS are a 57 percent coverage rate and 46 percent participation rate.)³ The bottom line is that regardless of the database used, pension coverage is stagnating for a percentage of the labor force.

Table 2
Pension Participation and Growth Rates of All Private-Sector Workers
By Selected Category and Ranked by Participation Rates in 2005

	Participation Rates in All Pension Plans		Participation Rates in DB Pension Plans		Participation Rates in DC Pension Plans		Changes from 1999-2005		
	1999	2005	1999	2005	1999	2005	Changes in Overall Pension Participation	Changes in DB Participation	Changes in DC Participation
Union	79	85	70	72	39	43	7.6%	2.9%	10.3%
Firms over 100	64	67	37	36	46	53	4.7%	-2.7%	15.2%
Goods-producing	61	64	36	32	44	50	4.9%	-11.1%	13.6%
Full-time	56	60	25	25	42	50	7.1%	0.0%	19.0%
Service industries	44	47	17	18	34	39	6.8%	5.9%	14.7%
Non-union	44	46	16	15	35	41	4.5%	-6.3%	17.1%
Small firms 0-99	34	37	8	9	27	32	8.8%	12.5%	18.5%
All workers	48%	50%	21%	21%	36%	43%	4.2%	0.0%	19.4%

Notes: All participation rates are in percentages. Source is National Compensation Survey: Employee benefits in private industry, author's computations from data available on the website: www.nbls.gov/ncs/ebs.

Table 2 also shows a great deal of variation of participation rates by group. Union workers' coverage rates increased 7.6 percent and workers' in small firms rates increased by 8.8 percent (the variations are discussed at length below).

The gap between the participation rates and coverage rates has grown larger. In 1983, some 54 percent of workers were covered by a pension plan, whereas only 43 percent of those workers participated in the plan their employer sponsored. This means, the fraction of workers participating in a pension plan among those who were covered by a plan was 82 percent. That

fraction fell to 75 percent by 2004.⁴ The coverage rates exceed participation rates because workers can choose not to be covered if the plan is a 401(k) and they can be disqualified from a plan if they have less than one year of service or work fewer than 1,000 hours per year. Yet, as defined contribution plans become more important, the voluntary participation feature of 401(k) plans becomes more significant. for low-income workers (Purcell. 2005b). Since 1983, which is about the time 401(k) plans were being adopted widely, participation rates have fallen behind coverage rates.

4. The Disconnect between Employer Pension Spending and Pension Security

It makes sense that tax expenditures are projected to increase because pension spending has risen dramatically for some employers though workers without pensions are not benefiting. According to the Chamber of Commerce's survey of private sector employers, from 1989-2005, the nominal increase in total compensation for all employees in manufacturing was 56.5 percent but the increase for DB spending was 450 percent; DC costs increased by 90.9 percent in comparison to medical insurance costs increasing by 13.2 percent. (Medical costs started at a much higher base. In 2005, the average DB pension cost for all employees in private manufacturing was \$4.40 per hour, DC costs were \$2.10 per hour and medical insurance was \$8.30.) In the non-manufacturing sector, the growth in spending for all types of compensation was more balanced. Between 1989 and 2005, DB pension spending rose by 60 percent, DC by 120 percent, medical insurance costs by 70 percent, and total compensation increased by 66 percent. See Table 3.

Table 3
Pension Spending Has Increased
Faster than Cash Compensation and Medical Insurance
For All Workers (Production and Salary Expressed in Dollars per Hour)

	Manufacturing			Growth	
	1989	1998	2005	2005 - 1998	2005 – 1989
DB*	\$0.80	\$1.20	\$4.40	266.7%	450.0%
DC	\$1.10	\$1.40	\$2.10	50.0%	90.9%
Retiree Health	\$1.00	\$1.00	\$1.20	20.0%	20.0%
Medical Insurance	\$8.30	\$6.90	\$9.40	36.2%	13.3%
total compensation	\$14.48	\$20.58	\$22.67	10.1%	56.5%
	Non- Manufacturing				
	1989	1998	2005	2005 - 1998	2005 – 1989
DB	\$2.50	\$3.90	\$4.00	2.6%	60.0%
DC	\$1.00	\$2.10	\$2.20	4.8%	120.0%
Retiree Health	\$0.80	\$0.90	\$0.50	-44.4%	-37.5%
Medical Insurance	\$7.90	\$6.40	\$10.90	70.3%	38.0%
total compensation	\$14.67	\$18.82	\$24.35	29.4%	66.0%

*DB includes cash balance and hybrid plans

Source: Employee Benefits Report, US Chamber of Commerce various years, Table 1

Companies, especially in manufacturing, had to increase pension spending dramatically in 2004 and 2005 when the sudden declines in the stock market placed companies in a severely underfunded position.⁵ It may be difficult to feel sympathy for companies that were required to sharply increase contributions into their DB plans after 2001. Many of these companies had taken pension holidays in the 1990s when the stock market returns and interest rates were high, enough so that assets were growing at the same time liabilities were low (because they were deeply discounted).

To their credit these companies did not ask for pity, instead they boosted DB contributions and many planned their exit out of DBs. Some used bankruptcy courts and exited in a non-orderly and brutal way (some airline pilots lost 80 percent of their anticipated pensions); other companies gradually boosted the 401(k) portion of their retirement plans and eased out of the DB plan. Some companies officially froze their healthy DB plan and did not replace the

pension lost for most of the workers (Van Derhei 2006).⁶ The demise of DB plans can be exaggerated. Congress and the White House have proposed pension changes but, as of April 2006, regulatory reform for private DB plans seems unlikely. Yet, while Congress feels pressure to act, many blame it for making DBs unattractive to employers (see GAO 2005a; Ippolito 2002) by approving funding rules that allowed firms too much flexibility in making pension fund contributions. Firms took advantage of the flexibility in the boom period of the 1990s by cutting pension funding under the exuberant belief that pension assets would consistently earn high returns; high interest rates would consistently discount pension liabilities deeply; and other investments (mergers, acquisitions) would consistently be more attractive than contributing to a pension fund

For many reasons not explored here, DBs are a unique kind of pension which works well with DCs but can't be substituted by them to reach the same levels of retiree well-being (Panis 2003). Congressional policy has a large effect on their security. Yet, the effect of government policy on employer-pension policy can be overstated. Blaming the tax and accounting rules amplifies a marginal reason for decreasing employer interest in DB pensions.⁷ I have argued elsewhere that the story is complicated by employer strategic choices, though many may be shortsighted, to lower employee costs. A recent study by Munnell et al (2006) confirms this view as does Van Derhei (2006). He found that though firms cited cost volatility as the DB feature firms wanted to avoid, the Aon Company found that 45 and 35 percent of the companies they surveyed froze their DB plans for reasons identified as "the amount of contribution" they had to make to their DB plan or "the impact on corporate expense." The human resource consulting firm, Mercer, found that 25 percent of their surveyed firms froze their DB plan for "long-term cost savings." Van Derhei found there is tremendous variability regarding what types of workers were compensated by employer contributions in a 401(k) plan when they lost DB benefits. He concludes, in general, older, longer-tenured workers are more affected than younger workers. And, if workers do not earn over 4 percent return on the 401(k) contributions and remain with the firm between 10-14 years, they will be more likely to lose from the DB to 401(k) switch. The stagnation in pension coverage may be explained at least partially by the fact that firms can reduce their costs of employee compensation by replacing DB plans with 401(k) plans. This is addressed below.

5. Why Have Employers Moved from DB plans to DC Plans?

DCs are increasingly dominating DB plans: DB participation rates have been flat since 2004 while DC rates are up 19.4 percent. Remarkably, the growth in DC plans has not raised pension participation rates. In 2005, employers reported 43 percent of workers participated in DC plans and 21 percent participated in DB plans (see Table 2 above). If these shares were added, 64 percent of the workforce would be in retirement plans, but only 50 percent are. If DC coverage and participation growth expanded access to pension plans, rather than replacing or supplementing an already existing DB plan, then growing DC rates should have pulled up total pension coverage and participation rates.⁸

The correlation between the overall expansion of pension participation and DB participation rates is a strongly positive 79 percent. However, the correlation between all pension and DC growth is a negative 10 percent. This means that groups with the highest growth rates in DC plans are less likely to experience a significant increase in pension access. The highest growth rate in DB coverage was 12.5 percent for workers in small firms and this group also happened to have the largest increase in overall growth rates—a boost of 8.8 percent. The recently announced terminations of traditional DB plans and their replacement with 401(k) plans by IBM, Hewlett Packard, Motorola and other major corporations only further illustrate this finding. IBM's savings are projected in the billions of dollars (Walsh 2006), and a full accounting of healthy companies' freezes are available from Munnell et al (2006). In sum, the evidence suggests that increases in DC plan coverage have not been correlated with increases in total pension coverage.⁹ All of this begs the question whether tax expenditures should proceed with more scrutiny because the mainstream explanations for the decline of DB pension may not be accurate.

Explanations for the growing DC plan dominance range from an evolutionary view that DB plans are dinosaurs that could not evolve to meet the demands of the new economic environment to the view that DB plans are more like pandas, a worthwhile species endangered by shortsighted policies and decisions. The “dinosaur” interpretation argues that employees have come to prefer the 401k-type DC plan to the traditional DB plan because the DC accounts are transparent, i.e. workers can better understand their benefits. Indeed, DB plans are notoriously confusing. They often appear to analysts and policy-makers as a mass of present values, current and termination liabilities, interest rates and mortality tables. Even the most well-educated and

interested employee has difficulty determining the defined benefit present value (Ghilarducci and Jeszeck 2006).¹⁰

The “DB pensions are pandas” interpretation holds that DB coverage rates have stagnated because many companies have adopted 401(k) plans to take advantage of temporary changes in accounting standards and the economy in order to lower pension costs, not to respond to worker preferences for DC plans or to changes in labor processes and technology. An argument can be made that firms should offer more DB plans, given the rapidly aging workforce and the projected labor skill shortage their tax expenditures may want to be assessed. (Older workers respond well to DB plans, especially women workers) Enabling financially healthy companies’ drive to save costs by creating a hostile environment for DB plans are four environmental changes: one, the national decline in union contracts has helped employers adopt 401(k) plans without apparent loss in productivity; two, the inhospitable regulatory environment for DB plans compared to DC plans (Gebhardt 2004; Eickelberg 2005); the dramatic shift in Presidential and Congressional attitudes about employer and government responsibility for social insurance; three, uncertainty over DB pension costs.¹¹ And four, there has been increased commercial vendor interest in 401(k)-type accounts relative to traditional defined benefit pensions (McCaw 2004), which would be an important topic for another paper.

In sum, I believe, the simplest and most obvious reason employers may prefer DC plans to DB plans is probably the chief explanation for the shift—shifting to DCs lowers worker pay without workers retaliating. In other words, the fact that 401(k) plans can reduce pension costs powerfully motivates some employers to choose 401(k) plans, despite DBs’ positive effects in retaining and attracting older workers—an especially important feature as the workforce ages. The motivation is apparent when the vexing problem that eligible employees irrationally “leave money on the table” by not participating in 401(k) plans is viewed from the vantage of the employers’ delight, not the policy-economist’s dismay.

In addition to the public announcements made by firms cutting DBs is the evidence that despite the convenience of payroll deduction and the proliferation of expensive investor education programs, the average participation rate for 401(k)-eligible workers has stagnated at about 80 percent. Twenty percent of employees do not take advantage of an employer’s match or tax break. Pension experts and academics invariably write this off to “quirky” human nature (Turner 2006). This view ignores the obvious reality that when workers leave money “on the

table,” they leave it on the employer’s table and that the outcome could be anticipated and factored into the employers’ compensation strategy. Ippolito (1997) and Burham (2003) argue that the voluntary participation feature of 401(k)s helps employers screen for the most productive employees. The idea is that workers who save are more productive. The forms can passively and easily tie compensation to productivity by matching the voluntary savings of those who turn out to be their best workers.

In fact, if all eligible workers participated in their employers’ 401(k) plans between 2002 and 2004, employers would have had to contribute 26 percent more—for an annual total of \$3.18 billion. Employers not wanting 100 percent participation solves some of the mystery why, although automatic enrollment is a documented, effective way to increase participation in 401(k) plans, 82 percent of 401(k) sponsors do not offer it. As mentioned above, one-fifth of employers are credited with providing a pension even though they contribute nothing to their employees’ 401(k)s.¹² Ghilarducci, Sun, and Nyce (2004) and Ghilarducci and Sun (2006) found that merely adopting a 401(k) can reduce pension costs by as much as 25 percent. Crucially, the cost savings from switching from a DB to a DC is not distributed equally; it is likely for numerous reasons the biggest losers are lower paid workers.

Indirect evidence that profit maximization motivates firms to discourage 401(k) participation can be found in the fact that those employers with the highest participation rates are primarily not-for-profit firms and government agencies. In 2003, *Plan Sponsor* magazine celebrated these employers for above average participation rates in 401(k) type plans. Those achieving 99 to 100 percent participation used a simple, surefire method: they mandated participation. Employers are able to adopt inferior pension plans, in part, because the workers are not resisting the loss. As noted earlier, one of the most important sources of climate change threatening pensions is the decline in unions. Collectively-bargained compensation packages traditionally contain more employee benefits and other forms of non-wage compensation than non-union compensation packages. There are various mechanisms that explain the union effect on employee benefits. Unions may facilitate benefits by informing and educating members about the importance of insurance and pensions. Unions also may promote employee benefits relative to cash wages because unions often represent the older worker rather than the marginal, younger worker who likely prefers cash relative to insurance. Union workers have almost twice the coverage rates for low-income workers and over 10 percent more for high-paid workers.

In sum, the shift to DCs corresponds with paradoxical trends: federal costs for pensions are increasing through tax expenditures while pension participation rates are stagnating. It seems companies are switching to save money. This adds up to a conclusion that pensions are becoming more skewed towards upper-income workers. Wolff and Weller's (2005) study of household wealth comes to the same conclusions.

6. Impact on Workers of Changing Pensions: More Savings or More Work

The changes in employer spending on pensions means that large, trend-setting employers are eroding retirement income security for most workers, who will never efficiently accumulate enough assets nor effectively choose payout options to provide a steady, adequate amount of income for life after retirement. It is doubtful that employees will save vigorously in voluntary retirement savings vehicles given that the 20-year-old experience with 401(k) plans reveals that employees have been either unwilling or unable to save enough (Vanguard 2005; Munnell and Sunden 2004). Only one-third of workers are on track to achieve the 70 percent target retirement income replacement rate (Vanguard 2005). Although a full 90 percent of workers have thought about how much income they would need in retirement, only 41 percent of workers have specific plans about how to obtain the necessary assets. Some 40 percent of households are at risk of not having enough income in retirement. To avoid this problem they would need to double their savings rates or defer retirement until age 70. When it comes to planning for an adequate retirement income, there is a large disconnection between thinking and doing. Financial education (FE) does not help much: only 40 percent of those who receive counseling or attend an FE class change their saving behavior. In fact, planning itself may be on the decline! The percentage of workers who thought about calculating savings needs ranged from 31 to 53 percent in 2000, then it fell to 42 percent in 2004 (EBRI 2004). If pensions are not enough the elderly will have to work—indeed Butrica et al (2005) predict that earnings from work will be a greater source of retirement income for baby boomers. That fact that earnings will become more important than investment income for future American retirees makes sense. Thus, to emphasize, the elderly will seek work as pensions fall short, but on whose terms? There is no reason to believe that employer attitudes and work conditions will welcome the older worker.

6.1 More Seek Work at Older Ages

Since 1949, men and women over age 65 have left the labor market in recessions. Men withdrew from the labor force at an average yearly rate of 2.4 percent and women by 1.5 percent. Yet, in the most recent recession, men over age 65 left at a rate of 3.9 percent, but women entered the work force by increasing work effort by 5.3 percent. The labor force participation rate for slightly younger men and women, ages 55 to 64, was higher over the most recent business cycle. However, labor force participation and working are not the same things. Despite the rapid increase in labor force participation, many of the elderly found unfavorable working conditions. If the elderly are laid off, they have half as much chance of being reemployed than younger people. The average duration of unemployment is higher for older workers and rose in 2002; the average search for job seekers over age 55 was 16 weeks, up from 12.7 weeks in 2001. Significantly, older men's job security has gotten much worse; their median years of tenure—the number of years a person has been employed by their current employer—has fallen dramatically, by almost 50 percent from 15.3 years for men ages 55 to 64 to just 10.2 years. (The decline is much smaller for women, from 9.8 years in 1983 to 9.6 years in 2002.)

6.2 Jobs for Older Workers Are Not Getting Easier for Old People to Do

A recent Urban Institute study (Butrica et al 2006) makes a clear, hard-hitting case for the most sought-after policy solution: a win-win opportunity. They argue that everyone wins if workers are persuaded to work more years. Social Security, Medicare, and workers all win if workers would work until age 70. Their simulations reveal that workers especially win. If they work several years longer they could enjoy a 25 percent increase in their standard of living. This finding is suspicious. A neoclassical economist would reject this conclusion faster than saying "Economics 101." Since a standard of living consists of money and leisure, if workers could have enjoyed more money by working longer and they wanted to, they would have. We would have to assume workers have revealed their preferences for leisure over a 25 percent increase in income by retiring, unless Butrica and colleagues argue that something like ignorance, custom, discrimination, and heuristic problems (all of which I am disposed to accept) bar, cajole, and inhibit workers from working more. Nevertheless, the paper makes no such claims. The puzzle—workers retire despite the huge gains from working longer—might be understood by recognizing the disutility of working for older people. An obvious reason people retire instead of

working to gain 25 percent more income is that the value of time increases as time becomes scarce, as one approaches death.

A fundamental question for policy-makers and for our scrutiny of federal spending on the elderly is whether federal policy is creating more older workers because they want jobs or because they have lost pensions. Currently, it seems employers are offering jobs to older people that employers have reserved for other marginal workers. Instead of 60 being the new 30, it has become the new 17 as older people fill the job segment with the predicted largest growth in new jobs—retail clerks. This is the direction in which we appear to be headed.

There is little evidence that older people have an increased ability to work longer. In fact, since 1981, the share of older workers reporting limitations in their ability to work has stayed steady at about 15 to 18 percent. While jobs demanding heavy lifting, stooping and kneeling, and overall physical effort are declining, especially for men, older workers report an over 17 percent increase in job stress and the need for intense concentration. Older women report an over 17 percent increase in jobs requiring good eyesight (see Table 4). Only magical thinking can conclude that the computer has made jobs easier for older workers (Johnson 2005).

Table 4
Selected Characteristics of Job as Reported by People Working Ages 55 to 60 in 2002
(Source: Johnson 2004)

	Percentage Change since 1992 Men	Percentage Change since 1992 Women
Good for older people		
Hardly any lifting heavy loads required	8.60%	17.10%
Hardly any stooping or kneeling required	6.90%	0%
Hardly any physical effort	26%	2.90%
Difficult for older people		
Always or almost always requires good eyesight	8%	17.70%
Always or almost always requires intense concentration	17.80%	15.10%
Strongly agree that the job involves a lot of stress	18.10%	17.80%

The fact that older people find jobs harder to get, more difficult to perform, and their unemployment duration much longer, suggests that older people are forced into the market

because of eroding pensions. In the last recession, the unemployment rate went up faster for older women than for any other group, while in the subsequent economic recovery the unemployment rate declined for older men and women more slowly than for younger workers.

Since older people are working more today, we need policies that speak to their special needs. The elderly will likely be attracted to the fastest-growing jobs, which happen to be dominated by women and, ironically, are those serving the elderly. The two occupations experiencing the fastest growth are registered nurses and home health care and personal health care aides. These jobs are better for the client and worker, no matter how old, when collective bargaining determines wages, hours, and working conditions. Older people in these jobs need the protections that the Americans with Disabilities Act provide, such as the right for reasonable accommodations in scheduling and equipment. In the end, the only way to ensure that older workers have jobs on their terms depends on them having secure retirement income.

6.3 Impact on Employers of Workers Working Longer

What Butrica et al do not address is whether extending work life will help employers. Clearly some workers will want to work longer, at least part-time. It is not clear, however, that employers will provide the jobs older workers want. All older workers want to work on their own terms, but if pension and retiree health care is less secure, that may not be possible. Robert Hutchens (Hutchens and Papps 2004; Hutchens and Grace-Martin 2004) shows that the overwhelming number of employers and workers tell researchers that they would be open to phasing in retirement but, in fact, such arrangements hardly ever exist. One reason may be that what older workers want from employers is not what employers want from workers. 

7. Policy Implications

Appropriate government policy should look like a purposeful retirement policy design. In basic public finance economics, social security systems have clear goals: adequacy, efficiency, horizontal and vertical equity, and contribution to economic growth. Giving tax favoritism to qualified private sector plans reasonably extends these goals to voluntary employer plans. Since the plans are voluntary, employers' needs are key: employers want to provide personnel tools and limit risk and volatility. Also, for employer pension plans to have a social purpose and justify their tax expenditures, they must make sense in people's lives. Given the recent wave of

DB and DC pension plans, all three groups of workers—the more than 50 percent without a pension at any one point in time; workers who have lost or spent their DB and DC plans; and those with pensions—are worried about retirement security.

There is great opportunity for policy-makers to reverse this deterioration of retirement income. In particular, policies should be designed to encourage efficient pension plans and voluntary working. Although not a focus of this paper, the contours of pension reform include the following platforms:

First, policy goals should ensure more coverage of defined benefit and defined contribution plans by extending the positive features of DB plans into the DC format, the DB(k)¹³, and traditional multiemployer portable DB plans that have existed in dynamic industries with mobile workforces.

A group of nurses in a New Jersey hospital offers an example. In the late 1990s they finally got their long-standing demand to join the multiemployer pension plan that the hospital's operating engineers belonged to. Why operating engineers?! The hospital had changed ownership so many times that each single-employer plan ended when another firm bought the hospital. The employees did not move; it was the employers who were mobile. Joining the multiemployer plan let the nurses build up credits in one DB plan (Ghilarducci 2003).

There should be more single-employer plans merged with multiemployer plans. Through collective bargaining, the union representing mechanics and other workers brought in employees from United, US Airways, and Aloha airlines after their other plans terminated and were taken over by the Pension Benefit Guarantee Corporation (PBGC). This means that when the single-employer DB plan in the airline industry failed, the International Association of Machinists multiemployer plans stepped up to replace them, offering better benefits than the airlines' proposed DC plans for the same contribution. The plan is more stable for the workers because it is a DB plan that includes the other airlines. These workers could lose their jobs at US Airways or any other airline, but not necessarily active membership in their pension plans.

Promoting the transfer of single-employer DB plans to multiemployer DB plans cannot be done easily without enabling legislation and regulatory changes. The law is not helpful, nor is the PBGC, in preventing single-employer terminations. The PBGC should encourage multiemployer plans to take on distressed single-employer plans by offering financial assistance.

This may be much cheaper than taking over an entire plan. The law already allows the PBGC to financially assist a distressed multiemployer plan to be merged into a multiemployer plan. A demonstration project in the airline or auto parts industries could greatly expand the multiemployer universe.

New DB hybrid pension designs could help calm those now in existing DB plans as long as current expected benefits are protected. Good policy would devise incentives to keep firms from exiting the DB system (Weller 2005; GAO 2005b).

Second, sensible protections that already govern the investment behavior of DB plan fiduciaries could be a good place to start, for example, in the percentage of a portfolio allowed to be in the employee's company's stock. Other considerations include mandatory minimum contributions, incentives for at least partial annuitization, limits on fees, and some form of insurance on account balances.

Third, policies should aim towards allowing individuals to use efficient not-for-profit individual account vendors such as Michigan Governor Jennifer Granholm's proposal to let Michigan small businesses use the Michigan state pension fund to administer their 401(k) plans (*Plan Sponsor* 2006) and the proposed legislation in Washington State that would give state residents access to the professionals managing the state employee pension funds (Watkins 2002).

Fourth, policies should protect older workers and ensure that work after an advanced age is under workers' terms. Extending American with Disabilities Act protections could help protect older workers and help employers resist the temptation to solve perceived labor supply shortages by cutting pensions.

8. Conclusion

The American system of retirement security is in transition. ate sector DB plans, which never covered more than 40 percent of the workforce, are declining. Meanwhile, 401(k) plans have grown by leaps and bounds. Yet none of this growth is likely to increase the number of workers covered by pensions or reduce their risk of losing them. Ultimately, it matters less which pensions systems we use to achieve a secure national retirement system; what really matters is that we ensure a secure retirement for all American workers and their families.

Appendix: Are DCs Better for Workers and Retirees in a Changing World?

The New (Exaggerated) Mobile Workforce: Does It Matter and Does It Even Exist?

A main argument against DBs is that they supposedly are a bad fit with today's workers. An extreme form of the argument is that DBs reward workers who stay with the same employer for their entire career. If workers are becoming more mobile, however, this makes little sense because if workers leave DB-covered employment at a young age, or before vesting, or before at least 10 years of service, DB benefits are zero to miniscule. Yet, the mobility argument is fragile, built on incorrect assumptions about the labor market.

In fact, younger workers have always engaged in "job hopping" but formerly they were also more likely to end up in a beneficial DB plan. Mobile workers actually can gain from a DB plan even if they do not settle into a job at age 40 for 25 years because after 10 years a worker can lock in a significant DB pension benefit. DBs offer ways that middle-age workers (especially women entering or returning to the workforce at older ages) can accumulate a reasonable retirement income in their 40s and 50s even if they've changed jobs a lot in their twenties and thirties and do not stay with their current employer for more than ten years. Furthermore, the fact that most workers use their 401(k) account balances as severance payments, spending them when they quit, are laid off or fired, means that job-hopping has even worse consequences for retirement savings in a 401(k) world.

However, before we allow that mobility determines the most effective pensions, we need to know the facts. Mobility trends differ depending on the point of view—what time period, what industries, what age workers, for men or for women. In many ways, workers have become more stable. One measure is that the share of employees with more than 10 years of service has increased since 1996, up for men from 30.5 to 30.6 percent and women up from 27.9 to 28.6 percent (Wiatrowski 2005). It is true that compared to the 1970s and early 1980s men have stayed in their jobs longer (the share of male employees with 10 or more years of tenure was 37.7 percent in 1983). In addition, older men, who experience more job displacement and have lost their employer pensions have had to "to screw their courage to the sticking-place" in order to save for retirement on their own. In 1983, over 57 percent of men ages 45 to 50 years would have been with their current employers for over 10 years—a standard unit of measurement; the probability in 2004 fell 48.1 percent. Nevertheless, women have become more stable: the probability a women in this age group would have been with her employer for over 10 years increased from 33 percent to 36.2 percent.

Another reason mobility increases can be exaggerated is that mobility actually is decreasing in industries where the most new jobs are appearing. The average tenure for all workers over age 16 increased from 3.5 years to 4 years from January 2000 to January 2004, which means more workers will have reached the 5-year mark when they must be vested (Bureau of Labor Statistics 2004, 2005). Yet, tenure growth is higher in the industries projected to produce the most jobs in the next two decades (see Table 5). Industries adding the most jobs are retail trade, employment services and computer design, state and local governments, food services, and in health care: offices of health practitioners, ambulatory health care services and hospitals. In all but one of these large job growth areas mobility is decreasing and tenure is increasing. Over all, the average growth in job tenure for most of the fastest growing industries is 16.3 percent, compared to the average of 14.3 percent. Bottom line: job security has improved slightly rather than the workforce becoming more mobile.

Table 5
Changes in Job Tenure for Industries with the Largest Job Growth

Industries expected to grow the fastest (2002 to 2012)	Average years of tenure with current employer		Increase in job tenure to January 2004
	January 2000		
Retail trade	2.5 years		12.0%
Employment services and Computer design*	2.6		38.5%
State and local government **	5.5		16.4%
Food services	1.4		14.3%
Offices of health practitioners, Ambulatory services	3.2		3.1%
Construction	2.7		11.1%
Educational services	3.2		18.8%
Hospitals	5.1		-7.8%
Average for all industries			13.3%
Average for all industries without hospitals	3.5		14.3%

Notes: Source is US Census, *Statistical Abstract of the United States: 2004-2005*. * The job tenure figures often include categories that do not correspond with the employment growth categories. The tenure figures are for professional and technical services, which is a larger category than “employment services and computer design.” ** The job tenure figures only include state employment because the employment growth categories are reported in larger categories than for job tenure. Average tenure in local employment decreased slightly from 6.7 to 6.4)

Head on Comparisons: DB vs. 401(k) simulations

Even in a mobile society, a worker would likely accumulate a pension worth much more in a DB plan than in a 401(k). The simulation assumes a worker has three jobs after age 30 and four jobs before age 30. The simulation also assumes that the worker with a 401(k) saves 25 percent of her 401(k) balance when she changed jobs before age 30 and then 100 percent after age 30. Participation in 401(k) plans is voluntary and there are many exclusions so most workers do not participate (Munnell and Sunden 2004, 56), but participation rates do increase with a person’s age. Munnell and Sunden (2004, 56) calculate that participation rates are about 28 percent until age 30 and then grow gradually to 44.2 percent by age 45, and then drop down to 38.8 percent. Assuming that workers and employers together contribute 9 percent to a 401(k) (Munnell and Sunden 2004, 58) and it earns 3 percent per year (after adjusting for risk and fees), then under real life circumstances this worker will accumulate \$33,335. This amount is not far-fetched since the median account balance for a 60-64 year old is \$59,000 (Munnell and Sunden 2004, 69). The annuity value is only about \$2,700 per year. On the other hand, the DB annuity accumulated under a common formula of 2 percent of salary per year of service credit adds up to \$35,000 per year. Workers are automatically in a DB plan and the amounts are guaranteed by

the government agency, the PBGC. The 401(k) is worth more only under ideal circumstances, which are that the worker never skips a contribution, always participates, and never withdraws. Under these ideal circumstances, the lump sum is over \$647,000 and the annuity value is over \$51,000. (See the Appendix.)

However, the ideal 401(k) world in which young workers always have a job, steadily save 12 percent of their income, always get low fees, and never touch the accrual or principal is in the big rock candy mountain in the sky, not on this planet, even with investor education.

Employers are causing the move away from DB plans. Employers, not workers, determine pension design. However, not all employers are alike and not all are adopting individual-based employee benefits. Many employers who do adopt the individual model choose 401(k)-style plans in order to lower short-term pension costs and help manage cash flow problems. A firm offering 401(k)s does not have to commit to contributions at all. In fact, over 20 percent of employers stopped contributing to their 401(k) plans in 2001 (Munnell and Sundén 2004).¹⁴ While DBs are superior in retaining workers in their late forties and early fifties (Johnson and Uccello 2004), and employers face impending shortages of skilled labor, worker loyalty seems less highly valued today by some large firms. It has always been the case that some business models stress low pay labor and a tolerance for high turnover. A memo from Wal-Mart's human resource director leaked to the press (Greenhouse and Barbaro 2005) advised supervisors to include vigorous physical tasks in all jobs so that senior workers, who are paid higher wages, are subtly encouraged to quit.

These trends away from offering pay to longer tenure employees may come back to haunt firms. Industries enjoying rapid growth may face high turnover costs, especially if they must recruit from other companies making hiring more expensive than retaining older workers. As the baby boomers retire over the next 20 years, and more companies—especially those that depend on skilled and semi-skilled labor—find it difficult to hire without raising wages, they likely will regret not having DBs. Certainly, many successful employers maintain DBs or DB hybrids in order to attract and retain older workers. Federal policy should not make DBs extinct for lack of action or imagination or because fads are moving in another direction in the short term.

Under Real Life Conditions DBs Are Better than 401(k)s

This is a simulation of a worker's pension accrual. This simulation assumes that the worker and the employer contribute the average to their 401(k) and participate at the average rates if they are covered by a DB or DC plan. The resulting pensions under both types of plans are compared with a career where the worker has the ideal rates of contribution, withdrawal and participation.

This simulated worker has eight jobs, retires at age 65 with an ending salary of \$52,240. Ideally, she would have \$647,379 in her account and take it out in an annuity of \$51,790. The ideal 401(k) is better than the average DB plan, which yields \$35,364 for life. However, under real life conditions, the real-life 401(k) is worth \$33,335 or \$2,667 for life.

					Real Life 401(k) plan			Ideal Behavior in a 401(K0 plan			Aver- age DB
Job	Age	Salary	Yrs on the job	Contri- bution rate 9%	With- dra wal Rates	Partici- pation rates	Net at age 65	With- drawal	Partici- pation	Lump and annuity	formula 2 % for each service year
										\$21,177	
1	20	\$35,000	2	0.09	75%	0.28	\$1,482	0%	1	\$32,718	0
2	22	36,050	3	0.09	75%	0.28	\$2,224	0%	1	\$11,233	0
3	25	37,132	1	0.09	75%	0.28	\$678	0%	1	\$11,570	0
4	26	38,245	1	0.09	75%	0.28	\$699	0%	1	\$35,752	0
5	27	39,393	3	0.09	75%	0.28	\$1,862	0%	1	\$223,452	0
6	30	49,241	15	0.09	0%	0.416	\$14,916	0%	1	\$153,437	\$14,772
7	45	50,718	10	0.09	0%	0.442	\$6,025	0%	1	\$158,040	\$10,144
8	55	52,240	10	0.09	0%	0.388	\$5,448	0%	1		\$10,448
Retire	65	same	0	0	lump	Leakages for adult children etc.	\$33,335 or \$2,667 for life	annuity		\$647,379 or \$51,790 for life	\$35,364 for life

Sources:

Aaronson, Stephanie, and Julia Coronado. 2005. "Are Firms or Workers behind the Shift Away from DB Pension Plan?" Board of Governors of the Federal Reserve System (US), Finance and Economics Discussion Series: 2005-17 Working-Paper.
Bell, Elizabeth, Adam Carasso, and C. Eugene Steurele. 2005. "Strengthening Private Sources of Retirement Savings for Low-Income Families." Opportunity and Ownership Project Brief #5. Washington, DC: Urban Institute. < http://www.urban.org/url.cfm?ID=311229 >
Bender, Keith A., and Natalia A. Jivan. 2005. "What Makes Retirees Happy?" Issues in Brief #28. Boston: Center for Retirement Research. < http://www.bc.edu/centers/crr/ib_28.shtml >
Bosworth, Barry, and Lisa Bell. 2005. The Decline in Saving: What Can We Learn from Survey Data?" Unpublished draft written for the 7 th Annual Joint Conference of the Retirement Research Consortium, "Creating a Secure Retirement" (Washington, DC, August 11-12, 2005). < http://www.bc.edu/centers/crr/dummy/seventh_annual.shtml >
Bureau of Labor Statistics. 2004. "Employee Tenure in 2004" September 21 < http://www.bls.gov/news.release/tenure.t05.htm > - Table 5. Median Years of tenure with current employer.
Burham, Kimberly. 2003. 401(k)s as Strategic Compensation: Align Pay with Productivity and Enable Optimal Separation. Ph.D. Dissertation, University of Notre Dame.
Butrica, Barbara A., Howard M. Iams, and Karen E. Smith. 2003. "It's All Relative: Understanding the Retirement Prospects of Baby-Boomers." Working Paper #2003-21. Boston, MA: Center for Retirement Research at Boston College. < http://www.bc.edu/centers/crr/dummy/wp_2003-21.shtml >.
Chamber of Commerce. 2005. <i>Employee Benefits</i> . Washington, DC. p. 10
Choi, James J., David Laibson, and Brigitte Madrian. 2005. \$100 Bills on the Sidewalk: Suboptimal Saving in 401(k) Plans." Prepared for the 7th Annual Joint Conference of the Retirement Research Consortium, "Creating a Secure Retirement" (Washington, DC, August 11-12, 2005). < http://www.bc.edu/centers/crr/papers/Seventh_Paper/Choi2.pdf >
Congressional Budget Office 2000. "Federal Spending on Elderly and Children."
Dowd, Maureen. 1987. "Is Jack Kemp Mr Right?" <i>New York Times</i> . June 28.
Employee Benefit Research Institute, EBRI, 2005. "Employment-Based Retirement Plan Participation: Geographic Differences and Trends, 2004." Issue Brief. No. 286. (October) page 7.
Employee Benefit Research Institute. 2004. Will Americans Ever Become Savers? The 14 th Retirement Confidence Survey, 2004. Issue Brief #268. Washington, DC: EBRI. (April) < http://www.ebri.org/publications/ib/index.cfm?fa=ibDisp&content_id=496 >
Friedberg, Leora, and Michael Owyang. 2004. "Explaining the Evolution of Pension Structure and Job Tenure." National Bureau of Economic Research, Inc, NBER Working Papers: 10714.
Frieswick, Kris. 2002. "Honey, I Shrunk the 401(k)." <i>CFO Magazine</i> . August 1. < http://www.cfo.com/article.cfm/3005808?f=search >

Gebhardtshauer, Ron. 2004. "A Balancing Act: Achieving Adequacy and Sustainability in Retirement Income Reform: What Are the Tradeoffs?" See Appendix A paper presented by Ron Gebhardtshauer at the AARP/CEPS Forum, Hotel Astoria, Brussels, Belgium. March 4. < http://www.actuary.org/pdf/pension/tradeoffs_030404.pdf >
General Accountability Office. 2001. Private Pensions: Issues of Coverage and Increasing Contribution Limits for Defined Contribution Plans. GAO-01-846. Washington, DC: GAO.
General Accountability Office. 2003. Pension Benefit Guaranty Corporation: Single Employer Pension Insurance Program Faces Long-Term Risks. GAO-04-90. Washington, DC: GAO.
General Accountability Office. 2004. Private Pensions: Multiemployer Plans Face Short and Long-Term Challenges. GAO-04-423. Washington, DC: GAO.
General Accountability Office. 2005a. Private Pensions: Recent Experiences of Large Defined Benefit Plans Illustrate Weaknesses in Funding Rules. GAO-05-294. Washington, DC: GAO.
General Accountability Office. 2005b. Private Pensions: Information on Cash Balance Pension Plans. GAO-06-42. Washington, DC: GAO.
General Accounting Office. 2002. Private Pensions: Improving Worker Coverage and Benefits. GAO-02-225 Washington, DC: Government Printing Office. April 9, 2002.
Ghilarducci, Teresa. 2003. "De-linking Employee Benefits from a Single Employer: Alternative Multiemployer Models." In <i>Benefits for the Workplace of the Future</i> , edited by David S. Blitstein, Olivia S. Mitchell, Michael Gordon, and Judith F. Mazo. Philadelphia: University of Pennsylvania Press.
Ghilarducci, Teresa, and Wei Sun. "How Defined Contribution Plans and 401(k)s Affect Employer Pension Costs: 1981-1998." Unpublished paper. Submitted to the <i>Journal of Pension Economics and Finance</i> , January 1, 2005. < www.nd.edu/~tghilard > #6 under Recent Papers.
Ghilarducci, Teresa, Wei Sun, and Steve Nyce. 2004. "Employer Pension Contributions and 401(k) Plans: A Note." <i>Industrial Relations</i> . Vol. 43, no. 2 (April), pp. 473-79.
Greenhouse, Steven, and Michael Barbaro. 2005. "Wal-Mart Memo Suggests Ways to Cut Employee Benefit Costs." October 26. <i>New York Times</i> . Business Pg. C1.
Hutchens, Robert M., and Karen Grace-Martin. "Who Among White-Collar Workers Has an Opportunity for Phased Retirement? Establishment Characteristics." (May 2004). IZA Discussion Paper No. 1155. Available at SSRN: http://ssrn.com/abstract=554023
Hutchens, Robert M., and Kerry L. Papps. 2004. "Developments in Phased Retirement." PRC WP 2004-14. Pension Research Council Working Paper. Pension Research Council. < http://rider.wharton.upenn.edu/~prc/PRC/WP/WP2004-14.pdf >
Ippolito, Richard A. 1997. <i>Pension Plans and Employee Performance: Evidence, Analysis, and Policy</i> . University of Chicago Press.
Johnson, Richard W., and Cori Uccello. 2004. "Cash Balance Plans: What Do They

Mean for Retirement Security?” <i>National Tax Journal</i> . Part 1 June; 57(2): 315-28
Madrian, Brigitte, James Choi, and David Laibson. 2005. “\$100 Bills on the Sidewalk: Suboptimal Saving in 401(k) Plans” Prepared for the 7 th Annual Joint Conference of the Retirement Research Consortium “Creating a Secure Retirement” August 11-12, Washington, DC. < http://www.bc.edu/centers/crr/papers/Seventh_Paper/Choi2.pdf >
McCaw, Daniel. 2004. “Strengthening Pension Security for All Americans: Are Workers Prepared for a Safe and Secure Retirement?” Testimony for the House Committee on Education and the Workforce. Feb. 25.
Mercer 2004. “Analysis Presented at the ERISA Industry Committee on January 14, 2004 – members only access to forum in ERIC.org website) Quoted in “Our Non-Level Playing Field Will eliminate Defined Benefit Plans (Or How to Hurt Retirement Security in American for Decades to Come) 2005. Center for American Progress
Mitchell, Olivia S., Stephen P. Utkus, and Tongxuan Yang. 2005. "Turning Workers into Savers? Incentives, Liquidity, and Choice in 401(k) Plan Design" NBER Working Paper No. W11726 October
Munnell, Alicia H., and Annika Sunden. 2003. “Suspending the Employer Match” Center for Retirement Research. Boston College. < http://www.bc.edu/centers/crr/dummy/pr_2003-06-30.shtml >
Munnell, Alicia H., and Annika Sunden. 2004. <i>Coming Up Short: The Challenge of 401(k) Plans</i> . Brookings Institution Press
Munnell, Alicia H., Francesca Golub-Sass, Maurice Soto, and Francis Vitagliano. 2006. “Why Are Healthy Firms Freezing Their Defined Benefit Pension Plans? Issue in Brief. (March) No. 44. Center for Retirement Research. < www.bc.edu/centers/crr/issues/ib_44.pdf >
Munnell, Alicia H., Francesca Golub-Sass, and Andrew Varani. 2005. “How Much Are Workers Saving?” Issues in Brief, IB #34. Boston: Center for Retirement Research. < http://www.bc.edu/centers/crr/ib_34.shtml >.
Munnell, Alicia, Francesca Golub-Sass, Mauricio Soto, and Francis Vitagliano. 2006. “Why Are Healthy Employers Freezing Their Pensions?” Boston: Center for Retirement Research
Munnell, Alicia. 2003. “The Declining Role of Social Security.” <i>Just the Facts on Retirement Issues</i> . JTF#6. Boston: Center for Retirement Research
Ottawa Citizen, 2006. “GM to Alter Pension Plans,” March 8, p. D3.
Panis, C. Annuities and Retirement Satisfaction 2003. RAND Labor and Population Program, DRU-3021. < http://www.rand.org/labor/DRU/DRU3021.pdf >
<i>Plan Sponsor</i> . 2006. “Michigan's Granholm Announces New 401(k) Plan Proposal.” January 26 (PLANSPPONSOR.com)
Purcell, Patrick. 2005a. “Pension Sponsorship and Participation: Summary of Recent Trends.” Findings from the Domestic Social Policy Division. CRS Report #RL30122.

Washington, DC: Congressional Research Service.
Purcell, Patrick. 2005b. "Retirement Plan Participation and Contributions: Trends from 1998 to 2003." Findings from Domestic Social Policy Division. CRS Report #RL33116. Washington, DC: Congressional Research Service.
Rappaport, Anna. 2004. "Retirement Perspective: Exploding the myth that employees always prefer defined contribution plans" Mercer Human Resource Consulting. May. < www.mercerhr.com > accessed October 10, 2005.
Turner, John, and Dana Muir. 2005. "Longevity and Retirement Age in Defined Benefit Pension Plans." In John Turner and Teresa Ghilarducci, eds. <i>Work Options for Older Americans</i> . Forthcoming. Notre Dame, IN: Notre Dame Press.
Turner, John. A. 2006. "Designing 401(k) Plans that Encourage Retirement Savings: Lessons from Behavioral Finance Research Report. AARP Public Policy Institute. (March) < http://www.aarp.org/research/financial/pensions >
Van Derhei, Jack. 2006. "Defined Benefit Plan Freezes: Who's Affected, How Much, and Replacing Lost Accruals." EBRI Issue Brief, No. 291, March 2006 Available at SSRN: < http://ssrn.com/abstract=891170 >
Vanguard Group. 2005. Vanguard Annuity Options. "Create Your Own Personal Pension Plan With an Income Annuity. Accessed at vanguard.com October 15.
Walsh. Mary Williams. 2006. "IBM to Freeze Pension Plans to Trim Costs." <i>The New York Times</i> . January 6. Section A, Column 5; Business/Financial Desk. P. 1.
Watkins, Marilyn. 2004. "Washington Voluntary Accounts: A Proposal Key Elements" Economic Opportunity Institute, January, available Dec. 2004 at < http://www.econop.org/Policy-WVA.htm >
Watson Wyatt Worldwide. 2004. "Traditional Pension Plans Outperformed 401(k) Plans during Last Bear Market, Watson Wyatt Analysis Finds." Press Releases, November 22. < http://www.watsonwyatt.com/news/press.asp?ID=13953 >
Watson Wyatt Worldwide. 2005 "Recent Funding and Sponsorship Trends among the FORTUNE 1000." <i>Insider</i> , Watson Wyatt Worldwide. Washington, DC. < http://www.watsonwyatt.com/us/pubs/insider/showarticle.asp?ArticleID=14750 >
Weller, Christian. 2005. "Ensuring Retirement Income Security with Cash Balance Plans." Center for American Progress. September.
Weller, Christian. 2006. "Presentation on the Immediate Future of Pension Security" Center for American Progress. Washington, DC. (March).
Wiatrowski, William J. 2005. "Retirement Plan Design and the Mobile Workforce." Bureau of Labor Statistics. Originally Posted: September 28, 2005. < http://www.bls.gov/opub/cwc/cm20050926ar01p1.htm >
Wolff, Edward N., and Christian Weller. 2005. <i>Retirement Income: The Crucial Role of Social Security</i> . Washington, DC: Economic Policy Institute.

Endnotes

¹ The average replacement rate will fall in two decades to 30.5 percent as the average benefit decreases due to increases income taxes and Medicare premiums, and in the normal retirement age rising to age 67 (Munnell 2003 Table 4. page 3)

²

Employer Pensions Are Important for Middle Class Retirees

	First	Second	Third	Fourth	Fifth
Social Security a	82.6	84.0	67.0	47.0	19.8
Private pensions or annuities	2.5	4.1	9.2	13.8	10.0
Income from assets	2.4	3.6	7.4	9.8	18.9
Earnings	1.1	2.3	7.0	14.7	38.4
Government employee pensions and railroad b	1.0	2.7	5.8	11.7	10.5
Other	1.5	1.7	2.7	2.9	2.4
Public assistance	8.9	1.6	1.0	0.2	0.1

Notes: Total income to each quintile by source of income of household units with member over Age 55. Quintile upper limits are: \$9,721, \$15,181, \$23,880, \$40,982. Source: Table 7.5

Percentage distribution, by marital status and quintiles of total money income
www.ssa.gov/policy/docs/statcomps/income_pop55/2002 released March 2005

³ The actual number is probably closer to the NCS results because employers have a better idea of who is covered than workers do. (Also, many CPS respondents are not the actual worker but his or her spouse or other relative and may not be knowledgeable about the employee's pension plans.

⁴

Private Sector nonagricultural wage and salary workers, aged 21 and over (in 2004 the ages are 21-64)			
	coverage	participation	sponsored-participation rate*
1979	54	43	80%
1983	49	40	82%

1988	51	37	73%
1993	55	39	71%
2004	55	41	75%
Private Sector nonagricultural wage and salary workers, aged 21 and over			
* the fraction of workers participation in a plan among those whose employer or union sponsors a plan for any of the employers at the worker's place of employment (for 2004 the age range is only 21 – 64).			
(Source: for years 1979 - 1993 the data comes from the Employee Benefits Research Institute. 1995. EBRI Data book on Employee Benefits. EBRI, Washington DC and the data for 2004 comes from EBRI, 2005. "Employment - Based Retirement Plan Participation: Geographic Differences and Trends, 2004." Issue Brief. No. 286. October page 7			

⁵ Manufacturing firms do not have more DB plans, nor are the benefits levels higher, but the pension holidays may have been more prevalent. In 2005 23% of non-manufacturing firms and 18 percent of manufacturing firms offered DB plans in the Chamber of Commerce's sample (p. 40) and the average employer costs were \$ 1,985 for non-manufacturing firms and \$1,410 for manufacturing firms (Chamber of Commerce p. 10).

⁶ The Employee Benefit Research Institute (Vanderhei, 2006) surveyed DB plan changes and found that the PBGC concluded most frozen plans were small and, if they were large, the companies were in some financial distress. If the firms surveyed by Aon consulting firm that say they are considering a plan freeze actually do, then, in a few years, 23 percent of their 1000 clients surveyed with DB plans will have frozen their plans. Watson and Wyatt surveyed Fortune 1000 firms revealed 11 percent had and they had below invest grade ratings. VanDerhei 2006.)

⁷ The funding rules affect pension plan contributions in a variety of ways. For example, some rules allow plan sponsors to choose interest rates that can reduce plan liabilities; other rules limit the maximum amount of contributions that a sponsor can make, while others permit the use of "credits" earned from passed asset gains as a substitute for cash contributions. See GAO 2005a.

⁸ Union workers experienced one of the largest increases in pension coverage rates – from 79 percent in 1999 to 85 percent in 2005 -- and this group had already started from a high base remarkably this group also had one of the largest increases in DB coverage – 70 percent to 72 percent -- and a large increase in DC coverage – from 39 to 43 percent. Because unions usually bargain DC plans to complement DB plans, we can be certain that in this case, the increase in the DB rate likely boosted pension access. This relationship holds up in an evaluation of the correlation between general pension and DB participation rates.

⁹ There are significant differences in pension coverage and the share of worker who actually participate in a plan. DB plan coverage, with some exceptions for part-time or newly hired employees, is largely universal. In contrast, while DC plans may be offered to a large majority of a sponsoring employer's workforce, employee non-participation rates can be quite large average over 20 percent (Purcell 2005a).

¹⁰ A recurring theme in the recent spat of bankrupt plan terminations is the belief of workers that their plans were well funded even immediately before termination. However, for many workers in DC plans their primary financial strategy is one of inertia. They continue with whatever their default financial strategy is and the initial contribution rate. This is why issues of automatic enrollment and rollover have become popular in recent years to take advantage of this inertia.

¹¹ Weller (2006) reports that according to a human resource consultant, Hewitt the top three threats to DB and DB hybrid plans are the costs volatility, overall costs and the lack of a long-term interest rate relief.

¹² I used information from Munnell and Sunden (2004) on participation rates, average contribution levels by earnings, the distribution of employees by earnings (Calculated from the CPS (2003) to make the three billion dollar estimate. The average savings per worker is \$156, Madrian, Choi, and Laibson (2005) calculated for their sample of over 800 employees in one firm that the employer saved over \$250 per older worker who did not participate in the 40(k) even when they were eligible.

¹³ Gebhardtshauer (2004) from the Academy of Actuaries propose the DB(k) which allows workers to supplement their DB plan with their own contributions. This is an attractive feature for employees in the 401(k) context for it helps an employee make personalized decisions about deferring current consumption to the future and individuals have an important sense of control and connection to their retirement plan.

¹⁴ Commonly cited advantages of 401(k) plans for workers are overstated. Theoretically, these plans offer the benefit of being transferable from job to job. But as many as half of people participating in these plans cash them out when they change jobs, so that the 401(k) plans really serve as severance plans that help alleviate the costs associated with being out of work and changing jobs. Facing rising living costs and stagnant wages, middle class workers often use these funds to pay for their children's education, household expenses, and housing needs. Women workers are more likely to cash out their 401(k) for non-retirement related needs. Early 401(k) withdrawals reduce the account levels. The average 401(k) account for someone nearing retirement is about \$70,000—about enough to replace only 3% of an average income.