Policy approaches to promote private and occupational old-age provision in the United States

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Pension Programs in the United States

by

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I. Background

Organization of the Public System. The foundation of the public retirement income support system in the United States is the Old-Age, Survivors and Disability Insurance (OASDI) program, which in the U. S. is the only portion of the social safety net that is popularly referred to as "social security." It is a contributory social insurance program operated directly by the federal government. The Internal Revenue Service, the agency responsible for collecting most other federal taxes, collects contributions. The Social Security Administration (SSA), an independent department of the government, maintains worker earnings information and calculates benefit entitlements. Payments are made through the U.S. Treasury. The social security program covered some 153 million workers in 2000. The only major employment group not covered by the program is certain employees of state and local governments.[2]

A second program also operated directly by the federal government offers needs-tested assistance to most residents who are either over age 65 or disabled.[3] It is called Supplemental Security Income, or SSI. It is financed from the federal government's general budget funds and is also managed by the Social Security Administration. Many state governments offer supplements to the SSI benefits of their residents, which they finance out of their own resources.

Benefit levels. Discussions of benefits levels under the OASDI program are generally framed in terms of target replacement rates rather than target benefit levels. The measure discussed most frequently is the *replacement rate* (the ratio of the benefit at retirement to the earnings just prior to retirement) for an illustrative worker *retiring at the normal retirement age after a full career of average earnings*.[4] Such a worker retiring in

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[2] State and local government must choose to participate, and those employing about two-thirds of all state and local employees have elected to join the system. Technically, railroad employees are covered by a separate system, but their system has essentially the same benefits and contribution rates and credits are fully portable between the two systems. Prior to 1985, civilian employees of the federal government were not covered, but all persons hired since 1985 are covered. The system also covers the armed forces and all self-employed individuals with annual earnings above a relatively low threshold.

[3] Supplemental Security Income is not available to certain recent immigrants or to people residing outside of the 50 states of the United States.

[4] The Social Security "average" used in these discussions is the number used to adjust prior year's earnings in the calculation of each worker's initial social security benefit. For historical reasons, it is

2000 would have received a monthly benefit of $990, which was some 39 percent of the 1999 average. Projections of the impact of current law show this ratio stabilizing at some 42 percent in the future.

The average social security earnings figure used in these calculations was estimated to be $2,675 a month in 2000, which is fairly representative of average earnings for manufacturing production workers, but a little higher than the average wage in other industries. In November 2000, average earnings for nonsupervisory workers in U.S. manufacturing were estimated to be $2,608 and average earnings of all nonagricultural, nonsupervisory workers were estimated to be $2,075.[5]

For two reasons, actual average social security retirement benefits are generally lower than the benefit afforded this illustrative worker. First, many workers (particularly women) do not have earnings in each year prior to retirement. Second, most workers file for benefits before reaching the normal retirement age. About half of the workers who retire each year file for benefits at age 62, the age at which they are first eligible, and receive a monthly benefit permanently reduced by some 20 to 25 percent below the benefit payable at the normal retirement age.[6]

In December 2000, the actual average retirement benefit being paid under the OASDI program was $844 a month. The average for male retirees was $950 a month and the average for female retirees was $730 a month. The male average represents a social security benefit equal to a little over 36 percent of the average manufacturing wage.[7]

Benefit calculations and minimum pensions. Each worker's initial social security benefit is calculated by first wage-indexing all past year's earnings, calculating the monthly average of the highest 35 years of earnings, applying a three-bracket benefit formula (whose bracket boundaries are also wage indexed annually), and applying the proper actuarial adjustment factor to reflect the age at which benefits are first drawn.[8] The procedure guarantees that initial benefits for successive retirement cohorts will rise at roughly the same rate as average earnings in the economy are increasing. Once an individual has retired, subsequent benefit adjustments reflect changes in the consumer price index.

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actually about 25 percent higher than the actual average derived by dividing total earnings of all covered workers in a given year by the total number of workers who had any earnings that year.

5 U.S. Council of Economic Advisors, 2001

6 Until recently, benefits awarded before age 65 were reduced 5/9 of one percent for each month prior to the month the worker turned 65. As the "normal retirement age" is gradually being increased from 65 to 67, the size of the reduction for benefits first drawn at age 62 is also rising.

7 Benefit and earnings data are from the Annual Reports of the Trustees of the Old-age, Survivors' and Disability Insurance fund and from the Annual Statistical Supplements of the Social Security Bulletin.

8 The formula for those reaching age 62 in 2001 is 90 percent of the first $511 of average indexed monthly earnings, plus 32 percent of the next $2820 of average indexed earnings, plus 15 percent of the remainder.

The only minimum benefit in the social security program is a special benefit targeted on workers with long histories (at least 20 years) of low wages.[9] Very few workers receive benefits under this provision, however, since most workers with sufficient attachment to the labor force to be eligible for the provision get a higher benefit from the operation of the normal benefit formula.

The only other minimum guarantee generally available in the United States is from the SSI program. That program guarantees a monthly benefit of $531 to single aged or disabled individuals or $796 to a aged or disabled couple who have no other source of income. The guarantee is $20 per month higher ($551 and $816, respectively) for someone who is also collecting a social security pension.[10] SSI benefits are available only to those who have very limited financial assets. There is no time limit on their duration.

Special factors affecting relative retirement income needs in the U.S. Two characteristics of U.S. retirees need to be considered in comparing the adequacy of retirement incomes in the U.S. to those in other countries, the relatively high incidence of home ownership and the relatively inadequate coverage of the national health insurance program.

Most U.S. retirees own their own homes and many have little if any debt on their homes. In 1998, some 81.5 percent of those aged 65 to 74 reported that they owned their own homes, and these homes had a reported median value of some $95,000. Roughly two-thirds of the home-owners had no mortgage debt. Of the third that had mortgages on their homes, the median size of the mortgage loan was $29,000. Home ownership rates are slightly lower for those over age 75, due either to cohort differences or to a tendency for people to sell their homes as they age. Among the older group, 77 percent reported that they owned their own home in 1998. The median value of these homes was $85,000. Almost three-quarters of the homeowners had no mortgage. Among those that had mortgages, the median mortgage loan was $21,200.[11]

The national health insurance program in the United States is called Medicare. It covers most persons aged 65 and over and those under age 65 who have been collecting disability (invalidity) benefits under the OASDI program for at least 2 years. Retirees less than 65 and those collecting disability for less than two years are not eligible. A separate program, Medicaid, provides medical benefits to the low-income population. It

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[9] The minimum benefit is calculated by counting the number of years in which a worker had earnings equal to at least one-fourth of the social security average. Workers with at least 20 years of such earnings are eligible for a benefit at the normal retirement age equal to some $30 for each year of service in excess of 10 years, up to a maximum of 20 years, or about $600. Benefits are reduced for those claiming them prior to the normal retirement age.

[10] SSI monthly benefits are reduced by $1 for each $1 in other income that the recipient has after the first $20 of such income has been disregarded. Thus all persons entitled to SSI and social security pensions receive the same benefit, regardless of the size of their social security benefit. SSI benefits are reduced by only $0.50 for each $1 in income from earnings after the first $65 in monthly earnings have been disregarded.

[11] Data are from the Federal Reserve Board's Survey of Consumer Finances. See Kennickell, et al., 2000.

is jointly financed by the federal and state governments and is managed by the states. Generally, those eligible for benefits under the SSI program are also eligible for Medicaid from their state government. Retirees under age 65 generally will not be eligible for Medicaid.

The Medicare program has two parts, one covering costs incurred in hospitals and the other covering physician services. Hospital insurance is a contributory social insurance program financed entirely from worker and employer contributions. The minimum volume of prior contributions required for coverage is the same as for Social Security cash benefits. Physician insurance (called Supplemental Medical Insurance or SMI) is government-sponsored, term insurance. Virtually any resident over the age of 65 may sign up for the program, but must pay a monthly premium equal to about one-quarter of the total cost of the insurance. The federal government finances the other three-quarters of the cost of SMI from its general budget.

Maxwell, et al. (2001) estimate that Medicare spending in 2000 averaged $6,213 for each aged beneficiary. Of that total, $631 was the average SMI premium that the beneficiaries paid and $5,582 was the amount financed from general budget transfers and social insurance contributions. They also estimate that the average middle-income beneficiary paid an additional $1,005 in 2000 in co-payments and deductibles for services that were covered by Medicare and an additional $3,114 on health care products and services not covered by Medicare. The two most important categories of spending not covered by Medicare are out-patient prescription drugs and long-term stays in nursing homes. These figures suggest that Medicare covers about 55 percent of the typical aged beneficiaries total health care spending while the aged individual is required to cover about 45 percent, including the Medicare insurance premium.

Because of the gaps in Medicare coverage, most aged individuals also carry some other form of health insurance to supplement Medicare. Maxwell, et al. estimate that in 1997, 29 percent of the Medicare population had supplemental insurance provided by a former employer, 24 percent had supplemental insurance that they purchased individually, 13 percent had sufficiently low incomes and assets to also be covered by the Medicaid program (which generally covers the Medicaid co-insurance and deductible payments), 10 percent had only coverage from Medicare, and 9 percent had some other source of supplemental coverage.

Table 1 shows a rough calculation of the net impact of these two adjustments.

Table 1. Impact of Medical Spending and Home Ownership On Well Being of Typical Retiree in the United States (Annual Rates)

Actual average retired worker benefit, 2000	$10,100
Imputed income from home equity	+ 2,075
Health spending not covered by Medicare	- 3,745
Net after these two adjustments	$ 8,458
Ratio of net to average manufacturing wage	30%

Source: Author's calculations based on data cited in the text. Imputed income from home equity is based on the assumption that typical worker has $83,000 in home equity. The figure is divided in two to allow equal sharing of the resulting imputed income by both husband and wife and multiplied by 5%.

For a typical retiree, imputed income from home equity could add about 20 percent to the value of the social security pension. At the same time, medical costs (including the SMI premium) could consume some 35 percent of the value of the average pension. The net effect after these two adjustments is a retirement benefit equal to some 30 percent of the average manufacturing wage.

Living arrangements and long-term care financing. Among those aged 65 or older, some 1.4 million persons, about 4 percent of the population of that age group, were living in nursing homes. The incidence increased with age, and three-quarters of the nursing home population was female.

Table 2. Population in Nursing Homes, 1995

	Number (x1,000)	**Rate (per 1,000)**
Age 65-74	198	10.1
Age 75-84	528	45.5
Age 85 and over	738	192.0
Total, Age 65 and over	1,465	43.4

Source: U.S. National Center for Health Statistics, *1997 National Nursing Home Survey*

Among those not living in institutions, the vast majority live independently, either alone or with their spouse. Most of the rest live with another relative and provide the majority of their financial support themselves. Even among unmarried women, only about 25 percent of the non-institutional population shares living arrangements with other relatives, most commonly one's children.

Table 3. Living Arrangements of the Non-institutional Population Age 62 and over, 1994

	All Persons	Married Persons	Single Men	Single Women
Living alone or only with spouse	83%	88%	80%	75%
With child	12	10	10	16
With other relatives	7	2	10	9

Source: U.S. Bureau of the Census, Survey of Income and Program Participation

The Medicare program covers nursing home care only when it is associated with recovery from a hospital-based procedure. For the most part, the costs of caring for someone with a chronic condition are covered only for those who stay at home, and are subject to some severe limits at that. Nursing home expenditures for those with few assets and other income sources are covered under the Medicaid program, however. In

1995, Medicaid financed the care of 56 percent of the residents of nursing homes. For 29 percent of the residents, financing came either from their own resources, their families, or private long-term care insurance. Medicare provided financing for 13 percent of the residents, and the remaining 3 percent were financed from a variety of other sources.[12]

There is a small market for private long-term care insurance in the United States, with an estimated 3.2 to 3.8 million policies now in force. Most are individually purchased policies, although some have been purchased through arrangements made by an employer or other group to minimize marketing and other transactions costs and thereby obtain lower rates. The federal government would like to expand these voluntary efforts and is now creating a group program that would allow its employees and retirees to purchase individual policies at group rates. There have been proposals to grant special tax deductions for those purchasing policies on their own, but no action has been taken on these proposals.

II. Fully Funded and Occupational Pension Schemes

A. Overall role of private sources in providing retirement income

The retirement income system in the United States is based on the assumption that workers, particularly those with average or above-average earnings, will rely in retirement on a mixture of public and private income sources. Public policy encourages employers to offer group pension plans as an employee fringe benefit and individuals to save on their own for their retirement.

Employer-sponsored pension plans are encouraged by favorable tax treatment for "tax qualified" plans. Employees are not required to pay taxes on employer pension contribution to these plans (but are taxed on benefits ultimately received) and all investment returns earned on the assets held by these plans are tax exempt. Public policy encourages lower earners and those individuals not covered by an employer-sponsored plan to save on their own for retirement through several programs that offer similar tax preferences to individual retirement accounts. The government budget office estimates that the favorable tax treatment afforded employer-sponsored pension plans (including plans set up by self-employed individuals) cost a total of $94.6 billion and the favorable tax treatment of individual retirement accounts cost an additional $15.2 billion in 2000.[13]

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[12] Dey, 1997. Medicaid finances only 38 percent of the new admissions to nursing homes. It's share of total financing is higher because many longer-term residents who had other financing sources when they entered a nursing home have exhausted those sources. A continuing problem is that the elderly will transfer their assets to their children so that they can become eligible for Medicaid. Generally, assets transferred to one's children are not counted in establishing eligibility as long as the asset transfer occurred more than two years previously.

[13] U.S. Office of Management and Budget, 2001.

Outside of the national social insurance programs, there are very few mandates to offer pensions or participate in private savings programs.[14] Traditionally, the government has not subsidized pension plans or individual retirement accounts beyond the tax deferral just noted (except for the occupational plans established for its own employees) However, recent legislation created a five year program offering tax credits to middle and lower-income individuals who make voluntary contributions to tax-qualified retirement plans. The credit will range from 10% to 50% of the first $2000 contributed to the plan, depending on household income, and is in addition to the normal deduction.[15]

Among all aged, Social Security provides by far the largest source of retirement income. Ninety percent of aged units receive benefits from Social Security and these benefits account for 38 percent of the income of all aged. In the aggregate, earnings from continued work, asset income (which includes earnings on most individual accounts and defined contribution pension plans), and defined benefit pension income each supply about 20 percent of the income of the aged. Each is far more important in the income of units in the upper half of the income distribution than among lower income units, however. Eighty-six percent of the units report income from assets, although the amount received by many units in the lower half of the income distribution is obviously quite modest. Thirty-four percent report income from defined benefit pension plans of all types and 24 percent report income from private occupational pensions. In the aggregate, income from private occupational pensions accounts for some 10 percent of all of the income of aged units. Twelve percent of age units report income from earnings. The rest of the income of the aged is comprised of public assistance, intra-family transfers, and so forth.

Table 4a. Sources of Income by Quintiles of Total Income Units with Head Age 65 or Older, 1998[a] (Percent with any income from each source)

Source:	1st	2nd	3rd	4th	5th	Total
Social Security	73	96	97	95	89	90
Pensions[b]	5	14	32	56	63	34
-- private pensions	3	10	25	41	41	24
Asset Income	19	32	61	74	86	55
Earnings	3	3	8	17	30	12
Public Assistance	21	9	3	-	-	7
Total[c]	100	100	100	100	100	100

[14] Perhaps the only example of a legally mandated occupational pension system is that covering the railroad industry.

[15] The highest credit is for persons with total household income below $20,000 a year. The plan is to be in effect from 2002 through 2006. The credits are not refundable, so that their value is limited to the tax liability that the individual otherwise would have had. Another provision just enacted provides a subsidy of up to $1500 over three years (through a tax credit) to small employers to help defray the administrative costs of setting up a pension plan.

Table 4b. Shares of Income by Quintiles of Total Income Units with Head Age 65 or Older, 1998[a]						
Source:	1st	2nd	3rd	4th	5th	Total
Social Security	82	80	64	45	18	38
Pensions[b]	3	7	15	24	20	19
Asset Income	2	6	10	14	28	20
Earnings	1	3	7	13	31	21
Public Assistance	10	2	1	-	-	1
Other	2	2	3	3	2	1
Total[c]	100	100	100	100	100	100

Source: U.S. Social Security Administration, Income of the Aged, 1998

a. Units are either a married couple whose head is 65 or over 65 or a single individual age 65 or over.

b. Includes government pensions, private pensions and annuities. For the population taken as a whole, 8 percent of income is from government pensions, 10 percent from private pensions and 1 percent from private annuities.

c. Detail may not add due to rounding.

B. Occupational pension plans

Pension coverage is widespread among currently active workers, but because coverage is not mandated, there are significant gaps. In 1999, some 47 percent of wage and salary workers participated in one or more pension plans sponsored by their employers, but 53 percent did not. Of those who did not participate in such plans, three-fourths worked for an employer who did not offer a pension plan and one-fourth either chose not to participate or were not allowed to participate in their employers plan.

Table 5. Employee Participation in Employer-Sponsored Pension Plans 1989 and 1999				
	Participants (millions)		**Percent of Total**	
	1989	**1999**	**1989**	**1999**
Participating in a pension plan	48.6	61.5	41.5%	47.0%
Not participating, because				
-- employer does not have a plan	54.3	51.1	46.4	39.0
-- employee does not participate[a]	14.1	18.3	12.1	14.0
Total	117.0	130.9	100.0%	100.0%

[a] includes those excluded by the employer and those electing not to participate

Source: U.S. GAO (2000). Based on tabulations from the Current Population Survey

The workers most likely to participate in a pension plan are those who are older, higher-wage earners, full time workers, and who are employed by a large employer. Large employers and employers who pay relatively higher wages are more likely to sponsor pension plans. In addition, employers who sponsor a pension plan are generally allowed to exclude from coverage employees under the age of 21, those who work less than 1,000 hours a year and those who have been employed for less than 6 months.

Table 6. Groups with Low Pension Coverage

	No. of Workers (millions)	Percent Covered
Part time or part year employees	45	21%
Under age 30	39	30
Employed by employer with less than 25 employees	29	24
Earned less than $20,000	52	19

Source: U.S. GAO (2000). Based on tabulations from the Current Population Survey

Aggregate pension coverage has ranged between 40 and 50 percent of wage and salary workers over most of the last thirty years. The upward trend in the 1990s offsets a downward trend in the 1980s. The recent increase in pension coverage can be attributed, in part, to the growth of defined contribution plans, particularly the salary reduction plans (such as the 401(k) plans) which are easier to establish and less expensive to sponsor. The growth of these kind of plans more than offset declines among more traditional defined benefit plans. Growth during the early 1990s was probably also helped by a generally healthy economy.

Table 7. Total Assets and Participants of Employer Pension Plans[a]

Year	Defined Benefit Plans		Defined Contribution Plans		Assets as % of GDP
	Participants (millions)	Assets (billions)	Participants (millions)	Assets (billions)	
1975	27.2	185.0	11.2	74.0	16
1985	29.0	826.1	33.2	426.6	30
1995	23.5	1402.1	42.6	1321.7	37

[a] Excludes assets held by insurance companies (estimated at 10 to 15 percent of the total) and government employee plans; workers participating in more than one plan are counted more than once in these tabulations.

Source: U.S Department of Labor, Pension and Welfare Benefits Administration.

Growing pension coverage and the continuing maturation of the pension system caused pension assets to grow more rapidly than the economy as a whole over the last 20 years. Nobody knows whether coverage will continue to grow in the future, but the general expectation is that such growth is likely to be modest in the absence of additional and significant policy interventions. It is expected that the maturation of the system will cause pension and asset income to become a somewhat more important source of income for the elderly in future years, but there are currently no reliable projections of the degree to which this is likely to occur.

Aggregate pension assets will probably stop growing in the second decade of the 21st century as the baby boom generation moves into retirement. One study projects that the ratio of aggregate pension assets to the nation's aggregate payroll will peak around 2020 and begin to shrink thereafter as outflows to finance retirement pensions for the baby boom generation exceed contribution income and investment earnings.[16]

B. Individual retirement accounts

Many people have tax deferred individual retirement accounts (IRAs). The most common form of IRA is an account containing funds on which no income tax has been paid, including both the deposits and investment returns. The funds in these accounts are fully taxed as ordinary income at the time they are withdrawn from the account. Recently a second form of individual retirement account was authorized, known as a “Roth IRA.” Funds deposited in these accounts are from income that has already been subjected to the income tax. In these accounts, neither the investment returns nor the subsequent withdrawals (assuming they are made according to the rules) are taxed.

Deposits to normal IRAs come from two sources, rollovers from other tax qualified plans and direct deposits to the account. A worker leaving a particular employer with whom he has a vested pension (whether defined benefit or defined contribution) has the right to an immediate payment in the amount of the vested portion. This payment can be deposited in (“rolled over into) his own IRA without triggering an immediate tax liability. If it is not rolled over, the entire payment is taxable at ordinary income rates and, unless the taxpayer is at least 59½, an additional penalty of 10 percent of the value of the payment is levied.[17]

Workers whose employer does not offer a pension plan (or who do not qualify to participate in the plan) and workers from families in approximately the lower half of the income distribution may also make tax-deductible contributions to normal IRAs or nondeductible contributions to Roth IRAs. In recent years, over 90 percent of the money going into IRAs has come from rollovers; contributions from lower wage and noncovered workers account for less than 10 percent.

The data in Table 8 show the latest information on the prevalence of and averaged size of tax-deferred individual retirement accounts. These data include

[16] Scheiber and Shoven, 1997.

[17] Bassett et al. (1998) find that only 28 percent of pre-retirement distributions are rolled over into IRAs or other tax qualified plans. However, since those receiving larger balances were more likely to roll them over, some 56 percent of all of the monies distributed were rolled over. They find that 13 percent of the percent of the money distributed was used for consumption, 11 percent was used for a non-qualified financial investment, 8 percent was used to pay off debts, and 6 percent to buy or improve a home.

IRAs, most 401(k) plans, and certain other forms of individual accounts. One notes that ownership is fairly widespread, particularly among those with family incomes above $25,000.[18] The median account balance is rather modest, however, for all but the highest income households. Indeed, the median account balance is less than the median income in every income category, and substantially below the median incomes of the upper income households.

Table 8. Holdings of Tax-Deferred Retirement Accounts, 1998 (Includes IRAs, Employer-Sponsored Plans, and Plans for Self-Employed)		
	Percent of Families having accounts	**Median value of holdings (thousands)**
By Family Income (1988$):		
Less than 10,000	7.9%	$ 5.3
10,000 to 24,999	25.1	11.1
25,000 to 49,999	52.5	10.6
50,000 to 99,999	71.6	24.6
100,000 or more	84.3	88.2
By Age of head (years)		
Less than 35	40.7	6.4
35-44	54.3	15.6
45-54	57.4	29.7
55-64	50.9	33.6
65-74	36.6	30.3
75 and over	15.7	25.0
All Families	45.2	18.1

Source: Survey of Consumer Finances, Kennickell, et al. (2000)

The 1998 results do show substantial growth in both the prevalence and average balance since a similar survey conducted in 1995. Over the three year period, the fraction of households having tax-deferred retirement accounts increased by some 3.5 percentage points and the median balance in the accounts rose by 32.6 percent, representing both the influx of additional contribution and the favorable performance of the equity markets during these years.

C. Federal Thrift Plan

In 1985, the federal government introduced a new retirement income system for its civilian employees.[19] The new scheme was designed to copy the approach then used by large private sector employers, with responsibility for retirement

[18] In this data base, the median family income for the entire sample was $33,400.

[19] The new system applies to all persons hired after 1985 as well as those who elected to switch to the new system.

income spread among three sources, social security, a defined benefit pension plan, and a defined contribution, thrift savings plan. The particular institution created to manage the new thrift savings plan has assumed a prominent role in pension reform debates in the U.S. and around the world, however, because it has proved to be an efficient and effective mechanism for managing funded individual accounts. In 16 years, assets under management in the plan have grown to almost $100 billion. Annual administrative costs currently run some 0.07 percent of assets under management.

Under the federal thrift plan, the government as an employer deposits 1 percent of each employee's wage in that employee's individual account. Employees may elect also to contribute a given fraction of their salaries, ranging from 1 percent to 11 percent. As with a 401(k) plan in the private sector, these contributions are excluded from the employee's taxable income (up to the annual ceiling on salary reductions generally applicable in the country). The government matches any voluntary employee contributions on a sliding scale, with a maximum government match of 5 percent for a 6 percent employee contribution.

Employees are allowed to allocate their contributions among five passively managed, indexed funds. One fund is essentially a savings account that pays interest at the average long-term government bond rate for each month. A second fund tracks the S&P 500 stock index. A third tracks a corporate bond index. The fourth and fifth funds, which were added only recently, track an index of international equities and an index of smaller firms' equities, respectively. The government bond fund is managed directly by the Thrift board, whereas private fund managers who are required to match the respective indexes manage the other funds. The funds of employees who make no selection are deposited in the government bond fund. Employees who wish to invest in one of the other funds must sign a statement acknowledging that the value of these other funds may rise and fall with market conditions.

Expenses are kept low by limiting the selections to a small number of indexed funds. Also, employees are allowed to alter their allocations of new monies only once every six months and move their balances from one account to another only once each month. A variety of mechanisms have been used to insulate these investment activities from political interference, including contracting with the private sector for fund management, restricting the investments to indexed funds, and making each of the trustees of the system personally liable for any breech of their fiduciary responsibilities.

D. General regulatory framework

The authority to regulate the various private sector retirement income products is spread over a half a dozen different institutions and involves the participation of individuals employed in both the public and private sectors.

Responsibility is divided along industry lines as well as between different agencies of government.

In general, employer-sponsored pension plans are jointly regulated by the Pension and Welfare Benefits Administration of the U.S. Department of Labor (DOL) and the Internal Revenue Service (IRS) of the U.S. Treasury Department. The former is responsible for enforcing provisions contained in the Employee Retirement Income Security Act and the latter is responsible for enforcing provisions contained in the Internal Revenue Code. In many respects, the two laws duplicate each other in that certain provisions (such as the minimum vesting requirements) are covered in both. In some respects, they complement each other by addressing different regulatory concerns.

In general, the IRS is concerned with the requirements that must be met in order for a pension plan to qualify for tax deferral. These tend to involve concerns that the revenue loss from the tax advantages is not excessive, that these tax advantages actually produce higher retirement incomes, and that the advantages are being distributed fairly among the employee population of a pension plan's sponsor. Thus the IRS worries that plan sponsors do not make larger contributions than are legally justified and that lower wage and shorter-tenure workers are accorded the proper benefits. IRS regulations are enforced largely through the review of tax returns and similar documents by government revenue agents and auditors.

In general, the Labor Department is concerned that plan assets are managed properly, that defined benefit plans are adequately funded, and that individual workers under either kind of pension plan receive the benefits to which they are entitled. Much of the Department's responsibility for overseeing the detailed operations of pension plans is delegated to private-sector auditors and actuaries whose job is to prepare and/or validate annual reports submitted to the Labor Department by each pension plan. Each pension plan is required to report annually on its basic operations, including income, expenses, assets, number of participants, and so forth. A Certified Public Accountant (CPA) must verify the accuracy of the information. In addition, each defined benefit pension plan is required to have an annual actuarial evaluation by a certified actuary. The standards for becoming a CPA are established by each State government and the federal Securities and Exchange Commission broadly oversees the activities of the profession. The Labor Department certifies actuaries who are authorized to perform the actuarial evaluations.

Insurance companies manage some 10 to 15 percent of defined benefit pension plans. Their financial condition and the other aspects of their business conduct fall under the supervision of insurance regulators in each of the states of the United States.

Individual retirement accounts can be offered only by banks, insurance companies, security brokers and other approved financial institutions. Each of these industries has its own regulatory system for assuring safety, financial soundness and fair treatment of customers. Banks are regulated either by state banking agencies, the federal Comptroller of the Currency, or the federal Office of Thrift Supervision; large bank holding companies are regulated by the Federal Reserve. Securities companies are overseen by a self-regulatory organization operating under the supervision of the Securities and Exchange Commission. As noted, insurance companies tend to be regulated by state agencies. Among the other institutions able to offer IRAs are local credit unions, which are regulated by a different agency of the federal government.

E. Tax treatment of non-pension savings and wealth

Outside of these retirement income schemes, most contributions to individual savings come from after-tax income.[20] Certain educational savings funds allow tax free accumulation of investment income.

As a general proposition, interest and dividends on securities held outside of the retirement (and educational) savings schemes are taxed as ordinary income. It is possible to purchase an annuity contract under which the purchaser may select an investment vehicle and defer the tax on all investment earnings until the annuity payments begin or the contract is terminated. As a general rule, penalties are assessed in the event of termination prior to age 59½, although annuity payments may begin sooner without incurring a tax penalty. As a practical matter, most individual annuity contracts sold in the United States are actually devices to postpone taxes on investment earnings; very few are actually converted into annuity payment streams.

Interest on most bonds issued by state and local governments is exempt from the federal income tax.

As a general proposition, capital gains on real and financial assets are taxed at lower rates than is income from other sources. Rates on most assets held for more than one year are capped at 20 percent; those on assets held for less than a year are capped at 28 percent. No adjustment is made, however, for changes in the general price level over the time the asset was held. Thus, the tax applies to the nominal gain, not just the real gain.

Each individual is allowed to exclude up to $250,000 in capital gains on the sale of a principle residence. Gains on a residence owned by a married couple can be divided equally between the spouses, giving the couple a $500,000 exclusion. Gains on other real estate, including residential real estate, are treated in the same manner as are other capital gains.

[20] A relatively new Medical Savings Account is available to those who purchase health insurance individually. Contributions to these accounts are also tax deductible.

Homeowners who itemize their deductions are generally allowed to deduct the interest they pay on their home mortgage loan and any property taxes that they must pay to state or local governments. There is no attempt to impute income equal to the rental value of the principle residence. Persons who own residential property that they rent to others are treated as operating a business. They must recognize the rent received as income and are allowed to deduct the full range of business expenses, including depreciation. Complex rules apply to those situations in which a property serves as both a residence and a source of income, such as a vacation home that is rented for some weeks and occupied by its owners for other weeks.

III. Regulatory approaches to specific schemes

A. Accumulation phase

Target groups. The government does very little targeting with respect to the programs reviewed here. The most important targeting may be the income restrictions that prevent those who have high earnings and are covered by another pension plan from contributing to Individual Retirement Accounts. The only examples of participation mandates involve the requirement that all federal civil servants participate in the thrift savings plan, at least to the extent of receiving a 1 percent employer contribution, and the legal mandate that stands behind the occupational pension plan covering railroad workers.

Incentives to participate. The Social Security Administration now sends an annual statement to each person age 25 and over not currently receiving benefits. That statement notes the earnings that were recorded in the individual's record, indicates the disability benefits that the person would be entitled to at that time, and includes a projection of the person's future retirement benefits. The statements have provided an element around which a public-private consortium has launched a public awareness campaign around the importance of saving for retirement to supplement the social security benefit.

Under federal law, individuals may request each year a statement of their accrued pension benefits, but their employer is under no obligation to supply such a statement if none is requested. Despite not being legally required to do so, most defined contribution plans provide regular statements to each participant and most large employers also provide some form of periodic benefit summary to their employees. Participants in the federal thrift plan receive an account statement every six months.

Tax incentives. As noted, contributions to qualified plans are excluded from the employee's personal income. The law limits the amount that can be excluded in any year, however. In 2001, total contributions to a defined contribution plan are limited to $35,000 or 25 percent of the employee's compensation, whichever was lower; contributions to defined benefit plans are limited to the amount that is needed to finance an annual benefit of $140,000; employee contributions to voluntary salary reduction plans (which includes 401(k) plans and the Federal thrift plan) are limited to $10,500. These limits are indexed for inflation.[21]

The tax amendments enacted in the Spring of 2001 increased these limits to $40,000 or 100 percent of compensation to defined contribution schemes; a defined benefit of $160,000 per year; and $11,000 in elective deferrals to salary reduction plans, effective 2002. These amendments also provided a higher ceiling for workers over age 50 who are participating in salary reduction plans. When fully phased in (2006 and thereafter) these workers will be allowed to contribute an additional $5,000 annually.

Contributions to Individual Retirement Accounts are limited to the lower of $2000 per year or 100 percent of the individual's annual earnings. These limits will rise gradually to $5,000 effective in 2008 and be indexed to the price level thereafter.

As noted earlier, in all cases, investment earnings of tax qualified plans are also exempt for income taxation.

Nondiscrimination. The law requires that all employees over the age of 21 who work more than 1,000 hours in a year be allowed to participate in an employer-sponsored pension plan. Employers are not allowed to exclude older workers or treat them differently than younger workers.

Several complex tests are applied to qualified plans to assure that pension plans do not discriminate unfairly against lower paid workers. Two features of the U.S. system greatly complicate this process. First, as noted earlier, the U.S. Social Security program is structured to supply proportionately higher benefits to lower wage workers. In recognition of this, private pension plans are allowed to "integrate" their benefits with social security, providing somewhat higher benefits to those who will receive proportionately less from Social Security. Thus, the objective of the nondiscrimination rules is not to eliminate all discrimination, but rather to limit the size of any discrimination against lower paid workers to no more than is appropriate to offset the impact of the Social Security structure. Secondly, many defined contribution plans involve employer contributions that match a elective employee contribution. If too few low-wage workers elect to contribute, most of the employer's contributions will go to high-wage workers with the result that a scheme with seemingly nondiscriminatory rules can have a discriminatory result. These issues are handled by creating several different tests and several "safe harbors." In general, the plan must meet at least one of the tests or qualify for one of the safe harbors in order to past the nondiscrimination test.

Conditions for being a plan provider. Employer-sponsored pension plans must be set up as separate institutions. Each must have a written plan designating

[21] For greater detail, although not including the most recent amendments, see Perun (2000).

one or more officials as the fiduciaries who are responsible for controlling and managing the plan.

Pension plan assets must be held in trust for the sole benefit of the plan participants, under the supervision of this fiduciary. The law prohibits persons convicted of serious crimes (particularly fraud, embezzlement, and the like) from serving as fiduciaries, but imposes few other restrictions as to the nature and identity of the fiduciary. Fiduciaries may be regulated financial institutions, such as banks or insurance companies, or they may simply be designated individuals. Where a fiduciary is not a regulated financial institution, the fiduciary must be bonded.

The plan sponsor is responsible for selecting the fiduciary. The fiduciary is required to discharge his duties "solely in the interest of the participants and beneficiaries." The standard for judging this conduct is the "prudent man" rule which requires that he act "…with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims."[22]

A fiduciary may select one or more investment managers to conduct the investment activities of the fund. In a defined contribution plan, the fiduciary may select an investment manager that offers each individual participant a choice of investment vehicles. Neither the fiduciary nor the plan sponsor are under any obligation to offer plan participants a choice of investment managers or pension providers, however.

As noted previously, the Internal Revenue Service and the Department of Labor share responsibility for supervising the activities of the fiduciary. If the fiduciary is a regulated financial institution, the regulators of that institution also share responsibility. Plan participants are also authorized to bring civil actions if they have been harmed by a breech of fiduciary responsibility.

Permitted financial products. There is no requirement that plan sponsors include coverage for disability (invalidity). Plans are required to turn over the vested interest in the pension of a deceased person to that individual's designated beneficiary. Plans are not required to split pension entitlements in the event of divorce unless the court supervising a divorce to that effect has issued a specific court order.

In general, assets of pension plans are to be invested in accordance with the prudent man rule, which generally requires that investments be diversified so as to minimize the risk of large losses. The only specific investment restriction involves a general prohibition on holding more than 10 percent of the plan's assets in securities issued by the plan sponsor. There are no specific restrictions on the types

[22] 29 US Code, Section 1104 (a)

of securities that a plan can hold, on the purchase of real estate or other kinds of assets, or on investing abroad.

About 10 percent of pension plans are “insured” – where an insurance company has entered into a contract to pay deferred annuities in specified amounts to an employers’ workers. This may either be the way the employer has decided to manage his pension or it may be the result of a plan that was terminated. Such pension promises are treated as an insurance product. The pension assets are commingled with the other reserves of the insurance company. Investments of these common reserves are supervised by individual state insurance regulatory agencies who are apt to prescribe limits on the fraction of portfolios invested in different asset classes, e.g., equities, government bonds, corporate bonds, real estate, etc.

The government offers no direct guarantees of investment performance and does not require plan sponsors to offer any guarantees.

Discontinuance of plans. Employers have the right to discontinue a pension plan, but may not reduce the value of any vested benefit accrued by an employee. Thus, new employer contributions to DC plans or to salary reduction plans can be suspended at any time, unless they are the result of a collective bargaining agreement. At the same time, the employer may have to maintain indefinitely the previous investment and withdrawal options with respect to previously vested benefits.

Employer contributions to a defined benefit plan can be suspended only if all vested benefits are fully funded. Since the pension plan remains liable for the promised benefit, an employer wishing to terminate a plan will usually purchase deferred annuities in the amount of the vested benefits from an insurance company.

Portability and Vesting. Employer contributions to any pension plan must vest with the employee according to one of several schedules established in the law. The basic options are: (a) 100% vesting after five years, or (b) a schedule of partial vesting beginning with 20% after three years and ending with 100% after seven years. Contributions to plans in which the owners comprise a significant portion of the total pool of participants must vest more quickly.[23] Employee contributions vest immediately.

Under a defined benefit plan, the vested benefit is the nominal benefit to which the employee is entitled based on service to that point in time and the

[23] These are so called “top-heavy” plans. For example, there might be a real estate agency that is a partnership of two real estate agents who employ two further persons, or a dentist office with the dentist, a receptionist and an assistant. The accelerated vesting is designed to reduce the chance that a plan will be terminated after the owner is vested but before lower-paid employees who may have been hired subsequently have become vested. There are a large number of very small pension plans like this in the U.S., although they only cover a relatively small minority of the work force.

employee's average earnings at that time. Vested benefit rights of an employee who has left the plan (or of the employees of a terminated plan) are not adjusted for subsequent wage or price changes.

There are no portability requirements. Employers sponsoring defined contribution or salary reduction plans may, at their option, accept deposits that have been rolled over from a plan that an employee previously participated in. The employee is more likely to simply roll these monies into an IRA, however.

Information regulations. Employers sponsoring tax qualified pension plans are required to give each employee a summary description of the plan at the time the employee joins the firm (or the plan is established), and are required to supply all workers with updates when the plan changes. Employers must also supply a statement summarizing the income, outgo, assets and liabilities of the plan to each participant once each year.

Limits on Charges. There are no specific limits on administrative charges, nor are there any specific disclosure requirements other than those generally applicable for mutual funds.[24] Assuring that administrative charges are reasonable is part of the fiduciary responsibility of the plan sponsor, however, and*, at least in theory*, a sponsor could be liable for allowing excessive charges. Most individual retirement products in the United States take the form of defined contribution accounts in which cancellation charges are generally not a major issue. Some mutual funds do levy withdrawal charges, particularly on accounts that have not been open very long. These must be disclosed at the time the investment is made, but are not regulated. Insurance companies are free to sell tax deferred annuity contracts that may have cancellation charges. Such charges would be regulated by the state insurance department having jurisdiction over the transaction.

Solvency protection. Benefits in defined benefit pension plans are insured by the Pension Benefit Guarantee Corporation, an agency of the federal government. The insurance is financed by a mandatory premium levied on the operators of all defined benefit plans. The premium is a function of the number of participants in the plan and of surcharges levied on plans that are inadequately funded. The insurance guarantees the payment of vested benefits, but the monthly benefit payable under the guarantee is limited.

The solvency of insurance companies is guaranteed by the state regulatory agency covering the company or policy in question. The states differ in how their guarantees operate as well as in what is guaranteed. (Some states guarantee all policies issued by insurance companies headquartered in their states; others

[24] Mutual funds (and other issues of financial securities to the general public) must supply a prospectus to each investor before accepting that investor's money. The prospectus outlines the business and financial condition of the issuer. Mutual funds are required to specify their investment philosophies, management structure, administrative charges, and so forth. The documents are generally not very easy to read, and most small investors probably do not devote much time to reading them.

guarantee only the policies issues to their own residents.) In general, insurance guarantees are financed by assessments on the firms licensed to operate in a particular state.

Insurance company solvency guarantees would extend to all products, whether or not they were specifically designed as retirement savings vehicles For example, insurance companies may offer guarantees of the principle and interest on a bond which has been purchased by a mutual fund that is one of the investment options of a 401(k) plan. One investment vehicle that is particularly popular in defined contribution pension plans is a "guaranteed investment contract," or GIC. These are issues by insurance companies and are, in effect, medium term bonds with a fixed term and interest rate. Another popular investment for retirement accounts is bank certificates of deposit which typically run for up to 5 years at a fixed rate of interest. These are insured up to a total of $100,000 by the Federal Deposit Insurance Corporation, the government agency that insures other bank accounts.

There are no specific guarantees of the value of defined contribution retirement accounts invested in equities or in most corporate securities. There is also no explicit guarantee against loss of value of an retirement account due to fraud or mismanagement on the part of a mutual fund operator. There is a guarantee fund to protect against losses in the event a licensed securities broker fails.

Investment loans. Plans in which employees make voluntary contributions, notably 401(k) plans, may make loans to the participants if the plan sponsor wishes to do so. IRS rules limit the amount that an employee can be borrowed from the plan to the employee's own contribution plus accumulated interest, but no more than $50,000. Loans can be for any purpose and must be repaid within five years. Loans for the purchase of a primary residence can be for as long as 15 years. (Loans that aren't repaid on time are treated as taxable distributions of the assets of the plan, just as if the individual had changed employers, withdrawn the balance in his account, and not rolled it into another tax qualified account.)

The authority to make loans from salary reduction plan funds is a relatively recent feature of U.S. pension law, and it is too early to judge the aggregate impact on retirement asset accumulations. Between 1992 and 1998, the fraction of plans allowing loans grew from 17 percent of the total to 30 percent of the total and the share of workers with loans outstanding has doubled, to 5.3 percent of participants.[25]

As a general rule, assets in a defined contribution account and benefits in a defined benefit plan can only be attached in accordance with a court order arising in connection with a divorce settlement.

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[25] Suden and Surette, 2000

B. Withdrawal phase

When withdrawal allowed. Regular, periodic pension payments under a defined benefit plan or an annuity contract may begin at any age without tax penalty, provided the individual ceases being employed by the plan's sponsor. Lump sum withdrawals are allowed at anytime after age 59-1/2, without tax penalty. As a general rule, withdrawals prior to age 59-1/2 trigger a 10 percent excise tax. There are a number of exceptions, however, under which tax-free, early withdrawals are allowed. The more common are summarized in Table 9.

Table 9. Allowable Distributions from Tax-Deferred Accounts (Situations where 10 percent excise tax on early distributions is waived)

	IRA	401(k)
1. Cease working for employer after reaching age 55	No	Yes
2. Annuity payments[a]	Yes	Yes[b]
3. Permanent and total disability	Yes	Yes
4. Death of account owner	Yes	Yes
5. Deductible medical expenses	Yes	Yes
6. Distribution to former spouse under court order	No	Yes
7. Purchase of health insurance by unemployed worker	Yes	No
8. Higher education expenses	Yes	No
9. Purchase of first home[c]	Yes	No

[a] Either an annuity or an alternative plan that pays substantially equal periodic payments for substantially all of the rest of the individual's life. [b] Must have ceased working for the employer from which the annuity derives. [c] Tax free distribution limited to $10,000.
Source: U.S. Internal Revenue Service, Instructions for form 5329

Withdrawals from a tax deferred account must begin by the time a person turns 70. At age 70, persons are required to withdraw a minimum amount according to a table that generally relates the amount to be withdrawn to the balance in the account and the life expectancy of the individual.

Form of withdrawal. Traditionally, defined benefit plans paid benefits in the form of a life annuity. Increasingly, defined benefit plans are offering their retirees the option of taking all or a portion of the benefit in the form of a lump sum.[26] Defined contribution and salary reduction plans are not required to offer an annuity as an option, and at least a third do not. To avoid high progression in tax rates there is a special provision in tax law, that allows to calculate the tax on one fifth of the lump sum and pay five times that amount in the year the lump sum is taken. This provision can only be used once in any taxpayer's lifetime.

Among the two-thirds of the plans that do offer an annuity option, only about one-third of the workers take at least a portion of their account in the form of

[26] Although the plan must be fully funded before it is allowed to offer a lump sum option.

an annuity. All together, then, less than 25% of the workers retiring under defined contribution plans take at least part of their balance out in the form of an annuity.[27]

Annuities offered as a part of an employer-sponsored plan must be race and gender-neutral. Defined benefit plans must offer the same benefit to both sexes, but may vary the payment by the age at which it is taken. Defined contribution plans with an annuity option must offer the same monthly benefit to men and women having the same account balance. Annuities do not have to be indexed, and price indexed annuities are generally not available in the United States.

Where annuities are offered as part of an employer-sponsored plan, the default option for married workers must be a joint and survivor annuity with the survivor receiving at least 50 percent of the amount received when both were alive. A married worker can receive a single life annuity only if the spouse waives his/her rights to a survivor benefit.

Defined benefit plans and any defined contribution plan under which participants have signed up for an annuity option must offer an annuity to the survivors of workers who die prior to reaching the annuity starting age.[28]

Most of these requirements apply only to employer-sponsored plans. There are no annuity requirements associated with IRA accounts. If the owner of an IRA wished to purchase an annuity, the annuity would probably be priced according to the individual's gender and the owner of the account would be free to decide whether it was a single life or joint annuity. In the individual annuity market, there are few restrictions on the permitted risk criteria other than race. Any additional restrictions would be imposed by state regulators and vary from state to state.

Effects on Savings. Analysts have had difficulty quantifying the impact of funded retirement savings vehicles on personal savings. Different studies reach different conclusions depending on the data set and analytical methods used, and their authors find in them support for different policy prescriptions. It is generally believed that some 40 to 60 percent of the assets accumulated in defined benefit occupational pension plans are offset by reductions in the personal asset holdings of plan participants, meaning that some 40 to 60 percent represent additions to private savings. The impact of IRAs and salary reduction plans is much more controversial, with estimates ranging from nearly no impact to close to 100 percent of the growth in assets representing new savings. [29]

Even if the growth of funded pension plans has had a positive impact on personal savings, it is less clear that it has had a positive impact on national savings.

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[27] Investment Company Institute, 2001.

[28] The participant specifies the age at which the annuity is to begin when he joins the plan. He can subsequently change the election. If no election is made, the starting age is set at 65.

[29] Resent summaries of this literature are found in Munnell and Yohn (1992) and Yakoboski (2000).

Given the size of the tax expenditures associated with retirement savings plans, it is entirely possible that any increase in personal savings is offset by associated declines in government savings, leaving the net impact on national savings unclear. Thompson (1998) notes that there is no apparent correlation between national savings rates and aggregate growth of pension plan assets among major industrial countries in the 1980s.

General arguments. There is little opposition to the creation of salary reduction plans, particularly if they are complements to defined benefit pension plans or allow a small employer that would not otherwise have sponsored a pension to offer a retirement savings vehicle. The plans appear to be popular with workers who like the flexibility of deciding whether or not to participate and how much to set aside. They are also popular with employers, especially smaller employers, because they usually involve lower administrative expenses (at least for the employer) and fewer regulations.

There are several concerns about the general structure of the current system, however. One of the most important is the relatively sparse coverage of lower wage workers, part-time workers, and those who work for small employers. This has lead to a variety of legislative adjustments designed to spread coverage more widely, so far without major impact. A second is the declining use of annuities as a mechanism for drawing down one's retirement savings.

IV. Financial Education

General financial literacy programs. Many schools offer some form of general financial literacy program, but the content is not standardized and the impact thus far has not been very impressive. One recent survey of students about to graduate from high school found that 62 percent had been offered a personal finance or financial education course at their schools, but only 34 percent of those offered a course had taken it.[30] Thus, only 21 percent of all students had actually taken a course. Other questions in the survey focused on the personal behavior, such as having a budget, having savings goals, etc., and found little difference between the behavior of those who had taken these courses and those who had not.

An earlier study of the financial knowledge of similar students about to graduate from high school found serious shortcomings in financial knowledge, particularly in the area of savings and investment.[31] For example, only 14 percent of the respondents thought stocks would likely have higher returns than savings accounts or checking accounts over an 18-year period. Over half did not know that the government insured bank certificates of deposit.

[30] American Savings Education Council, (1999)
[31] Jumpstart Coalition (1998)

Other studies find that a large fraction of the population has not done a great deal of serious planning for retirement. Less than half of the workforce reports having done any calculations of how much they will need in retirement or how much they will have to save in order to achieve their retirement objectives.[32] Over 40 percent of 401(k) account holders have never adjusted the composition of their portfolios or of the allocation of their contributions.[33]

Retirement Income planning programs. A variety of financial services vendors and independent financial planners offer retirement income planning services. The financial services vendors, particularly commercial banks and mutual fund managers, sponsor television and print media advertisements encouraging people to plan for their retirement. A coalition of public and private sector organizations also sponsors a media campaign to encourage retirement saving. Many financial service vendors view encouraging retirement planning as a primary mechanism for selling their products, and organize seminars, distribute literature, and offer computerized retirement income calculators over the internet as part of their marketing strategy. There is no systematic evaluation, however, of how effective the decentralized, private sector efforts have been.

A primary source of information about retirement planning is the employer, particularly larger employers. A recent survey found that 35 percent of employees report having received some form of educational materials about retirement from their employer in the previous 12 months.[34] The most common forms of educational materials received were employee benefit statements and brochures. Just over half of those receiving any information received workbooks or worksheets or were offered the opportunity to attend a seminar or contact a financial planner.

Organizations interested in promoting increased planning for retirement include the Employee Benefit Research Institute (www.ebri.org), The American Savings Education Council (www.asec.org), and the Choose to Save Coalition (www.choosetosave.org).

Determinants of Amount of Pension Savings. The most important determinants of participation in a retirement savings program are whether an individual's employer offers a plan and, if so, whether the individual is eligible to participate in the plan. Data from the most recent (1999) survey that addressed these issues found that the firms were more likely to sponsor pension plans if they operated in highly unionized industries, particularly mining, manufacturing, communications, utilities, and finance. Firms in agriculture and construction and much of the service sector had lower than average rates of plan sponsorship. Employers with above average concentrations of younger workers, part time workers, and lower paid workers are less likely to offer pension plans.

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32 Employee Benefit Research Institute (2001)
33 Investment Company Institute (2001)
34 Employee Benefit Research Institute (2001)

Table 10. Fraction of Private Wage and Salary Workers Whose Employer Sponsors a Pension Plan By Industry and Occupation	
	Percent Offering Plan
Total	58%
Industry	
Agriculture, Forestry, and Fisheries	21
Mining	71
Construction	38
Manufacturing-Durable goods	76
Manufacturing-non-Durable goods	73
Transportation	63
Communications and Utilities	84
Wholesale trade	64
Retail trade	45
Finance, Insurance, and Real Estate	71
Services	56
Occupation	
Executive, administrative & managerial	72
Professional specialty	73
Technicians and related support	74
Sales	55
Administrative support, including clerical	63
Private household	4
Protective service	49
Services, except protective & household	32
Farming, forestry, and fishing	20
Precision production, craft & repair	59
Machine operators, assemblers & inspectors	62
Transportation and material moving	53
Handlers, equipment cleaners, helpers, laborers	50

Source: 1999 Current Population Survey. Data available at : www.dol.gov/dol/pwba/public/programs/opr/CWS-Survey/hilites.html

As noted previously, in 1999 some 18.3 million workers (14 percent of all wage and salary workers) worked for an employer that sponsored a plan but did not participate in their employers pension plan. These are primarily part time, younger, and lower paid employees. Apparently, two-thirds of these were not eligible to participate in the pension plan, whereas the other third were eligible but chose not to participate.

An analysis of those who chose not to participate found that the most important characteristics determining non participation was low annual earnings. The next most important characteristic was the existence of an employer match. Other important characteristics included part time status, age, and tenure with the firm.[35]

The employer match is also important in determining how much employees choose to save under the various salary reduction arrangements. Among those contributing to such plans in one recent survey, 27% contributed the legal maximum (then $10,500), 26% contributed the maximum that their company would match, 17% contributed something between the maximum match and the legal limit.[36]

As noted previously, deposits into IRAs are primarily rollovers from employer-sponsored, salary reduction plans. Only a small fraction are voluntary contributions.

V. Assessment

The strengths of the retirement income system in the U.S. include the wide range of choice that workers have in developing financial plans for their retirement, the encouragement of individual responsibility in retirement planning, and the relatively modest overall cost of the system, particularly the direct public sector cost. The increasing importance of defined contribution arrangements reinforces the emphasis on choice and responsibility.

It also improves the portability of the pension system, which both facilitates labor market mobility and more fairly distributes the system's benefits between those who spend an entire career with one employer and those who spend their career with multiple employers. Under a defined contribution plan, the value of the vested pension increases at a more or less constant rate, which is the contribution rate plus the rate of return being earned on the portfolio. Under a traditional defined benefit plan, such as described above, the value of the vested benefit increases much more slowly when the worker is young, but much more quickly as the worker approaches retirement age.

The U.S. pension system has amassed large financial reserves, which are an important source of liquidity for the financial markets and arguably have increased the national saving rate.

The U.S. system is less adequate than those in the rest of the developed world in protecting the bottom of the income distribution, leaving the U.S. with the

[35] U.S. General Accounting Office, 2000
[36] Investment Company Institute, 2001

highest aged poverty rates of any developed country.[37] The system tends to widen income disparities owing to the fact that relatively fewer low wage workers are covered by the pension system and that among workers who are covered, the voluntary nature of large elements of the system allow higher wage workers to participate more intensively than middle income workers. In the U.S., the aged are the demographic group with the widest income disparities.

Given the large number of leaks in the current defined contribution system, it is unclear how much of the retirement saving will actually be available when today's worker's reach retirement age. Analysts differ as to whether the current savings levels are likely to prove adequate, largely because of the uncertainty in projections of the likely development of the current system and disagreement over how to value owner-occupied housing.[38]

The growth of defined contribution plans (and the relative decline in defined benefit plans) has shifted much of the risk and uncertainty about future retirement incomes from the public sector and private employers to individual workers. Risks include the rate of return that will be earned on assets over one's remaining work life, each individual's retirement lifespan, and the impact of macro-economic fluctuations. The shift has occurred during a bull market in equities and most workers probably do not appreciate the degree of risk they are assuming in the new system. The impact of the declining importance of annuities will not be known for several decades, as those most affected by the trend have just now begun to move into retirement.

Shifting risk from collective institutions to individual workers probably increases the overall level of risk in the system. It is particularly troubling in the face of two expected developments. The first is the projection that the retirement of the baby boom generation will cause a measurable aggregate shift in the flow of funds into and out of the retirement income system, with an uncertain impact on financial asset values. The second is that the average life expectancy at retirement will increase, implying that those who do not purchase annuities may badly misjudge the length of time that they will have to be living off of their retirement savings. Fortunately, the retirement of the baby boom generation should produce a labor shortage, giving rise to enhanced employment opportunities for retirees who find that they have insufficient retirement incomes through some combination of bad luck, poor planning, failure to anticipate future developments, or a lack of fiscal discipline.

The shift to defined contribution arrangements has also probably driven up the aggregate administrative costs of the retirement income system (and the gross receipts of financial service providers). Generally, the administrative costs of the group defined benefit pension systems are lower than those of decentralized, defined contribution systems, although the costs under DB systems tend to be borne

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[37] Awad and Israeli, 1999
[38] For example, Uccello, 2001

by the employer, while many of the costs under the DC systems are borne by the individual worker. James et al. (1999) estimate that the annual administrative costs of the average 401(k) plan come to 1.44 percent of assets. If aggregate pension assets reach 70 to 80 percent of GDP and they are primarily in defined contribution plans of the 401(k) type, the annual administrative costs of the pension system will exceed one percent GDP.

A sound national pension system should strike a balance between pay-as-you-go and advance funded elements, between government sponsored and privately sponsored elements, between defined contribution and defined benefit elements, and between voluntary and compulsory elements. The system in the U.S. probably errs on the side of being too voluntary and is headed in a direction that is probably too much defined contribution. The current relatively roles of the public and private sectors in providing retirement income are acceptable, but the result would be improved if the public program(s) were more redistributive and the private programs were a little more compulsory.

Sources

American Savings Education Council. 1999. *Results of the 1999 Youth and Money Survey*. www.choosetosave.org

Awad, Yaser and Nirit Israeli. 1999. "Poverty and Income Inequality: An International Comparison, 1980s and 1990s." Working Paper No. 166. Luxembourg Income Study. Luxembourg. www.lis.ceps.lu

Annual Report of the Board of Trustees of the Old-age, Survivors, and Disability Insurance Trust Fund. Available at www.ssa.gov/oact

Annual Supplement to the Social Security Bulletin. Available at www.ssa.gov/policy

Bassett, William F., Michael J. Fleming, and Anthony P. Rodrigues. 1998. *How Workers Use 401(k) plans: The Participation, Contribution, and Withdrawal Decisions.* Working Paper, New York Federal Reserve Bank. www.ny.frb.org

Dey, Achintya N. 1997. "Characteristics of Elderly Nursing Home Residents: Data from the 1995 National Nursing Home Survey." Advance Date No. 289. National Center for Health Statistics. www.nchs.gov

Economic Report of the President, Annual Statistical Supplement. w3.access.gpo.gov/eop

Employee Benefit Research Institute. 2001. *2001 Retirement Confidence Survey.* www.ebri.org

Investment Company Institute. 2001. *Defined Contribution Plan Distribution Choices at Retirement*. www.ici.org

James, Estelle, Gary Ferrier, James Smalhout, and Dimitri Vittas. 1999. "Mutual Funds and Institutional Investments: What is the Most Efficient Way to Set Up Individual Accounts in A Social Security System?" NBER Working Paper #7049. Cambridge, MA: National Bureau of Economic Research. www.nber.org

Jumpstart Coalition for Personal Financial Literacy. 1998. *1997 Personal Financial Survey of High School Seniors.* www.jumpstart.org

Kennickell, Roger, Martha Starr-McCluer and Brian J. Surette. 2000. "Recent Changes in U.S. Family Finances: Results from the 1998 Survey of Consumer Finances. www.federalreserve.gov/pubs/oss

Maxwell, Stephanie, Marilyn Moon and Misha Segal. 2001. "Growth in Medicare and Out-of-Pocked Spending: Impact on Vulnerable Beneficiaries." www.urban.org

Munnell, Alicia H. and Frederick O.Yohn. 1992. "What is the Impact of Pensions on Savings?" in Zvi Boodie and Alicia Munnel (eds.) *Pensions and the Economy: Sources, Uses and Limitations of Data.* Philadelphia, PA. University of Pennsylvania Press.

Perun, Pamula. 2000. *The Limits of Saving.* Occasional Paper No.7. The Retirement Project. The Urban Institute. www.urban.org

Scheiber, Sylvester and John Shoven. 1997 "The Consequences of Population Aging on Private Pension Fund Saving and Asset Markets." In Michael D. Hurd and Naohiro Yashiro (eds.). *The Economic Effects of Aging in the United States and Japan*. Chicago. University of Chicago Press. pp 111-130. Also available as Working Paper W4665 at www.nber.org.

Suden, Annika and Brian Surette. 2000. "Households' Borrowing from 401(k) Plans." Paper prepared for Second Annual Joint Conference for the Retirement Research Consortium, May 2000, Washington D.C. www.bc.edu/crr

Thompson, Lawrence H. 1998. Older and Wiser: The Economics of Public Pensions. Washington, D.C. The Urban Institute Press. Copy of relevant chapter attached.

Uccello, Cori E. *Are Americans Saving Enough for Retirement?* Issue Brief for Center for Retirement Policy Research. Boston College. www.bc.edu/crr

U.S. Council of Economic Advisors. 2001. *Economic Report of the President, 2001.*
U.S. General Accounting Office. 2000. *Pension Plans: Characteristics of Persons in the Labor Force Without Pension Coverage.* GAO/HEHS-00-131. www.gao.gov

U.S. Office of Management and Budget. 2001. Budget of the United States Government. www.whitehouse.gov/omb

U.S. Thrift Savings Board. 2001. TSP and a Glance. www.tsp.gov
w3.access.gpo.gov/eop/

Yakoboski, Paul. 2000. *Retirement Plans, Personal Saving, and Saving Adequacy.* Employment Benefit Research Institute Issue Brief. www.ebri.org