Shifting from Defined Benefit (DB) to Defined Contribution (DC) Benefits: Implications for Workers' Disability and Survivor Benefits

by Peter A. Diamond, Stephen C. Goss, and Virginia P. Reno

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This paper focuses on the implications for disabled workers and the families of deceased workers of a shift from defined benefits to defined contributions for Social Security.

Proposals to "privatize" Social Security would substitute individual savings accounts for all or part of traditional Social Security benefits. The individual accounts are designed for retirement. Traditional Social Security also provides disability benefits and survivor benefits to families of workers who die before retirement. They are based on the same formula used for retirement benefits. Thus, any privatization plan needs to take account of how it would apply to disabled workers and families of workers who die before retirement. The benefit design issues are important because they would affect significant numbers of workers and their families.

The Office of the Actuary of the Social Security Administration has estimated the probability that a cohort of young adults will die or experience disability (that meets the strict test in the Social Security law) before reaching retirement age (table 1). Of those reaching age 20 in 1986, about 3 in 10 women and more than 4 in 10 men are estimated to become disabled or die before reaching age 67. Among men, nearly a third (32.2 percent) are estimated to become disabled-worker beneficiaries. They include: 17.6 percent who enter the old-age benefit rolls as disabled worker beneficiaries; 2 percent who recover and leave the disability benefit rolls before reaching normal retirement age (NRA); and 12.6 percent who die as disabled workers before reaching retirement age. Another 9.5 percent of young men are projected to die before retirement age without having previously been a disabled-worker beneficiary. Thus, changes in disability and young survivor benefits will affect a large minority of workers and their families over their lifetimes.

* This paper was prepared as a background paper for an expert panel of the National Academy of Social Insurance. The Panel on Privatizing Social Security was chaired by Peter A. Diamond. Stephen P. Goss served on the Panel and Virginia Reno was the staff director. Helpful comments were also provided by Mary Ross, Dan Halperin, Dallas Salisbury, Kathryn Olson, and Daniel Mont. Any views expressed in the paper do not represent an official position of the National Academy of Social Insurance or the U.S. Department of Labor, which provided partial support for the analysis.

Table 1
Probabilities of Death and Disability before Normal Retirement Age
Persons born in 1966, age 20 in 1986

Probability of:	**Men**	**Women**
Surviving not disabled until NRA(67)	58.3	70.0
Death before NRA, no disability	9.5	6.0
Disability before NRA - Total	32.2	24.0
Dies before NRA	12.6	6.9
Recovers and lives to NRA	2.0	1.6
Survives disabled until NRA	17.6	17.3

Source: William B. Kelley, "A Death and Disability Life Table for the 1966 Birth Cohort," Actuarial Note #129, Office of the Actuary, Social Security Administration, December 1986.

To explore options for providing disability and young survivor benefits under privatized individual accounts, this paper examines two options developed by the Advisory Council on Social Security and the system that is in place in Chile. We start with these for two reasons. First, they represent a range in the degree of "privatization" -- from relatively modest individual accounts added to a somewhat scaled down OASDI program in the Individual Accounts (IA) or "Gramlich" plan, to more substantial individual accounts with a modest flat benefit replacing OASI payments in the Personal Security Account (PSA) plan, to full privatization (with government guarantees) in the case of Chile. Second, they are sufficiently developed that they specify the basic outline of disability and young survivor benefits.

This paper begins by describing present law OASDI benefits for disabled workers and young survivor families in section I. It then examines the "Gramlich" plan in section II. The PSA plan is examined in section III and the Chilean system is discussed in section IV.

I. Present Law Social Security Benefits for Disabled Workers and Young Survivors

Social Security provides monthly benefits under an earnings-replacement formula, which is based on the worker's earnings over most of his or her lifetime.

Average Lifetime Earnings

For a retiree, the benefit is computed using the average of the worker's highest 35 years of earnings.[1] Thus, a worker retiring after 35 years of covered work would receive a higher benefit than one with similar earnings who had worked for only 25 years. This occurs because the latter worker would have 10 years of zeros included in the average lifetime earnings to which the benefit formula is applied.

In the case of disability or young survivor benefits, the benefit computation is based on the period of potential work years before the disability or death occurred. This reduces the number of years of earnings that must be averaged. For example, workers who became disabled at the age of 40 would have benefits based on the highest 15 years of earnings (in the case of workers who died, the highest 13 years of earnings would be used). If the death or disability occurred at the age of 50, the highest 23 years of earnings would be used. In the case of death or disability at age 62, the highest 35 years are used.

In the case of disability, eliminating the period of disability in computing average earnings is called the "disability freeze." If the disabled worker leaves the benefit rolls and later claims retirement benefits, the "disability freeze" period is still excluded in determining his average lifetime earnings (and insured status). For example, a retiree who had a 5-year disability freeze and then returned to work would have a retirement benefit based on his or her highest 30 years of lifetime earnings (excluding any earnings in the freeze period).

Benefit Amounts

The primary insurance amount (PIA) benefit formula is used as the basis for calculating benefit amounts for all beneficiaries. Disabled workers receive the full, unreduced PIA amount, as do workers retiring at the normal retirement age (NRA). Workers retiring after the NRA get more than the full PIA while those retiring before the NRA get less.

The PIA benefit formula for beneficiaries newly eligible in 1997 is: 90% of the first $455 of average indexed monthly earnings (AIME), plus 32 percent of the next $2,286 of AIME, plus 15% of AIME over $2,741 in 1997.[2] The following table illustrates the monthly benefit amount and replacement rates for hypothetical workers becoming disabled or retiring in 1997, with steady earnings since age 22.

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[1] The worker's past earnings are first indexed to reflect prevailing economy-wide wage levels when the worker approached retirement age.

[2] The dollar brackets are indexed to increase with average wages.

Table 2
Illustrative Benefit Amounts for a Disabled Worker Eligible at Age 50 and for a Worker Retiring at the Normal Retirement Age, 1997

1996 annual earnings level	Disabled Worker: Monthly benefit amount (PIA)	Disabled Worker: Replacement rate (percent of prior earnings)	Retired Worker: Monthly benefit amount (PIA)	Retired Worker: Replacement rate (percent of prior earnings)
Low ($11,576)	$560	58	$566	59
Average ($25,724)	923	43	933	44
High ($41,158)	1,224	36	1,202	35
Maximum ($62,700)	1,410	27	1,326	25

Source: Office of the Actuary, SSA.
Note: Benefit amounts of disabled and retired workers are a few dollars different because they have slightly different AIMEs.

Benefits are also paid to dependents of workers. Children under age 18 of a retired or disabled worker receive a benefit of 50% of the worker's PIA. An adult child disabled since childhood can continue to receive benefits after age 18. A spouse caring for the child(ren) is also entitled to 50% of the worker's PIA.[3] A family maximum limits total benefits paid to the family.

When a worker dies, each surviving child under age 18 is eligible for a benefit of 75% of the PIA amount based on the deceased parent's work record. The widowed spouse caring for the entitled child is also entitled to 75% of the deceased worker's PIA. Again, a family maximum limits the total for the family. The following table illustrates the maximum family benefit that would be paid to a family of three or more beneficiaries. The family maximum for disabled workers' families is set at a lower level than that for families of retired or deceased workers because of concern about work disincentives for disabled workers.

[3] An earnings limit also applies to beneficiaries, and can reduce or eliminate that individual's benefits.

Table 3
Illustrative Maximum Family Benefits for a Disabled Worker Eligible at Age 50 and for a Worker Retiring at Normal Retirement Age, 1997

Prior annual earnings of the worker, 1996		Monthly benefit for family of 3 or more	Replacement rate (percent)	Family benefit as a percent of worker's benefit
Retired worker				
Low	$11,575	$841	87	150
Average	25,725	1,687	79	183
High	41,160	2,144	63	175
Maximum	62,700	2,468	47	175
Disabled worker families				
Low	$11,575	820	85	146
Average	25,725	1,386	65	150
High	41,160	1,838	54	150
Maximum	62,700	2,115	40	150

Source: Office of the Actuary, SSA, and staff calculations

Proposals to shift all or part of Social Security to individual accounts require specifications of what benefits would be provided in the event of disability or death before retirement.

II. Individual Accounts (Gramlich Plan)

Overview

The so-called individual accounts (IA), or Gramlich, plan would gradually ratchet down the PIA benefit formula,[4] raise the NRA and make several other changes so that future OASDI benefits could be financed by the existing payroll tax of 6.2 percent each for employers and employees. When phased in (over a 33-year period), the PIA formula reduction would be about 17 percent for an average earner -- more for higher earners and less for lower earners. The ultimate reduction would be about 20 percent for one who always earned the maximum covered by Social Security ($62,700 in 1996). The ultimate reduction would be about 8 percent for one who always earned about 45 percent of the average wage, or $11,575 in 1996.

In order to offset the effect on benefit levels of the PIA formula reduction and other changes in the IA plan, the plan adds mandatory individual savings accounts to be financed wholly by new contributions from workers of 1.6 percent of their earnings starting in 1998. Workers would choose among a prescribed set of investment alternatives, which would be managed by the federal government, similar to the federal employees' Thrift Savings Plan. The savings would be nominally owned by individual workers. However, they could not be withdrawn before retirement, and at retirement, the government would convert these accumulations into an inflation-indexed annuity that would be paid for the rest of the retiree's life. If the retiree were married, the accumulation would be converted into a joint-and-survivor annuity, unless the spouse declined it.

The plan also raises the normal retirement age (NRA) beyond that scheduled in current law. Specifically, it accelerates the scheduled increase in the NRA, so that it would reach 67 for workers who were eligible for retirement at 62 in 2011. Thereafter, the NRA is indexed to rise in relation to longevity (the increase in NRA is estimated to be 1 month every 2 years.) For a worker retiring at age 65 in 2038 (whose NRA is 68), the reduction at age 65 is 20 percent, or about 7 percent over the reduction already scheduled in present law, which is 13 percent.

Treatment of Disabled Workers and Their Families

This section first examines the effect of the IA plan on disabled workers and their families. It begins by examining the change in the basic (PIA-based) benefit and then considers treatment of the IA balance in the event of disability. The next section considers changes for families of workers who die before retirement.

Question 1. What would happen to disability benefits under this plan?

For a disabled worker, the IA plan provides the same reduction in the basic Social Security

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[4] The top two percentage rates of the PIA formula would be lowered to 15 percent (from 32 percent) and 10.5 percent (from 15 percent). The 90 percent factor would remain unchanged.

benefit that would apply to a retiree at normal retirement age -- that is, ultimately benefits are lowered by about 17 percent for an average earner, more for higher earners and less for lower earners. The balance in the IA fund would not be available until the disabled worker reached the early retirement eligibility age of 62 or died. Consequently, disabled workers under age 62 would experience the full reduction in benefits due to ratcheting down the benefit formula for retirees. The reduction in the disabled worker's benefit would also lower dependents benefits for the worker's children and/or spouse.

Question 2. What role do Social Security benefits play in the income of disabled workers?

Young disabled workers are considerably worse off financially than retirees, according to findings from the New Beneficiary Survey in the early 1980s. The median incomes for newly-disabled men and their wives was 20 percent less than that of their retired counterparts, while the median for unmarried disabled workers was about 37 percent less than that of unmarried retirees (table 4).

Table 4
Median Monthly Income of New Beneficiaries, 1982
(1982 dollars)

Beneficiary type	Disabled	Retired
Married men and their wives	$1,230	$1,500
Married women and their husbands	1,360	1,470
Unmarried men	490	780
Unmarried women	460	760

Source: Social Security Administration, *SSA's 1982 New Beneficiary Survey: Compilation of Reports* (Washington, DC: U.S. Government Printing Office, September 1993), table 11, p. 14-204; and table 11, p. 9-141.

Disabled workers typically have less in income from pensions and savings and consequently they rely on Social Security for a larger share of their income. Among the unmarried, Social Security as a share of total income was just over 60 percent for disabled workers compared to about 40 percent for retired workers. Among couples, the share of income from Social Security was 45 percent for the disabled and 34 percent for the retired (table 5).

Table 5
Shares of Aggregate Income from Various Sources of New Beneficiaries by Age, 1982

Type of income	Disabled					Retired		
	Total	Under 45	45-54	55-59	60-64	Total	62-64	65 and over
Married men and their wives								
Total number of beneficiaries (thousands)	111.1	17.1	29.4	35.7	28.9	573.7	433.9	139.9
Total percent	100	100	100	100	100	100	100	100
Percent of aggregate income from:								
Social Security	45	50	44	44	45	34	34	35
Earnings	24	30	28	22	18	20	19	23
Pensions	11	5	11	16	16	19	21	14
Asset income	10	4	10	11	14	23	23	25
Other income	6	11	8	7	7	5	5	4
Unmarried men								
Total number of beneficiaries (thousands)	39.5	16.9	8.1	8.7	5.8	111.3	87.2	24.1
Total percent	100	100	100	100	100	100	100	100
Percent of aggregate income from:								
Social Security	65	63	66	67	67	40	41	37
Earnings	4	8	3	2	1	15	10	26
Pensions	11	2	12	17	19	20	24	14
Asset income	6	3	9	8	7	20	19	22
Other income	12	23	10	6	8	7	7	4
Unmarried women								
Total number of beneficiaries (thousands)	32.2	8.3	7.8	9.7	6.4	182.4	128.5	53.9
Total percent	100	100	100	100	100	100	100	100
Percent of aggregate income from:								
Social Security	62	62	65	58	63	42	44	40
Earnings	3	7	3	1	2	14	12	19
Pensions	11	3	13	13	12	16	18	14
Asset income	11	3	7	19	13	21	21	22
Other income	14	25	12	9	10	7	6	8

Source: Social Security Administration, *SSA's 1982 New Beneficiary Survey: Compilation of Reports* (Washington, DC: U.S. Government Printing Office, September 1993), table C, p. 9-149; table 12, p. 14-205; and table B, p. 14-212.

Disabled married men often had a working wife, which made them better off, on average, than unmarried disabled workers. With the increase in two-earner couples, however, the earnings of one spouse are not necessarily a substitute for earnings of the other (table 6).

Table 6
Percent of New Beneficiaries Receiving Income from Various Sources and Median Monthly Income, by Age, 1982

Sources of Income	Disabled					Retired		
	Total	Under 45	45-54	55-59	60-64	Total	62-64	65 and over
Married men and their wives								
Total number of beneficiaries (thousands)	111.1	17.1	29.4	35.7	28.9	580.1	438.7	141.3
Percent receiving:								
Pensions	41	17	38	50	53	56	57	53
Insurance, annuities	8	6	11	8	8	3	3	3
Asset income	60	39	56	64	73	83	81	90
Earnings - total	44	50	49	42	36	44	42	48
Disabled or retired worker	3	5	3	2	4	27	24	35
Wife only	40	45	46	40	32	17	18	13
Median monthly income	$1,230	$1,160	$1,250	$1,240	$1,240	$1,500	$1,410	$1,820
Unmarried men								
Total number of beneficiaries (thousands)	39.5	16.9	8.1	8.7	5.8	112.5	87.9	24.6
Percent receiving:								
Pensions	18	5	19	32	37	41	41	41
Insurance, annuities	2	2	2	4	4	2	2	3
Asset income	29	21	30	30	47	63	58	78
Earnings	7	17	4	4	4	22	18	35
Median monthly income	$490	$430	$520	$560	$600	$780	$700	$1,070
Unmarried women								
Total number of beneficiaries (thousands)	32.2	8.3	7.8	9.7	6.4	183.4	129.3	54.1
Percent receiving:								
Pensions	23	6	24	30	34	30	43	45
Insurance, annuities	4	1	4	6	3	3	3	4
Asset income	39	28	37	45	47	43	70	77
Earnings	6	13	5	1	3	30	29	34
Median monthly income	$460	$460	$450	$470	$500	$760	$710	$930

Source: Social Security Administration, *SSA's 1982 New Beneficiary Survey: Compilation of Reports* (Washington, DC: U.S. Government Printing Office, September 1993), table A, p. 9-144; table A, p. 14-208; table B, p. 14-212; and table B, p. 9-147.

In terms of asset holdings and net worth, disabled workers were less likely than retirees to own their homes, and they had strikingly smaller asset holdings other than a home (table 7). Limited asset holdings might be due to their relative youth -- they had less time to accumulate savings or home equity. But older disabled workers also had significantly less in asset holdings than did retirees. Whether this is due to smaller asset accumulation during their work lives or depletion of assets due to unanticipated expenses associated with the onset of disability, is not clear from the data, but the latter is certainly plausible. It is consistent with anecdotal findings from focus groups conducted for the Academy's disability project.

Table 7
Rates of Home Ownership and
Value of Total Assets of New Beneficiaries, 1982

Assets	Disabled by age		Retired
	Under 55	55-64	
Married men and their wives			
Percent who own homes	75	83	87
No mortgage	20	44	60
With mortgage	55	39	27
Median value of all assets			
Excluding home	$300	$3,600	$20,000
Including home	$23,000	$41,000	$68,300
Unmarried men			
Percent who own home	16	30	48
No mortgage	7	20	35
With mortgage	9	10	13
Median value of assets			
Excluding home	$0	$0	$3,500
Including home	$0	$200	$1,700
Unmarried women			
Percent who own home	31	48	58
No mortgage	12	29	43
With mortgage	18	20	15
Median value of assets			
Excluding home	$0	$200	$5,100
Including home	$200	$6,300	$30,100

Source: Social Security Administration, *SSA's 1982 New Beneficiary Survey: Compilation of Reports* (Washington, DC: U.S. Government Printing Office, September 1993), table 7, p. 12-188.

Those interviews indicated that disability onset often brings new expenses that are not faced by healthy people who retire as planned (National Academy of Social Insurance, 1996). Such expenses include:

- the need to support themselves without earnings during the 5-month waiting period for benefits (or longer if their claims are not decided promptly);
- the need to pay for health care coverage for the first 29 months after disability onset before Medicare becomes available. While COBRA continuation coverage is sometimes available to disabled workers, the worker pays the full premium for continued group coverage from the former employer.
- disability-related expenses not covered by Medicare, such as prescription medications, which are commonly prescribed for people who are chronically ill, or in pain with musculoskeletal disorders, or are mentally ill (the three largest categories of disabled-worker impairments).

Question 3. How would the defined contribution benefit structure affect younger versus older disabled workers?

Most people newly awarded disability benefits are older workers. Nevertheless, some people are disabled at very young ages. In fact, over 20 percent of all beneficiaries newly awarded benefits in 1996 were under age 40 (table 8).

Table 8
Age of Disabled Workers Awarded Benefits by Sex, 1996

	Men	Women	Total
Total number	347,100	256,900	604,000
Percent in age category:			
Under 30	6.9	5.3	6.2
30-39	16.2	15.1	15.7
40-44	10.8	11.3	11.0
45-49	13.2	14.0	13.5
50-54	16.2	19.0	17.4
55-59	19.9	21.2	20.5
60-61	9.3	8.3	8.9
62-64	7.5	5.8	6.8
65	0.1	0.1	0.1

Source: Social Security Administration, *Annual Statistical Supplement to the Social Security Bulletin, 1997,* p.267

One option to increase the disability income protection for young workers would be to require that they purchase private term disability insurance -- drawing on funds in their individual accounts -- to supplement their defined-benefit from Social Security. If purchased privately, the design of such products could not match the social insurance features that pay different amounts to otherwise similarly situated workers based on whether they had small children or a spouse. The design of such products and their pricing would be complex. Furthermore, there would need to be significant monitoring of insurer practices.

If workers (under some age, or with children) were required to purchase private insurance, the price of the insurance could be a substantial portion of their annual contributions toward their individual accounts for retirement. Estimates cited below indicate that premiums for private disability insurance varies greatly by the size of the group purchasing the coverage (Salisbury, 1997). For example, the premium as a percentage of disability income protection ranged from 0.7 percent for a very large group (the size of General Motors), 1.7 percent for an employee group of 25, to 8.3 percent for a person purchasing the coverage individually.

Question 4. How would the reduction in disabled-workers benefits affect on private long-term disability insurance?

Currently, about 25 percent of private sector employees are covered by private long-term disability insurance (LTDI) that is financed, at least in part, by employers. Higher-paid employees are more likely to be covered. Among full-time employees in professional and technical positions in medium and large firms, about 60 percent have LTDI coverage (DoL, 1994).

Higher paid employees will experience larger cuts in their Social Security disability benefit replacement rates under the IA plan. Because LTDI plans are usually integrated with Social Security, reductions in Social Security benefits would increase costs for private LTDI, unless those plans change their provisions.

Typically, private LTDI guarantees a specified replacement rate of prior earnings. The most common replacement rate is 60 percent, but they range from 50 to 70 percent. (DoL, 1994) Plans that guarantee a specified replacement rate will experience increased costs, unless they change their LTDI contracts.

Anecdotal evidence from disability insurers shows that LTDI plans do change their provisions in response to changes in Social Security benefits. During the 1970's many LTDI plans offered specified dollar benefits. When Social Security replacement rates rose because of legislated benefit increases, insurers found that Social Security plus private LTDI provided too generous benefits that created work disincentive problems. So, plans changed to a fixed replacement rate, with a dollar-for-dollar offset against Social Security (Don Boggs, HIAA).

If Social Security replacement rates are scheduled to decline in the future, private plans will again be affected. In this instance, plans that are engineered to provide a particular replacement rate will have an adverse financial affect on insurers to the extent they must compensate for reductions in OASDI. Plans may again adapt to avoid incurring these unplanned cost increases.

Employers are already concerned about their LTDI costs. According to Salisbury (1997): "As a result of employers' concerns about increasing costs, there is a decline in the availability of both health and long-term disability coverage. The number of sellers of [LTDI] to public and private sector employers indicate that the marketplace is consolidating. The number of insurers willing to write these policies has been declining because of a number of factors, including a consensus that, with the aging of the American work force and of the baby boomers, the good risks are going to be fewer and the bad risks (those who are likely to file claims) probably will grow significantly, putting pressure on both policies in force and premiums. ... As a result of these demographic changes, coverage reductions are evident in most policies. Particularly in the individual marketplace, it is growing increasingly difficult for any individual who seeks disability coverage outside of employment-defined policies, with guaranteed premiums and guaranteed renewability, which as recently as two years ago were standard design features of individually purchased policies.

"Cost is the reason that few individuals purchase individual disability insurance coverage relative to the group marketplace. Moreover, small group policies are much more expensive than large group policies and their cost is closer to that of individual coverage.

"One insurer provided two estimates of disability insurance costs for a group of 25 employees and for a single individual, assuming that the person is 30 years old and that the annual benefit that he or she would wish through this disability policy would be $12,000 per year in income as a result of a disability. A small employer buying a group policy to cover all its workers would pay a premium of $200 a year per employee for that $12,000 benefit. That is 2 ½ times the cost that would be obtained by a company the size of General Motors or the federal government. The individual going into the private disability market would generally be quoted an annual premium of $1,000 a year for $12,000 in disability income."

Given their concern about costs, LTDI plans sponsors might choose to take the IA balance into account in designing new integration rules with the revamped Social Security benefits. For example, they might make some assumptions about the value of the IA balance (which would be expected to be higher at older ages of disability onset) and provide LTDI replacement rates that decline with age.

Question 5. How might lower DI benefits affect the SSI program?

The means-tested Supplemental Security Income (SSI) program uses the same test of disability that is used for Social Security disabled-worker benefits. The federal SSI guarantee is $484 per month for an individual in 1997. The benefit is reduced by the amount of other income they receive. Currently, about 14 percent of disabled worker beneficiaries receive some supplemental benefit from SSI. Reductions in DI benefits at the low end of the benefit distribution would increase disabled workers' reliance on the SSI program.

Question 6. What would happen to a disabled worker's income at retirement?

In traditional Social Security, a disabled worker's benefit does not change when he/she reaches retirement age. The benefit is the same as the amount that would be paid at normal retirement age.

Under the IA plan, the balance in the IA fund would remain in the government-administered account while the worker is disabled. The disabled worker would make no further contributions to the account, but he or she would continue to make investment choices about the funds.

If the disabled worker survived to early retirement age, the government would convert the IA balance to an annuity that is paid for the remaining life of the disabled worker and spouse if married. Hence, while the disabled-workers benefit would be reduced relative to present law while disabled before retirement. The benefit would then rise at retirement age, although the disabled worker's circumstances would not have changed.

Question 7: On what terms would annuities be provided to disabled workers who reach retirement age?

Annuities currently available in the private insurance market are designed to provide regular monthly income for the remaining life of the annuity purchaser. Life expectancies for the population who choose to purchase annuities are used by insurance companies to set the terms of annuities. In general, annuity buyers have above average life expectancy (Mitchell et. al, 1997).

If annuity purchase is mandatory at retirement age for all holders of individual accounts under Social Security, on what terms should they be offered to retirement-age workers who have already established disability status under the Social Security program? Should they be based on average life-expectancy of disabled-worker beneficiaries at retirement age? Or on general population life expectancy? Because disabled workers have lower average life expectancy than the rest of the population of the same age, a mandatory annuity based on general population life expectancies would pay less than if it were based on their shorter life expectancy.

Question 8. Would the IA balance be treated as a "countable asset" for the purpose of determining eligibility for SSI and or Medicaid?

Under current SSI rules, financial assets of more than $2,000 for an individual make one ineligible for SSI.

In most states, eligibility for SSI (federal or state supplements) brings eligibility for Medicaid, which can be very important to disabled persons because it covers items not covered by Medicare, such as prescription drugs, nursing home care, and community-based alternatives to nursing home care.

Under current SSI rules, balances in a retirement account -- such as IRA'S or 401(k)s -- are treated as a countable asset, because the person has a "right, authority or power" to obtain access to the funds in these accounts. (And as a practical matter, people generally have access to these funds if they have left the workforce because of a disability that is severe enough to qualify for Social Security disability benefits.)

It would be precedent-setting to have retirement savings accounts that are not available in the case of career-ending disability. But if that were the case and current SSI rules applied, then the IA funds would not cause a person to be disqualified for SSI benefits so long as they could not be accessed before retirement. Presumably, when the IA balance became available for annuitization at retirement age, then under SSI rules, the balance would be treated as a countable asset (and could cause ineligibility for SSI) or the monthly income would be treated as countable income and be offset $1 for $1 against monthly SSI benefits.

If Congress liberalized access rules, then presumably IA balances would become countable assets for purposes of SSI eligibility, unless specifically excluded under SSI law or regulations. Liberalizing access rules might produce a short-run saving in SSI expenditures because applicants' eligibility for SSI would be delayed until the IA balance was depleted (or nearly so). But the IA would then not reap investment returns and produce income at retirement.

Question 9. Would there be political pressure to make the IA balance available to disabled workers? If so, what is the appropriate policy response?

Disability onset often brings unanticipated expenses that pose new financial burdens beyond the loss of earnings (See question 2.). The financial problems faced by disabled workers and their families would likely bring pressure on policy makers to grant access to the IA funds to meet immediate needs rather than to preserve the funds for the disabled worker's retirement (or heirs if he/she dies before retirement).

Policy options for granting access to the IA funds include annuitization at disability onset, allowing access to the lump sum, or permitting borrowing against the funds.

Annuitization at disability. An alternative to holding the IA balance for retirement would be to annuitize it when the worker became disabled. For workers disabled long before retirement age, this would still fall short of compensating for the reduction in basic benefits. The shorter time for contributing to the IA and for building investment earnings would result in much less than the IA amount anticipated for retirement.

If the IA balance were to be annuitized at disability, a number of new issues would need to be addressed. For example:

(1) What population life tables would be used? For a young disabled worker -- say age 40 -- an annuity based on general population life tables would produce a very small monthly amount, because it would be based on life expectancy of about 35 or 40 years (SSA, 1996, table 4C.6). Alternatively, one might use life tables for the population of disabled worker beneficiaries. While that population has much shorter life-expectancy, it also has great diversity. Their common attribute -- onset of disability that meets the test in the Social Security law -- has already occurred. Private insurers have little or no experience designing life annuities for people who already have a very serious health problem.

(2) How would the requirement for joint and survivor annuities apply to a couple made up of a young disabled worker and an able-bodied spouse?

If disabled workers were required to annuitize their IA balance, and to purchase joint and survivor annuities (unless the spouse declined it), the joint-life annuity would be quite small because the young spouse would have a long life-expectancy.

On the other hand, if the worker could unilaterally opt for a single-life annuity, there would be no survivor protection of this money for the spouse. In some situations, the spouse might have little Social Security protection other than that based on the disabled-worker's record.

(3) If the disabled worker annuitized the IA balance and later recovered and returned to work, what would be the appropriate treatment of the annuity payment?

About 2 percent of workers are expected to experience disability and then recover and survive to retirement age (table 1). The government currently has very limited capacity to determine in advance which workers will recover and leave the benefit rolls (Mashaw and Reno, 1996). Under current policy, when a worker recovers, his/her disability benefit stops and the subsequent retirement benefit would be based on earnings over the work life that excluded the period of disability.

In this scenario, would the annuity payment stop and then resume at retirement age? Or would it continue to be paid for the rest of the formerly disabled worker's life? Would the worker have to start over to build a new IA balance based on only the work record after recovery from disability?

These complexities may help to explain why the IA proposal does not call for annuitization at disability. Another policy option might be to give disabled workers access to the IA balance.

Access to the IA balance at disability. Political analysis suggests that it would be very difficult not to allow disabled workers access to the IA balance (Heclo, 1998). All precedents for government-encouraged retirement savings plans -- such as IRA’S, 401(k) plans and the thrift savings plan for federal employees -- permit early access to the funds in the event of disability.

If the funds were available at disability, they would not be available to fulfill the purpose for which they were designed -- that is to substitute for reductions in retirement and survivor benefits in old age. If the disabled worker was married, the spouse would lose survivor protection in old age if it was used to meet disability-related costs of the worker. At the onset of career-ending disability, the worker and spouse have already lost the worker's future earnings that may have been counted on in retirement planning. Under this option, they would also lose part of their expected Social Security protection for retirement. This loss may cause some people to turn to SSI for assistance.

If IA funds were available at disability, there would be pressure to make them available for other pressing needs -- such as medical emergencies, job loss, to purchase a home, or tuition expenses.

Loans against the IA balance. If IA funds are not available at disability, there could be pressure to permit the worker to borrow against his/her IA account. For workers who have terminal illness, this is now done with life insurance under so-called viatical arrangements.

Viatical arrangements have developed to allow terminally ill persons -- such as AIDS or cancer patients -- to access proceeds of their life insurance policies in advance of their death. Under these arrangements, the terminally ill person signs over the proceeds of his/her private life insurance in exchange for current income. The viatical seller takes a portion of the life-insurance to cover the cost of administration, of assuming the risk that the person won't die as expected, and profit.

Should such arrangements be allowed for the IA portion of Social Security? Would the government set rules under which they would be allowed? For example, -- only if the ill worker were unmarried, or only if the ill worker had a very high probability of dying? Would the agency set up a loan program? Loans add significantly to the administrative burden of retirement savings plans (Benna, 1997, Cavanaugh, 1996). More important, loans, like other forms of early access, erode the retirement Security that the IA funds were designed to provide to workers or their widowed spouse.

In summary, political pressure to grant access to, or loans from, IA balances in the event of disability is likely to be significant. Different responses to this pressure pose different trade-offs.

Treatment of Families of Workers Who Die Before Retirement

Benefit changes in the IA plan also have important implications for treatment of family members of workers who die before retirement. In many cases, workers who die before retirement were previous recipients of disabled-worker benefits. In other cases, workers die suddenly without prior experience with Social Security benefits.

Question 10. How would benefits for young survivor families change under this plan?

For young survivor families, the IA plan provides the same reduction in basic (PIA-based) Social Security benefits that would apply to a retiree at normal retirement age. That is, the benefits for the surviving family of an average earner would be about 17 percent lower than under present law. The reduction would be larger for higher earners and smaller for lower earners. The balance in the individual account would not be used for monthly benefits for survivor families.

Question 11. When a worker dies before retirement, what would happen to his/her individual account?

The balance in the individual account would automatically go to the deceased worker's widowed spouse and remain in her/his account until retirement. At retirement, the government would annuitize it. The annuity would then supplement the widow(er)s own PIA-based benefit (or survivor) benefit based on the deceased spouse’s earnings, plus any IA annuity acquired from her or his own work life.

If there was no widowed spouse when a worker died before retirement, the IA balance would go to the worker’s estate. It would be distributed immediately according to the worker’s will or the laws of the state.

Question 12. What role does Social Security fill in providing income for young survivor families?

Because the plan reduces benefits for young survivor families, it useful to consider the role of current benefits for young survivor families.

About 1.9 million children receive Social Security survivor benefits. They include 1.4 million children under age 18 and about 0.45 million adults who have been disabled since childhood. The 1.9 million child-survivor beneficiaries reside in about 1.2 million families.

Data from the 1990 Survey of Income and Program Participation (SIPP) matched with SSA's administrative records provide estimates of living arrangements and total income for families with children under 18 receiving Social Security survivor benefits. Of the 889,400 such families, about 62 percent were headed by a an unmarried adult, and 38 percent were husband-wife families. The latter would include families where the widowed parent had remarried or where the child was living with a couple other than the original parents. The families' economic status varied considerably by family type (table 9).

Among families with an unmarried head, those receiving survivor benefits had higher mean income and were less likely to be poor than other single-parent families. Social Security benefits accounted for 29 percent of their aggregate income. Earnings were received by about 7 in 10 families with a single parent, regardless of whether the child (or children) received survivor benefits. And mean earnings were about the same for families with, or without, child survivor benefits.

Among families headed by a married couple, those receiving survivor benefits had slightly lower mean total income than others. Survivor benefits accounted for about 18 percent of their aggregate income. Almost all married couple families had income from earnings, but the mean amount was smaller for those receiving survivor benefits.

Table 9
Families with Children Under Age 18: Recipients of Social Security Survivor Benefits Compared with All Families, by Marital Status of Family Head, 1990

	Total	Unmarried head	Husband/wife
Families with children receiving Social Security survivor benefits			
Total number (in thousands)	889.4	543.5	345.9
Mean total monthly family income	$2,884	$2,459	$3,551
Share of income from:			
Social Security	24	29	18
Earnings	62	52	74
Other	14	19	8
Percent with earnings	78	69	94
Mean earnings of recipients	$2,287	$1,845	$2,796
Percent poor	12.7	18.8	3.1
All families with children			
Total number (in thousands)	34,736.7	9,483.7	25,252.8
Mean total monthly family income	$3,190	$1,670	$3,762
Share of income from:			
Social Security	1	4	1
Earnings	91	76	93
Other	8	20	6
Percent with earnings	89	70	97
Mean earnings of recipients	$3,241	$1,817	$3,628
Percent poor	16.2	38.4	7.9

Sources: Kearney, Grundmann and Gallicchio, "The Influence of Social Security and SSI Payments on the Poverty Status of Families with Children," *Social Security Bulletin*, vol. 57, No. 2, Summer 1994, pp. 27-43 and vol. 58, No. 3, Fall 1995, pp. 3-14.

Question 13. Would the reduction in basic survivor benefits affect private, employment-based provisions for life insurance?

Probably not. Employment-based life-insurance is generally not coordinated with Social Security. About 60 percent of private sector employees and 80 percent of state and local government employees have some sort of employer-financed life insurance. It typically is paid as a lump sum. The most common lump-sum is equal to one-year's salary, although some plans pay two years' of the deceased worker's salary. The median amount in private plans is about 1.5 times salary. In state and local government employment, the median is about 2 years' salary. Some life insurance plans pay a flat dollar amount. In these cases, the median amount is about

$15,500 in private plans and about $17,500 for state and local government employees (DoL, 1994, 1996, 1996).

Very rarely does employment-based life insurance pay regular monthly survivor income benefits to children or widowed spouses. Such coverage was reported for only 5 percent of full-time employees in medium and large firms, and virtually not at all for part-time employees or those in small firms.

Question 14. When workers die before retirement, who would gain and who lose under this plan relative to current Social Security?

In brief, the IA plan would pay lower basic benefits than under the current program to young survivor families and to disabled workers and their families. On the other hand, it would transfer a lump-sum (where no benefits are now paid) to the heirs of workers who die before retirement without leaving dependents.

Question 15. How would provisions for inheritance of IA balances by heirs other than a widowed spouse interact with rules for annuitization of IA balances?

The IA plan also requires that the IA balance be annuitized when a worker or widowed spouse retires. If the balance is annuitized, it is no longer transferable to other heirs. (The IA plan provides that the mandatory annuity could have a one-year certain feature, whereby the designated heirs of an unmarried work who dies after retirement would be guaranteed one year's payment of the annuity.)

With mandatory annuities, the relationship between the date of death and the timing of required annuitization could have important implications for the amount of money, if any, that would go to heirs, such as adult children.

- If an unmarried worker or widowed spouse died before annuitizing, the full IA balance would go to the heirs.

- If the individual died shortly after annuitizing, the heirs would receive the balance of 1 year's worth of the annuity (if the one-year certain option were selected), which is far less than the full amount of the IA balance.

If the individual has a choice of when to annuitize, there may be instances in which heirs have a financial interest in delaying the annuitization date. If the individual has no choice of when to annuitize, there could be significantly different outcomes for the heirs, due to very small differences in the date of death.

One way to reduce the disparity in outcomes would be to require a longer period-certain annuity, such as 5, 10 or 15 years. This would reduce the amount of the annuity for the person entering retirement, but it would also reduce the disparity in outcomes for heirs in the event that person dies shortly after retirement.

Another option would be to require annuitization only up to a specified amount and leave part of the IA balance for heirs. Yet another option might be for balances to go to the Social Security trust fund rather than to heirs. This is consistent with traditional social insurance but is a sharper departure from standard defined contribution practices.

Question 16. How would rules for inheritance of IA balances apply in the case of remarriage of a widowed spouse before retirement?

Both traditional Social Security and the IA plan are straightforward in the simple case of "one long-term marriage, no remarriage." Benefit rules would need to be devised for disposition of the account balance to address other family situations, such as sequential marriages.

Under traditional Social Security, rules about sequential marriage aim to achieve a mix of goals: (1) fair and adequate benefits for widowed spouses; (2) not paying a survivor "subsidy" to a retiree who is remarried, (3) avoiding a "marriage penalty" that reduces benefits when a current beneficiary remarries; and (4) no transfers from husband to husband or wife to wife.

In brief, traditional Social Security old-age benefits for one widowed before retirement are:

(1) A widowed spouse can receive a widow(er)s benefit at age 60 of 71.5 percent of the deceased worker's benefit. If the widow(er) waits until age 65 to claim the benefit, it is 100% of the deceased workers' benefit.

(2) If a former widow(er) is married upon entering retirement, she/he is treated as a worker and/or spouse. No widow's benefit is paid to one who enters retirement married. If the person later becomes widowed, however, a widow's benefit is then payable.

(3) During old age (after becoming a beneficiary) a widow(er) receiving a survivor benefit can continue to receive that benefit upon remarriage. This was done to avoid penalizing marriage by taking away benefits that are currently being received.

The IA plan would retain these features in treatment of the basic (PIA-based) benefit, although it would raise the aged survivor's benefit to 75 percent of the couple's combined benefits.[5] Questions arise about how the IA balance would be treated with multiple marriages and remarriage.

Because the IA balance is treated like property rather than a social benefit, the transfer to a widowed spouse would presumably be permanent, and this ownership would not change should the widow(er) remarry. If widows or widowers remarried prior to retirement, they would still retain their prior deceased spouse's IA balance. At retirement, both their deceased spouse's IA balance and their own would be converted to an annuity by the government. Presumably, the requirement for joint and survivor annuities would apply to a remarried widow(er). That is, the

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[5] This has the effect of increasing widow(er)'s benefits for dual-earner couples. Because other provisions of the IA plan reduce the benefit paid to spouses of retired workers to 33 percent of PIA (compared to 50 percent under current law), providing a widow(er)'s benefit of 75 percent of a couple's combined OASDI benefit does not raise benefits for widow(ers) in single-earner couples; instead, it leaves them with the same benefits they would receive under current law.

first husband's IA balance would become a joint and survivor annuity for the widow and her second husband.

Question 17. If a remarried widow(er) subsequently died before retirement, should the IA balance of the first spouse be transferred to the second spouse, or should it go to other heirs?

Under traditional Social Security, there is no precedent for transfer of old-age survivor protection from a first husband to a second, or from a first wife to a second. And, as already noted, there is no precedent for transferring "unused retirement income protection" to other heirs, such as adult children.

Consistent application of the IA plan rule of automatic transfer of the IA balance to a widowed spouse would seem to call for indirect transfers from husband to husband or wife to wife, in such cases. In such cases, however, there could be competing claims on the IA balance between subsequent spouses and other heirs, such as adult children of a prior marriage. If this is considered a problem, two options below suggest other treatment. One involves separate accounting of inherited IA balances. The second would make the transfer of the IA subject to spousal consent.

Separate accounting. When a widowed person dies, policy-makers could provide for separate distributions of the widow(er)s "own" IA balance versus the IA balance resulting from funds the widow(er) has inherited from a former spouse. This would require separate accounting and record keeping of account balances that are inherited from a former spouse. This might be deemed desirable by heirs in certain circumstances. It would, however, add to record keeping requirements for the IA balances that are transferred when someone dies before retirement.

The Supreme Court recently grappled with a related issue with regard to a private retirement savings plan. In *Boggs v. Boggs*, the Court split 5-4 in favor of the second wife's claim, over the deceased first wife's bequest that her community property share of the husband's retirement savings should go to their children after he died. At issue was not the design of Social Security. Rather, it was to be whether ERISA's preferential treatment of the current widow preempts the prior wife's community property right to designate the beneficiaries of her share of her husband's retirement savings. (Washington Post, June 3.) Policy issues about how to apply competing principles: automatic protection of a widowed spouse, on the one hand; and discretion to accommodate complex family relationships in sequential marriages, on the other hand.

Spousal consent for IA transfer. Another option would not make the IA transfer to a widowed spouse automatic. Instead, the IA transfer could be waived by notarized signed consent of the spouse (as is the case in annuitization under the IA plan). Presumably, that decision would have to be made before the person owning the IA balance died in order to ensure that the decision reflected the wishes of both parties. The default would be automatic transfer to the widowed spouse.

In summary, traditional Social Security has developed policies for widowed spouse benefits in the event of complex family relationships, such as sequential marriages. Current policies seek to provide retirement security while balancing other social goals. Under an IA plan, other relatives (such as adult children) would also have a potential claim on account balances when someone dies before retirement. Consequently, rules for transferring account balances to widowed spouses or other heirs may need to take account of the interests of other family members. The challenge would be to balance competing principles about social adequacy for widowed spouses (in traditional Social Security) with traditions about inheritance of private property that are followed in other settings.

Question 18. In the event of divorce, what rules would apply to the transfer of the IA balance?

The IA plan does not specify this contingency. Three options might be considered: an automatic 50-50 split of IA balances at divorce, allowing divorce courts to decide disposition of IA balances along with other property, or retaining IA ownership without permitting it to be divided at divorce.

If the law provided for an automatic 50-50 split, the government agency managing the IAs would need to receive information about the divorce in order to divide up the IAs between spouses. Should the division apply only to account activity (contributions and investment earnings) that occurred during the marriage, or should the division apply to the total balances when the marriage ends?

The following table illustrates one example of how the outcomes would differ.

Table 10. Illustrative Divisions at Divorce

	Spouse A	**Spouse B**	**Total**
IA Balances			
Balance at marriage	$3,000	$10,000	$13,000
Acquired during marriage	12,000	2,000	14,000
Balance at divorce	15,000	12,000	27,000
Totals Under Alternative Divisions			
50/50 of total	$13,500	$13,500	
-- Change in individually-held balance	(1,500)	1,500	
50/50 of accumulation during marriage	10,000	17,000	
-- Change in individually-held balance	(5,000)	5,000	

If the 50/50 split applied to the total balances, should it include IA balances acquired from prior marriages that end in widowhood or divorce?

What mechanism would be needed to report divorces to the government IA agency? What proofs would be needed to protect the rights of both parties? Some of these issues have been explored in analyses of implementing earnings sharing proposals under Social Security. (Committee on Ways and Means, 1984)

Two other options would be to allow divorce courts to determine the division, if any, of account balances; or to simply specify in the law that there is no division between spouses at divorce. Each has implications for the economic well-being of both spouses, and would impact the family adequacy approach embodied by traditional Social Security.

Summary

The IA plan explicitly reduces benefits for disabled workers and their families and for young survivor families under its provisions for lowering the basic benefit formula. For old-age benefits, the IA balance would be annuitized to provide monthly income to offset the reduction in basic benefits. No provision offsets the benefit reduction for younger families of disabled or deceased workers. Instead, the plan requires that the IA balance be held for a disabled worker's or widowed spouse's future benefit at retirement. Many questions remain about the optimal policy response to:

- Political pressure to make the IA balance available at disability, or other cases of financial hardship.

- Treatment of the IA balance at divorce or in the event of widowhood and remarriages.

- The adequacy of the PIA for the income protection of disabled workers and young survivor families, at least for those younger than some age, such as the earliest age of eligibility (age 62).

- The new entitlement for heirs when unmarried IA holders die before retirement and how the rights of heirs would be balanced against the rights of disabled workers, widowed and divorced spouses and their subsequent marital partners.

  Relative to the current social insurance system, entitlement for heirs who are adult children represents a "leak" out of the system, making it more expensive to provide a given level of retiree income guarantee.

III. Personal Security Account Plan

The personal security account (PSA) plan would transform Social Security retirement benefits into a two-tier system. The basic benefit would be a flat amount, equivalent to about 47 percent of the benefit paid to an average full-career earner today. The second tier would be a personal savings account financed by shifting 5.0 percentage points of the existing employee payroll tax to that purpose. Workers would be free to invest their accounts in financial instruments widely available in the market. They could not withdraw the funds before retirement. At age 62, they could use the funds as they saw fit.

The PSA plan also raises the normal retirement age (NRA) beyond that scheduled in current law. Specifically, it accelerates the scheduled increase in the NRA, so that it reaches 67 in 2011. Thereafter the NRA is scheduled to rise by about 1 month every 2 years. In addition, the age of earliest eligibility for benefits, currently 62, is scheduled to rise in tandem with the NRA, until it reaches age 65 when the NRA is age 68. Thereafter early retirement benefits remain available at 65, but the actuarial reduction in them increases from 20% to ultimately 30% when the NRA reaches age 70. The PSA would continue to be available at 62, thus allowing early retirement at that age.

The two-tier benefits apply only in old age. Benefits for disabled workers and young survivors would be calculated based on PIA calculations as under present law. However, benefits for disabled workers would be gradually reduced as the NRA increases. Specifically, they would be reduced by the same rate as a benefit payable to an age 65 retiree (currently 100%, but scheduled to decline to 70% in the PSA plan).

Impact of Reduction in Basic Benefits at Disability

The PSA plan retains PIA-based benefits for disabled workers or young survivor families up to the NRA, but disability benefits are gradually reduced as the normal retirement age is raised. Thus, similar questions arise as under the IA plan:

Question 1. What might be the impact of the reduction in the disabled-worker's benefit on private long-term disability insurance?

Question 2. What might be the impact of lower DI benefits on the SSI disability benefit program?

Issues here are similar to those discussed under the IA plan. New issues, however, apply to the PSAs relative to the IAs at disability or death before retirement.

Question 3. How would a disabled worker's benefit change when he/she reaches retirement age?

Under the PSA plan, a disabled worker would shift from an entirely PIA-based disability benefit, to a retirement benefit that is a blend of the new two-tier benefit and the PIA-based benefit he had previously received.

When disabled workers reach age 65, they would shift to a blended basic benefit made up of (1) their PIA-based DI benefit times the fraction of their work life they received DI, plus (2) a tier 1 retirement benefit times the fraction of the work life spent working.[6] The PSA account balance would become available when the disabled worker reaches age 62. The worker could use it as he or she saw fit.

Thus, under the PSA plan, a disabled worker's basic defined benefit amount would change at retirement age -- generally, it would go down. And the PSA balance would become available to the disabled worker for the first time at early retirement age. The size of the PSA balance would depend on the number of years the disabled worker had contributed to the system before disability, and his or her investment success with it.

Treatment of PSA Balances at Disability

Some of the issues are the same as under the IA plan. More would be at stake, however, because the PSA balance (accumulated from 5% of earnings) would generally be considerably larger than the IA balance (accumulated from 1.6% of earnings).

Question 4. Would the PSA balance be treated as a "countable asset" for the purpose of determining eligibility for SSI or Medicaid?

See discussion under IA plan.

Question 5. Would there be political pressure to make the PSA balance available to disabled workers? If so, what is the appropriate policy response?

See discussion under IA plan.

Question 6: Should a disabled worker or his/her family be permitted to borrow against the PSA account for the purpose of caring for the ill or disabled worker?

See discussion under IA plan.

Treatment of PSA Balance At Death Before Retirement

When a worker dies, his or her PSA balance would go to the estate. It would be transferred according to the provisions of the deceased worker's will or the laws of the state. The plan has no requirement that the PSA go to a widowed spouse, that it be retained for a widowed spouse's retirement, or that it remain part of the public mandatory retirement income system. It would be immediately available for the deceased worker's heirs to use as they saw fit.

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[6] During a 30-year transition, the tier 1 retirement benefit would, itself, be a blended benefit, made up of a present-law PIA-based retirement benefit and the new tier 1 benefit. The blended retirement benefits would apply to workers age 25-54 in 1998. Their transition tier-1 benefit would be a combination of: (a) a partial PIA-based benefit based on work prior to 1998; and (b) a pro-rated tier 1 benefit, based on years covered in the new system. Any balance in the PSA would become available at the earliest eligibility age for retirement benefits.

In this respect, it is a significant departure from traditional Social Security and from the IA plan, which seeks to preserve retirement income security for widowed spouses. In the PSA plan, the only guarantee for a widowed spouse is the tier 1 benefit and his or her own PSA balance. Many questions remain about optimal policy response under a PSA approach.

IV. Chilean System of Disability and Young Survivor Benefits

Chile mandates that workers save 10% of their earnings in individual accounts for retirement, which are held by AFPs (*administradoras de fondos de pensiones*), which are private, highly regulated financial institutions set up solely for this purpose. Disabled workers and the survivors of deceased workers receive access to these funds on disability or death of the worker.

In addition to the mandated savings, Chilean workers are required to purchase disability and life insurance (for survivors of workers who die before retirement) through the AFP. The insurance is purchased on a group basis by the workers who are enrolled in each AFP. The AFP bundles the cost of this insurance with the administrative charges of the AFP and is required to have uniform pricing for all its enrollees. The insurance pays a "topping-up" lump-sum amount into a disabled or deceased worker's account. The amount is the difference between the lump-sum amount given by a government-set formula and the actual amount in the worker's AFP account at the time of death or disability. (That is, it subsidizes the disabled worker's account up to an amount sufficient to purchase an indexed annuity that would replace a set percentage of the worker's prior earnings. In effect, because of this subsidy, there is an implicit 100 percent tax on worker accumulation in the event of disability or death before retirement age, to the extent that the worker's accumulation does not exceed the formula amount.)[7]

In the case of total disability, the top-up amount is set to allow purchase of an indexed annuity that would provide benefits that replace 70 percent of the worker's average indexed taxable earnings over the previous 10 years.[8] The "topping up" formula is based on what an annuity should cost given a life table and interest rates, and uses current mortality and interest rates.[9] Family benefits are not provided.

In the case of survivors, the top-up amount is set sufficient to purchase an indexed annuity that would provide benefits according to the following schedule: for widows (and disabled widowers), a monthly benefit of 60 percent of the deceased workers' pension (this pension is the amount the worker would have received had he been disabled on the date of death); children under 18 receive 15 percent (30 percent if both parents are deceased); and dependent parents receive 50 percent. [10]

Finally, the government finances out of general revenues a *minimum pension* and a lower *subsistence pension*, for those who cannot meet the eligibility requirements for a minimum

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[7] Chile has partial disability benefits (loss of earnings capacity between ½ and 2/3) as well as total disability benefits (loss of earnings capacity above 2/3), and a workers' compensation program. This description is limited to total disability.

[8] Diamond and Valdes-Prieto, page 266.

[9] Need to confirm whether these are based on life tables for a disabled population, or general life tables.

[10] These benefits are not paid to survivors of retired workers. Instead, benefits for these survivors are provided for in the payout options described below -- phased withdrawals or annuity purchase.

pension. The minimum pension is available to retirees who: 1) have at least 20 years of contributions and whose accumulated funds do not yield the minimum level set by law; and 2) those who have chosen to receive phased withdrawals and have exhausted their funds because they outlived their life expectancy. The minimum pension is a flat amount set at about 85 percent of the legal minimum wage.[11] The minimum wage and the minimum pension are subject to ad hoc adjustments for inflation. It is estimated that about 30-40 percent of workers in the system may become eligible for a minimum pension due to low earnings, under reporting of earnings, or evasion of contributions once they have qualified for the minimum pension.[12]

The subsistence pension is available only to the aged and to disabled adults and is available to those who do not qualify for the minimum pension. In 1990, it was equivalent to about 10 percent of the average taxable salary after contributions.[13]

In Chile, a minimum basic pension for those who have contributed to the system has been in effect since 1952 and that concept has been retained, though modified, in the shift to a privatized system (Diamond and Valdez-Prieto). The Chilean data suggest that the minimum pension is an important safety net for workers and their families.

To apply the Chilean minimum pension -- of 85 percent of the minimum wage -- in the United States would yield a minimum Social Security pension here of about $9,000 a year. This is considerably larger than the minimum statutory Social Security benefit or the federal guarantee under the means-tested SSI program -- currently $484 a month or $5,808 a year.

On becoming eligible to receive disability or survivor benefits, a Chilean worker or survivor has options for receiving monthly income similar to the options for a retired worker. That is, the individual is able to choose between:

- a sequence of phased withdrawals from the account (with maximum size limited by formula), such that the withdrawals would stretch out over the actuarial life expectancy of a retiree

- the purchase of an annuity on the private market from an insurance company (this option is allowed only if the annuity amount would be larger than the government-guaranteed minimum pension)

- or a combination of these two.

The Chilean topping-up mechanism poses a number of issues about incentives and equity if applied in the United States. Most proposals to shift the U.S. Social Security retirement benefits

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[11] In December 1995, the monthly minimum pension was US$133 for pensioners up to age 70 and US$120 for pensioners age 70 and older, compared with the minimum wage of about US$143, as reported in Kritzer, as reported in the April 1996 statistical bulletin for the SAFP.

[12] Vittas and James, as reported in Kritzer.

[13] Diamond and Valdez-Prieto, page 262

to full or partial individual accounts are designed to retain the basic features of the social insurance-based system for providing disability and young survivor benefits.

V. Conclusion

Providing for disability and young survivor benefits calls for an insurance-based approach, rather than an asset accumulation approach. The nature of the risk, where the financial risk is greatest for disability or death at a young age, does not permit covering this risk through an accumulation in individual accounts.

Providing insurance coverage, however, may be accomplished in a number of ways. Requiring purchase of private disability and life insurance through periodic premiums from workers is complicated by issues of insurability and the need for expanding coverage as earnings rise or families grow. Providing a lump-sum payment from the government to purchase a stream of income from a private insurer after disability or death raises numerous concerns about how the premium would be determined and how income would be managed if a disabled worker recovers.

The case for providing disability and young survivor insurance through a government-run social insurance seems compelling. The inability to finance individual disability and young survivor protection through DC accounts, and the intricacies involved in any attempt to craft a competitive private market to adequately provide insurance, suggest strongly that social insurance is the appropriate choice. While DC accumulations can provide for retirement income, in whole or in part, such accumulations do not serve as well as insurance, particularly social insurance, in providing income replacement protection in the event of disability or early death.

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