for numbers of persons, and table II the approximate standard errors for percentages of persons with a given characteristic The reliability of an estimated percentage depends on both the size of the percentage and on the size of the total base population The standard errors in the body of table II are expressed in percentage points Standard errors for percentages and bases not shown in the table can be obtained by linear interpolation

The approximate standard error on differences of percentages, P1–P2, over time can be obtained by

$$SE_{P1-P2} = SQRT\ [(SE_{P1})^2 + (SE_{P2})^2]$$

Standard errors obtained by means of this approximation are likely to be conservative (biased high) since the estimates are obtained from overlapping samples with presumed high positive correlation

TABLE II —Approximate standard errors of estimated percentages of disabled-worker beneficiaries

Size of base	Estimated percentages				
	2 or 98	5 or 95	10 or 90	25 or 75	50
2 500	2 8	4 4	6 0	8 7	10 0
5 000	2 0	3 1	4 2	6 1	7 1
7 500	1 6	2 5	3 5	5 0	5 8
10 000	1 4	2 2	3 0	4 3	5 0
25 000	9	1 4	1 9	2 7	3 2
50 000	6	1 0	1 3	1 9	2 2
75 000	5	8	1 1	1 6	1 8
100 000	4	7	1 0	1 4	1 6
250 000	3	4	6	9	1 0
500 000	2	3	4	6	6
750 000	2	3	4	5	6
1,000 000	1	2	3	4	5
2 500,000	1	1	2	3	3

The sensitivity of the causative matrix analysis to sampling variability is unknown at the present For further discussion of this issue of stability, see the Bye and Franklin study cited earlier

Notes and Brief Reports

Questions on Social Security and the Future Work Force*

The effects of the social security program on retirement behavior is of growing interest This interest is stimulated by long-range cost projections of the social security program that show a dramatic increase in the ratio of the retired to the working-age population early in the next century That increase reflects the aging of the post-World War II "baby boom" cohort and the sharp birthrate decline that has occurred in recent years The projected rise in the workers' tax burden to support a growing retired population is a source of concern Policies to encourage older workers to remain in the labor force were discussed by the 1975 Advisory Council on Social Security as a way to alleviate the long-run higher cost The retirement policies of the social security program are being examined in this context

The article on retirement patterns on page 3 of this issue documents the rise in the retirement rate (measured both by labor-force withdrawal and by the number of older persons receiving retirement benefits under the social security program) in the past 25 years The author summarizes research in the past decade that shows voluntary retirement is becoming more common and that level of retirement income, job satisfaction, and health are key factors in the retirement decision

The rising retirement rate coincided with the expansion of coverage under the social security program in the 1950's, introduction of early retirement options (in 1956 for women, 1961 for men), and benefit increases enacted in the late 1960's and early 1970's The availability and the level of retirement benefits, in conjunction with supplemental pension income, have undoubtedly influenced the retirement rate and contributed to the rise in voluntary retirement

Until recently, these trends might have been cause for optimism Policies designed to improve the economic well-being of the aged and to introduce an element of choice in the retirement decision were having the intended effect The wisdom of continuing these policies, however, is now being questioned

Rising costs were spotlighted in projections of the social security program, and ways to reduce costs are being sought To slow down or reverse the rising retirement trend, modification of social security policies that accompanied the trend are being considered A logical alternative to the early-retirement option would be to postpone the

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retirement age by fiat The 1975 Advisory Council considered the option of providing full benefits at age 68 and reduced benefits at age 65 An alternative to the recent provisions that raised benefit levels would be to permit a decline in these levels An independent panel of actuaries and economists, authorized by Congress in 1975 to study the social security program, proposed automatic adjustment provisions that would allow a decline in relative benefit levels for future retirees The panel also suggested that the earnings test, early-retirement option, and delayed-retirement provisions be studied for possible measures to encourage continued work among the elderly [1]

Social security has undoubtedly influenced retirement trends Changes in the social security provisions that would be sufficient to reverse those trends could have unfortunate side effects While increasing numbers of older workers may have sufficient resources to make retirement attractive, many still reach retirement with little income other than their social security benefits The average social security benefit for retired men at the end of 1975 was $228, yielding annual 1976 benefit income of about $2,820 (when the 6 4-percent cost-of-living increase effective in June is included) Research has shown that supplemental retirement resources—primarily second pensions—are a key item in the voluntary retirement decision

Factors outside the social security program certainly have contributed to retirement trends Goals other than improving the economic status of the elderly also have influenced retirement policies—both public and private Extending the early-retirement option to men in 1961 was viewed, in part, as an antirecession measure to help reduce unemployment and open up job opportunities for younger workers Expansion of coverage under private pension plans that began during World War II (when wage ceilings limited direct pay increases) laid the groundwork for using pension retirement policies during the 1960's to help reduce job competition from older workers Early-retirement options under private pension plans proliferated during the 1960's and early 1970's Some options clearly intend to encourage early retirement by providing attractive early benefit options Slightly less than half the private sector employees are covered by pension plans, but the majority of those covered are in plans with early-retirement options A majority are also subject to mandatory retirement—frequently at age 65 [2]

The Age Discrimination in Employment Act of 1967, while establishing the rights of older workers to employment opportunities, permitted compulsory retirement at age 65 and allowed compulsory retirement earlier if it was part of an employee-benefit plan Social Security Administration survey results for the late 1960's showed that few workers on jobs without pension coverage were subject to compulsory retirement policies Of those with pension coverage and subject to compulsory retirement, many avoided mandatory retirement by taking early-retirement options

During the past 15 years a number of social changes heightened competition for available jobs the postwar "baby boom" cohort began its entry into the work force, the civil rights movement of the 1950's and early 1960's resulted in enhanced awareness of the rights of minority groups to jobs and advancement, and the women's movement brought increased pressure for access to better-paying jobs for the growing number of women in the labor force In this context, providing early-retirement options for older workers and compulsory retirement with pensions for the holdouts was widely perceived to be good social policy While some advocates of older workers' rights objected to compulsory retirement policies in principle, the pressing needs of other segments of the work force demanded priority attention

If society's future needs call for prolonging worklife or increasing the number of workers in relation to nonworkers, a number of changes independent of the social security system could help bring this about Three sources of additional workers are discussed below

If demand for older workers increases, then

[1] *Report of the Consultant Panel on Social Security to the U S Congressional Research Service*, April 1976 (publication pending)

[2] See Walter W Kolodrubetz and Donald M Landay, "Coverage and Vesting of Full Time Employees Under Private Retirement Plans," *Social Security Bulletin*, November 1973, Alfred M Skolnik, "Private Pension Plans, 1950–74," *Social Security Bulletin*, June 1976, and Virginia P Reno, "Compulsory Retirement Among Newly Entitled Workers," *Social Security Bulletin*, March 1972

(*Continued on page 54*)

TABLE M-31 —Supplemental security income for the aged, blind, and disabled Number of persons receiving State-administered State supplementation only and total and average amount, by reason for eligibility and State, February 1976 [1]

State	Number of persons				Total amount (in thousands)				Average payment			
	Total	Aged	Blind	Disabled	Total	Aged	Blind	Disabled	Total	Aged	Blind	Disabled
Total	55,336	33,524	859	20 953	$3 589	$1,636	$88	$1,865	$64 86	$48 81	$102 01	$89 02
Alabama	5,005	3,925	61	1,019	266	193	4	69	53 12	49 14	67 90	67 58
Alaska	988	518	20	450	42	24	1	17	42 92	47 43	48 40	37 48
Arizona	213	213		-	37	37	-	-	174 00	174 00	-	-
Colorado	6,880	4,727	26	2,127	557	277	3	276	80 90	58 69	115 81	129 82
Connecticut	3,948	1,293	27	2,628	345	96	1	248	87 37	74 32	44 26	94 24
Florida [2]			-			-	-	-		-	-	-
Illinois	9 949	2 113	66	7 770	1,150	210	5	934	115 60	99 61	82 61	120 23
Kentucky	1,188	1 002	8	178	109	93	1	15	91 65	93 09	66 75	84 70
Minneosta	814	463	22	329	60	32	1	27	73 64	68 46	53 55	82 27
Missouri	13,134	10 440	402	2,292	623	449	46	127	47 44	43 05	115 34	55 58
Nebraska	850	412	12	426	40	13	1	26	46 92	31 75	75 17	60 81
New Mexico	22	7	-	15	(3)	(3)	-	(3)	(4)	(4)	-	(4)
North Carolina	1,470	734	88	648	171	80	21	70	116 20	109 40	234 80	107 80
North Dakota	11	6	--	5	(3)	(3)	--	(3)	(4)	(4)	-	(4)
Oklahoma	8 354	6 227	30	2 097	140	105	1	35	16 76	16 82	17 53	16 56
Oregon	2,510	1,444	97	969	49	25	3	21	19 52	17 26	27 77	22 06

[1] Data reported to the Social Security Administration by individual States All data subject to revision Data not reported for Idaho, Iowa, Maryland, New Hampshire, Ohio, South Carolina, South Dakota, Utah, Virginia, and West Virginia

[2] No persons receiving State supplementation only

[3] Less than $500

[4] Not computed on base of less than $500

SOCIAL SECURITY AND FUTURE WORK FORCE

(Continued from page 30)

there is some cause for optimism that the retirement trend will slow down without government intervention If employers need older workers, ways can be found to hire and keep them Lifting mandatory retirement policies or exempting increasing numbers of workers from them are possibilities Unions may agree to such changes—just as they now aim for job security at younger ages and retirement-inducing pension policies at older ages In the future, if demand for workers increases, unions may choose to emphasize higher wages, better working conditions, and job security at all ages in lieu of early-retirement options

Employers and unions may find that midcareer retraining programs are a practical way to prolong productive worklife and forestall problems of skill obsolescence of older workers Flexible work schedules to permit gradual retirement may become more common

A considerable untapped potential of working-age women exists in the United States Nearly half the wives in this Nation are in the labor force, conversely, about half are not Some of those not in the labor force have no preschool children at home The supply of women workers might be increased through on-the-job training and flexible work hours adjusted to school schedules

If the response of older workers and women to genuine employment opportunities does not fulfill society's needs for workers, other avenues exist Present immigration policies are extremely selective They are used to enhance the supply of certain highly skilled professional workers Changes in immigration policy, in conjunction with training programs, could expand the supply of workers in other categories

To sum up, liberalized social security and private retirement provisions during the 1960's and early 1970's coincided with different but compatible goals (1) improving the economic well-being of the elderly and introducing an element of choice in the retirement decision and (2) using retirement policy to reduce job competition from older workers It may be possible to alter the second goal without sacrificing the first Careful review of policy options in both the public and private sectors may yield measures to stimulate employment and encourage prolonging worklife without sacrificing the economic security of the elderly when they ultimately retire