The Retirement Test: Its Effect on Older Workers' Earnings

by KENNETH G. SANDER*

THE RETIREMENT TEST in the Social Security Act was originally introduced to restrict benefits to only those persons whose income was reduced by retirement. Some observers feel that one of its principal effects has been to discourage workers from holding jobs after entitlement because they do not want to lose benefits. So enduring is this belief that "from 1940, when monthly benefits were first paid, to the present time, bills have been introduced in every session of Congress either to change the OASDHI (old-age, survivors, disability, and health insurance) program to an annuity program for persons reaching a designated age, usually 65, or to liberalize the retirement test."[1]

Unquestionably, the test provided a deterrent to work in the 1940's, when benefits were suspended for any month in which a beneficiary earned more than $14.99 in covered employment. However, the test has been successively liberalized until today benefits are reduced $1 for each $2 of earnings from $1,680 to $2,880 and $1 for each $1 in excess of the latter amount. Currently, no benefit is withheld for any month in which earnings total $140 or less and in which there is no "substantial" self-employment. After beneficiaries reach age 72 the retirement test no longer applies and they may earn any amount without losing benefits.

To determine which provisions of the annual part of the retirement test have the greatest effect on the work and earnings of retired workers, the Social Security Administration recently evaluated data for 1963 from its 1-percent continuous work-history sample. Data for that year were the most recent that would be suitable for the kind of analysis undertaken in this study.

Provisions in the 1963 test closely resembled the current provisions: $1 was withheld for every $2 of earnings between $1,200 and $1,700 and the dollar-for-dollar rate applied to earnings above $1,700. Benefits were payable for any month in which total wages were $100 or less and in which the beneficiary had not performed substantial services in self-employment. Full benefits were payable at age 72, regardless of earnings.

Preliminary findings show that

—the amount of annual "exempt earnings" had a considerable effect on the beneficiaries' earnings, but the $1-for-$2 and $1-for-$1 reductions did not

—beneficiaries did not noticeably differentiate between the $1-for-$2 and the $1-for-$1 reduction provisions in determining their earnings levels after they became entitled to benefits; it apparently made no difference to them whether the rate of reduction was at 50 percent or 100 percent.

Adverse Effect on Marginal Pay

Under the retirement-test provisions in effect in 1963, the disposable income of beneficiaries was increased by the after-tax amount of the first $1,200 earned, but the next $500 of earnings was only partially reflected in disposable income because of the $1-for-$2 reduction. The effect of the benefit withholding was to reduce the beneficiary's marginal rate of pay between $1,200 and $1,700 of annual earnings by approximately one-half.

When additional work brought the total earnings of beneficiaries to more than $1,700 but less than the amount at which all benefits would have been suspended, an even greater disincentive to work was created. All the income from earnings within this range was subject to the $1-for-$1 reduction and, since the worker's earnings nevertheless were subject to OASDI contributions and possibly to personal income taxes, in most cases he actually ended up with less disposable income than would have been the case had his earnings stopped at $1,700. Such a beneficiary would thus find himself working at a negative marginal pay rate; the more he earned, the less disposable income he had. The situation began to correct itself

*Program Studies Branch, Division of Economic and Long-Range Studies, Office of Research and Statistics.

[1] Edna C. Wentworth, *Employment After Retirement*, Research Report No. 21, Office of Research and Statistics, Social Security Administration, 1968, page 2.

when earnings reached the point where all benefits were withheld, where disposable income began increasing by the after-tax amount of additional earnings.

Expected Effect on Earnings Distribution

Some characteristics of the distribution of earnings of retired-worker beneficiaries under age 72 can be hypothesized from the information about the effects of the test on a beneficiary's income. A clustering of workers could be expected around annual earnings of $1,200 and $1,700. The $1,200 cluster would be made up of workers who did not want to take home half or less of their gross pay over the "exempt earnings" level and who could not or preferred not to work enough to have all benefits withheld (in addition to those who would not have earned more than $1,200 in any case). Similarly, the $1,700 cluster would contain workers who did not want to work for zero or negative pay rates and who could not or preferred not to earn enough to have all benefits withheld. The earnings intervals between $1,200 and $1,700, where many of the workers present in the cluster at $1,200 would have been in the absence of the retirement test, would have small populations. In particular, intervals immediately above annual earnings of $1,700 would be thinly populated, because of the presence of the negative marginal pay rate.

There were two factors that could have blurred the hypothesized distribution of earnings. The first was the monthly test, which provided for the payment of full benefits for any month in which earnings did not exceed $100. For example, a beneficiary who was entitled to at least the minimum benefit could have earned $2,000 of wages (or any other large sum) in 3 months and still receive 9 months' benefits if wages in each of those months were $100 or less. The second factor was the beneficiary's inability to control the amount of his earnings. In a typical case, the beneficiary may have been confronted with the choice of taking a job that would put him in the $1-for-$1 trade-off area or taken no job at all. He would have had to take the job if he wanted extra income, even though he might have been better off holding his earnings to $1,700.

Proportion of Sample Potentially Affected

Data for the study show the number of workers who were entitled[2] to old-age benefits in all 12 months of 1963, distributed by 1963 earnings credits in $200 intervals. Detail is given for two groups—those who attained ages 63–72 and those who were aged 73 and over in 1963. By limiting the study to living workers who continued to be retired throughout the entire year, earnings amounts are freed from the effects of retirements and deaths. Other factors that affected postentitlement earnings plans, such as illness and unemployment, could not be eliminated. Detail was also available for men and women separately. Combining the data for both sexes seemed appropriate in this study, however, since there were no significant differences between the two sexes' response to the test, and there would be larger sampling errors in the data for men and women separately.

The sample consisted of 99,706 persons aged 63 and over who were, and remained, entitled to retirement benefits throughout 1963. Of these persons, 41 percent were aged 73 and over and not subject to the retirement test in any month of the year. (Only 16 percent of the beneficiaries aged 73 and over had earnings credits in 1963.) Another 41 percent of the beneficiaries were aged 63–72 but did not work in 1963. Only 18 percent of the beneficiaries in the sample were thus potentially affected by the retirement test for all or part of 1963.

Table 1 presents percentage distributions of workers aged 63–72 and aged 73 and over who had earnings credits in 1963, by the amount of earnings credits in that year. The data for those aged 63–72 exhibit plainly only one of the hypothesized characteristics of the earnings curve for workers subject to the retirement test—a clustering of workers around annual earnings of $1,200. The earnings interval of $1,000–$1,199 takes in about 14 percent of the workers aged 63–72, and the two surrounding intervals each include about 9 percent. No clustering is present in the interval containing annual earnings of $1,700, the other potential clustering point.

[2] An entitled worker is one who has been awarded a retirement benefit. He may never actually have been paid a benefit because, for example, he continued to work in covered employment.

TABLE 1.—Percentage distribution of workers aged 63–72 and 73 and over who were entitled to old-age benefits throughout 1963, by amount of earnings credits in 1963 [1]

Interval	Workers [2]	
	63–72	73 and over
Total	100.0	100.0
Without earnings	70.3	83.5
With earnings	29.7	16.5
Workers with earnings, total	100.0	100.0
$1–199	10.2	7.7
$200–399	7.9	6.3
$400–599	9.6	8.3
$600–799	9.5	8.3
$800–999	9.2	6.8
$1,000–1,199	14.2	6.7
$1,200–1,399	9.1	7.8
$1,400–1,599	3.1	4.5
$1,600–1,799	2.1	3.8
$1,800–1,999	1.7	3.3
$2,000–2,199	1.6	2.6
$2,200–2,399	1.4	2.5
$2,400–2,599	1.1	2.5
$2,600–2,799	1.5	2.4
$2,800–2,999	1.1	1.7
$3,000–3,199	1.1	1.8
$3,200–3,399	1.1	1.4
$3,400–3,599	1.0	1.4
$3,600–3,799	.9	1.3
$3,800–3,999	1.0	1.3
$4,000–4,199	.9	1.0
$4,200–4,399	.7	1.0
$4,400–4,599	.7	.8
$4,600–4,799	.8	.9
$4,800	8.5	13.9

[1] It is likely that sampling error makes interval-to-interval changes not significant for intervals above $2,000.
[2] Age attained during 1963.

The intervals above $1,200 appear, as hypothesized, less populated than they would have been without the retirement test, judged by the rapid falloff in the number of workers in those intervals.[3] Intervals for annual earnings above $1,700 are not markedly less populated than those between $1,200 and $1,700—a situation that runs counter to the postulated behavior.

Because of the monthly test, no *a priori* judgment can be made that all beneficiaries with earnings in the intervals just above $1,700 would be financially better off if their earnings equaled $1,700. The lower that earnings are in each month, however, the more likely beneficiaries are to be penalized by having annual earnings not greatly in excess of $1,700, and vice versa. It seems probable that annual earnings around $2,000 reflect low monthly amounts earned throughout the year rather than a few months with high earnings. It can therefore be assumed that a significant proportion of the beneficiaries with earnings close to that amount were being penalized.

Comparisons between the earnings distributions for the age group 63–72 and the group aged 73 and over must be carefully drawn if the intention is to determine the effects of the retirement test on relatively younger workers. The inverse relationship between age and earnings that presumably exists in the age groups under study presents a problem since, other things being equal, members of the older age group would tend to have lower earnings. A more important source of noncomparability is the greater weight in the older age group of beneficiaries who became entitled to old-age benefits when they were older than age 65. The workers who delayed entitlement typically had relatively high earnings, and as a result there were proportionately more workers aged 73 and over in the higher earnings intervals. Their influence is best seen by comparing the percentage of workers earning more than the taxable maximum in the two age groups. About 9 percent of the workers aged 63–72 had earnings of $4,800 or more, and 14 percent of the workers aged 73 and over were in that interval.

To avoid this bias in the data, comparison of the earnings distributions for the two age groups are confined to that portion of annual earnings below $2,000. A worker under age 72 who was entitled to the minimum monthly benefit ($40) payable in 1963 could have drawn some benefits if his earnings did not exceed $1,929 for the year. Hence, it would have been better for almost everyone earning less than $2,000 not to delay entitlement past age 65, since most workers retiring later would have had earnings of that amount or greater.

To facilitate the comparison, ratios of the number of workers aged 63–72 to the number of workers aged 73 and over in each interval and for all intervals below $2,000 combined were computed. Deviations from the all-intervals ratio of 3.1 signify differences between the two earnings distributions, since each interval would have that ratio if the distributions were identical. A ratio greater than 3.1 indicates the presence in that interval of relatively more workers aged 63–72 than of those aged 73 and over Conversely, a ratio

[3] The drop is more abrupt than the data in table 1 indicate. Tabulations of 1964 earnings data indicate that almost one-half of the workers in the $1,200–$1,399 interval earned exactly $1,200 a year.

TABLE 2.—Ratios in 1963 of workers aged 63–72 to workers aged 73 and over, for earnings credit intervals below $2,000 [1]

Interval	Ratio
All intervals below $2,000	3.1
$1–199	3.4
$200–399	3.2
$400–599	3.0
$600–799	3.0
$800–999	3.5
$1,000–1,199	5.5
$1,200–1,399	3.0
$1,400–1,599	1.8
$1,600–1,799	1.4
$1,800–1,999	1.4

[1] Age attained during 1963.

of less than 3.1 means that relatively fewer of the younger beneficiaries than of the older ones appear in the interval.

The ratios (table 2) substantiate the conclusions derived from examining by itself the earnings distribution of the group aged 63–72. Workers subject to the retirement test were clustered in the $1,000–$1,199 interval, as shown by the 5.5 ratio, which is about 75 percent higher than the all-intervals ratio. The cluster apparently extended into the $800–$999 interval, probably indicating both a strong aversion to any loss of benefits and an inability to control precisely the amount of earnings. There was no increase in the ratio for the $1,600–$1,799 interval as there was in the $1,000–$1,199 interval—an indication that no clustering occurred at the annual earnings level of $1,700 .

Intervals between $1,400 and $1,999 exhibit ratios between 1.4 and 1.8—about 50 percent lower than the all-intervals ratio. These ratios indicate that the number of workers aged 63–72 present in the $1,400–$1,999 intervals was probably lower than it would have been in the absence of the retirement test. At the same time, the interval for annual earnings above $1,700, which was hypothesized to be significantly less populated than the interval immediately below $1,700, was no less populated than the interval that contained $1,700 in annual earnings.

Summary

From the prominence of the cluster around $1,200 in annual earnings it appears that the amount of earnings permitted without any loss of benefits was a much more important determinant of worker behavior than either of the trade-off provisions in 1963. Workers also seemed to make no distinction between a $1-for-$1 and a $1-for-$2 withholding of benefits due to earnings. The absence of a cluster at $1,700 and no sharp drop in interval populations past this sum provide strong evidence for this conclusion. The situation could change, however, as workers affected by the $1-for-$1 provision become more familiar with its effect.

The $1-for-$2 provision was originally introduced as a work-incentive measure, but it seemingly has had little effect on work by beneficiaries. This provision can, however, be supported on the basis of equity. A $1-for-$1 trade-off does result in a financial penalty to some beneficiaries for additional work since it represents a 100-percent marginal tax rate. The argument on the basis of equity would require that the $1-for-$2 provision (or a somewhat similar one, such as $1-for-$1.50) be extended to the point of loss of all benefits, so that additional work would, for all practical purposes, always result in a higher disposable income for the beneficiary.