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THE RECOGNITION AND SUBSTITUTION EFFECTS OF PENSION COVERAGE

The results so far suggest that covered households save more not only by the amount of their own and their employers' contributions to pension funds but also by a slight increase in their other saving—a "recognition" effect. A "substitution" effect—whereby pension contributions lead to a reduction in other saving and leave total saving the same or only slightly higher—does not appear, at least for covered households as a whole.[1] Substitution between pensions and other saving ought not to be perfect and would therefore lead to an increase in a household's total saving—in this respect the substitution and recognition effects are similar—but substitution implies a *reduction* (or at the very least, no change) in other forms of saving, so that the slight increase observed can be explained only by a recognition effect or its equivalent. Even so, substitution might still occur in particular households but be offset in aggregate figures by the recognition effect in other households. Evidence of such differential behavior among covered households can be inferred from an analysis of factors so far ignored: vested rights, amount of the employee's contribution, and amount of his employer's contribution.

1. Employees' Vested Rights and Contributions

Vested rights pertain to the employee's retention of pension benefits should he change jobs. In virtually all plans, he gets his own contribution back [2] (though not necessarily with accrued interest) in cash or in deferred retirement benefits, but depending on his age and term of

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[1] Note that the "substitution" referred to here is not between saving and consumption but pension contributions and other saving. "Full substitution" in this sense means that the amount of total saving and of consumption each remains unchanged.

[2] Under Treasury regulations, all plans approved for tax exemption must provide for full vesting of employees' contributions.

service, he may get none, part, or all of the benefits attributable to his
employer's contribution. These benefits are worth nothing without
vesting if the employee is going to change jobs long before retirement.
Because job changes become less likely as age advances, lack of vesting
is less important to older workers as a group, though individually they
may not think so, of course, when they face the prospect of not getting
pension benefits they previously expected. Though there may be vari-
ous characteristics of pension plans of importance to participants, vest-
ing is among the more important ones that might affect saving be-
havior. Table 12 gives the saving ratios of covered households classified
by their reported vested rights (question 5, Appendix). The question
asked whether none, some, or all of the employee's pension would be

TABLE 12

Average Ratios of Total Other [a] Saving to Income of Covered Households [b]
by Reported Vested Rights

	Vested Rights			Differences[c]	
				Some Minus	Full Minus
Age Classes	None	Some	Full	No Vesting	Some Vesting
All	8.5	9.9	7.9	1.4[s] (±0.8)	−2.0[s] (±1.0)
50 and over	7.5	11.0	9.2	3.4[s] (±2.0)	−1.8 (±2.1)

Note: Figures in parentheses give the range of error at the .05 level;
s means significantly different from zero at that level.
   [a] That is, excluding contributions to group pension plans and social
security taxes.
   [b] Same exclusions as for Table 6, as well as households not reporting
vested rights. Number of households under none, some, and full vest-
ing, respectively: 1st row, 2,687, 2,098, and 1,202; 2nd row, 337, 478,
and 254.
   [c] May not exactly equal difference between the ratios shown because
of rounding.

lost if he changed employers. We have interpreted an answer of "none"
to denote full vesting, of "some" to denote some vesting, and of "all"
to denote no vesting. "Some" vesting could mean that benefits from
the employer's contribution may be partly or wholly lost.[3] "No" vest-

   [3] Those who marked "some loss" might have fully vested plans in the legal sense
and have only meant that, if they changed jobs, further contributions to the pension
fund would cease and the retirement income would be less than if contributions

ing presumably means the full loss of benefits from the employer's contribution only. Some households may well be mistaken about their vested rights; it is a technical subject often misunderstood. Although our sample is fairly sophisticated and should be reasonably well informed on this matter, the clarity of question 5 on vesting leaves much to be desired, and tabulations based on it must be interpreted cautiously.

Table 12 at first sight seems to give conflicting evidence on the relative importance of the recognition and substitution effects. To the extent that a pension plan is fully or partly vested, it is more likely that the employer's contribution will be disbursed some day as retirement income, which enhances the pension's value to the household, and therefore it is more likely that other saving will be reduced, if the substitution effect dominates, or increased, if the recognition effect dominates. Yet we observe that the group with partly vested plans saves significantly more in other forms than the groups with the fully and not-vested plans. This pattern also prevails for the older workers, who presumably pay close attention to their pension benefits. If either the substitution or the recognition effect alone predominated, the saving ratio would fall or rise, respectively, with the degree of vesting; the some-vesting group would not have the highest ratio. The figures seem, therefore, to reflect both effects.

One possibility is that a recognition effect accounts for the rise in the ratio from no to some vesting and a substitution effect for the decline in the ratio from some to full vesting. On this interpretation, pension coverage sharpens households' awareness of the requirements for an adequate retirement income and induces them not only to keep up their other saving but to augment it. Table 12 suggests in particular that this recognition effect varies in intensity with the strength of vested rights, since the some-vesting group has a larger saving ratio than the no-vesting group. For all age classes, coverage without vesting raises other saving by almost a full percentage point (8.5 in Table 12 minus 7.7 for the not-covered group in Table 4). Some vesting produces

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had continued until retirement. Or they may have meant that they would lose the benefits of their employer's but not their own contribution, which means "not vested" in our sense. The question was unfortunately ambiguous in distinguishing these possibilities.

a further rise of almost one and a half percentage points (9.9 minus 8.5). Hence the total recognition effect, as estimated by these figures, is 2.2 points (9.9 over 7.7), a substantial increase in the average saving ratio, all in addition to the employee's and his employer's contribution. The recognition effect for the older age class has the same order of magnitude.

Coverage appears to produce its full recognition effect with some vesting. When households achieve fully vested rights, their other saving declines, suggesting a substitution effect. Full vesting endows the employer's contribution with a definite value in contrast to the uncertain value that some or no vesting entails. A stronger effect undoubtedly results from definite than from uncertain benefits. If we interpret the reduction in the saving ratio from some to full vesting as a substitution of a pension's enhanced value for other saving, the amount of substitution for all age classes shown by the table is 2.0 percentage points (7.9 from 9.9), which is substantial.

Since these inferences are based on average figures, individual households may deviate widely from the average pattern. Some may show no recognition effect at all; others no substitution effect; for still others, the substitution effect may occur but at a different point in the range of vested rights. It should be kept in mind that the averages suppress these deviant patterns and present only the total effect of all.

It may perhaps be questioned why the full recognition effect of coverage requires some vesting. Why does not coverage itself, even with no vesting, produce the full effect? One reason may be that the group reporting no vesting contains a large number of households for whom coverage has little or no recognition effect. They may also be poorly informed about their plans and, instead of leaving the question on vested rights blank, mistakenly answered "none." It is possible that many households, without explicit knowledge of their precise vested rights, would presume that they would forfeit retirement benefits in changing jobs. Without additional evidence, however, this is just a guess.

These differences in the saving ratio due to vesting ought, if our interpretation is correct, to be repeated in a classification of covered households by the amount each contributes under its pension plan. Contributions should be similar to vested rights in producing recognition and substitution effects. Table 13 gives the saving ratios of

various contributory groups.[4] These groups pertain to the employees' contributions; employers' contributions, which are neglected here, will

TABLE 13

Average Ratios of Total Other [a] Saving to Income of Covered Households [b] by Amount of Employee's Pay [c] Contributed to Pension Plans

Age Class	None (1)	More Than Zero to 2.9 (2)	3 to 4.9 (3)	5 to 6.9 (4)	7 and over (5)	Combined Groups		Difference, Col. 7 Minus Col. 6[d]
						0 to 4.9 (6)	5 and over (7)	
All	9.1	8.9	9.9	8.2	7.6	9.3	7.9	−1.3[s](±0.7)
50 and over	10.2	9.6	10.7	8.7	10.2	10.2	9.3	−1.0 (±1.5)

Note: Figures in parentheses give the range of error at the .05 level; s means significantly different from zero at that level.

a That is, excluding contributions to group pension plans and social security taxes.

b Same exclusions as for Table 6, as well as households not reporting amount contributed. Number of households in cols. 1 to 7, respectively: 1st row, 2,538, 1,042, 1,336, 1,781, 1,027, 4,916, and 2,808; 2nd row, 351, 158, 247, 382, 232, 756, and 614.

c Head of household's pay, which is often less than family income used to derive saving ratios (see footnote 4, above). From question 15A (see Appendix).

d May not exactly equal the difference between the ratios shown because of rounding.

be analyzed in Section 2, below. The 50-and-over age class is again shown separately as representative of the older workers who are likely to reveal the most concern with their pension benefits.

The table does repeat the pattern found for vesting. The saving

4 The contributions were reported as a percentage of the head of the household's gross pay; this is lower than total family income and makes the percentages too high compared with pension-saving ratios shown in Table 4.

It is also possible that some respondents overstated their contributions. Most industrial plans have a break in the scale of contributions: the percentage amount is zero or lower on the first $3,000 to $3,600 of income or so, and is higher on income above this level. If respondents reported the percentage applied to the higher levels of income, they overstated the percentage of total income contributed.

It may be noted that about two-thirds of the covered households reported making contributions, in part because of the high proportion of teachers and government workers; whereas it is estimated that only 23 per cent of all employees in the United States covered by corporate plans were making contributions in 1959. Their contributions represented about 15 per cent of total dollar contributions.

ratio tends to increase as the contribution rises—up to a point. When the contribution exceeds about 5 per cent of pay, the ratio begins to fall. This pattern is also repeated, though less strongly, by the older age class. (The high ratio for the older class in the 7-and-over group has a large range of error and is probably accidental.) An interpretation corresponding to that suggested for Table 12 is that the increase in the ratio as the contribution rises to 5 per cent reflects the recognition effect, and the fall in the ratio thereafter reflects the substitution effect. No other explanation seems plausible for the failure of the saving ratio to fall as contributions rise from nothing to 4 or 5 per cent of pay,[5] and then to fall sharply as contributions rise further. As shown in the far right-hand column of the table, this fall is significant for all age classes and almost as large, though not significant, for the older age class separately. In summary, the results suggest a recognition effect of coverage, though one that has full force only for households making some contribution to the pension themselves and, as shown by Table 12, having some vested rights. Contributions over 5 per cent or thereabouts are partly substituted for other saving.

We can estimate the amount of the recognition and substitution effects from a breakdown by both vesting and contribution, to avoid interaction between the two that may distort the figures for either classification separately. Table 14 presents this cross classification for all covered households and for these households that are also under social security or are salaried employees of business. The latter group excludes government workers and teachers, who, even if their plans are not vested, may feel secure in their jobs because of civil service or tenure and behave as though their plans were fully vested.

These figures present the same pattern with but slight differences in magnitude from the separate classifications in Tables 12 and 13. The saving ratio rises from the lowest to the middle contributory group within the no- and full-vesting columns (though not within the some-vesting column, where the ratio remains largely unchanged), and falls again with the highest contributory group within each of the three

[5] This increase in the ratio just misses being significant. The difference for all age classes of the none–2.9 combined contributory group over the 3–4.9 group is $0.9(\pm 0.9)$; hence the lower range of the estimated difference is zero at the .05 level of significance.

vesting columns. Within each contributory group, some vesting elicits a higher ratio than no vesting, but with full vesting the ratio declines again. This pattern is also characteristic of the sample after excluding households without social security in part B and government workers and teachers in part C. If covered government workers and teachers all behaved as though their plans were fully vested and followed the pattern in Table 14, this might explain the relatively low saving ratios

TABLE 14

Average Ratio of Total Other [a] Saving to Income of Covered Households [b] by Vesting and Amount of Employee's Contribution

Amount Contributed (per cent of pay[c])	Vested Rights		
	None	Some	Full
	A. All Households		
None to 2.9	8.9	10.8	7.4
3 to 4.9	10.1	10.7	8.4
5 and over	7.2	9.1	7.9
	B. Households with Social Security[d]		
None to 2.9	9.0	10.7	8.1
3 to 4.9	9.9	10.2	9.1
5 and over	7.6	9.8	8.7
	C. Salaried Employees of Business[e]		
None to 2.9	9.3	11.1	8.4
3 to 4.9	11.3	11.5	9.8
5 and over	8.3	11.4	8.0

[a] That is, excluding contributions to group pension plans and social security taxes.

[b] Same exclusions as for Table 6 as well as households not reporting vesting rights or amount contributed, and, in part A, salaried manual workers through an oversight. Number of households, arrayed in the same pattern:

PART A			PART B			PART C		
1,692	598	321	1,672	588	309	1,173	440	157
316	440	212	281	394	187	209	270	89
527	970	588	317	457	332	163	290	108

[c] Head of household's pay (see note c, Table 13, and footnote 4, above).

[d] Same group as presented in Table 5, first row.

[e] Same group as presented in Table 7 under same heading.

of this group (see Table 7) and of households without OASDI (see Table 5), since government workers and teachers comprise the bulk of our covered households not under OASDI.

A difficulty in measuring the recognition and substitution effects is that we do not know the dollar value to households of fully instead of partly vested plans. In other words, there appears to be one effect for increases in contributions and another for the enhanced value of a pension with greater vesting, and the latter value was not measured by our questionnaire. We may circumvent this problem by estimating the effect of contributions on saving, holding the degree of vesting constant. A quadratic regression function was fitted to the data underlying Table 14, part A, and gave the following results:

$$\frac{S}{Y} = .93 \frac{C}{P} - 14.1 \left(\frac{C}{P}\right)^2$$

$$+ \begin{cases} 7.8\% & \text{if no vesting} \\ 9.3 & \text{if some vesting} \\ 7.2 & \text{if full vesting.} \end{cases}$$

S/Y is other saving as a percentage of family income, and C/P is the reported amount contributed as a percentage of head of household's pay (not available as a percentage of household income, which would be preferable). The regression function was made quadratic in C/P, so that it would show both the substitution and the recognition effect. Midpoints were used for the intervals of C/P, and the 5-and-over class shown in Table 14 was divided into two classes, 5–6.9 and 7 and over. For the latter open-end class, the midpoint was arbitrarily taken as $7\frac{1}{2}$.

The negative coefficient for the second term means that saving declines as C/P rises, after first rising to a peak. The peak occurs when C/P equals 3.3 per cent (that is, when $d\frac{S}{Y}\Big/d\frac{C}{P} = 0$). The coefficients for C/P and $(C/P)^2$ differ from zero at the .05 level, though not greatly owing to large standard errors.[6] The regression function is plotted in Chart 2 for the three vesting groups.

[6] The range of error for the coefficient of C/P is ±.91, and for $(C/P)^2$ 10.7, at the .05 level of significance.

CHART 2

Estimated Relation Between Saving Ratio and Employee's Contribution by Degree of Vesting
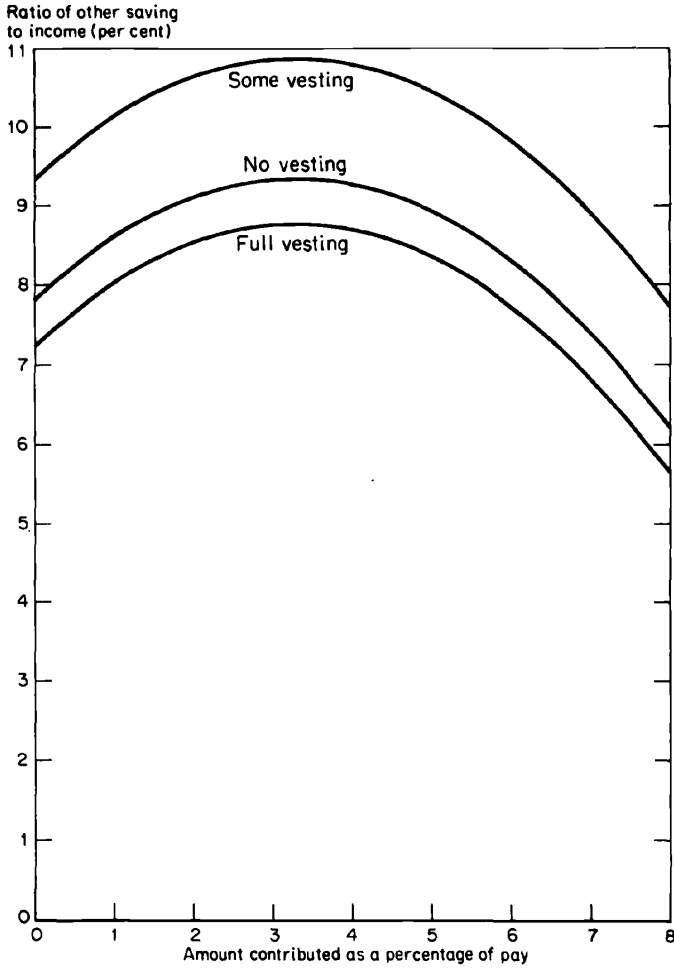
Source: Regression equation in accompanying text.

The quadratic function is at best only an approximation to the saving behavior of the sample; it does not fit the data perfectly, as the large range of error for the regression coefficients indicates.[7] Nevertheless, the function brings out, even though in a crude way, the nonlinear effects on saving of vesting and amount contributed. The nonlinearity of these effects is evident from inspection of Table 14; the regression is simply a convenient summary of what this table shows.

The effect of vesting is given by the differences between the coefficients for the vesting variables. "Some" over "no" vesting raises the saving ratio by 1.5 percentage points (±0.9 at the .05 level) and "full" over "some" vesting reduces the ratio by 2.1 (±1.0) points. Coverage with no vesting and no contributions is 7.8 per cent and, compared with 7.7 for the not-covered group (Table 4), indicates virtually no recognition effect. When the amount contributed goes from zero to 3.3 per cent of pay, other saving rises by 1.5 percentage points; when it rises further, other saving declines. A rise in contributions from 3.3 to 7.0 per cent of pay, for example, reduces other saving by 1.9 percentage points.

One expression for the elasticity of the effect of contributions is given by

$$\frac{d\dfrac{S}{Y}}{d\dfrac{C}{P}} = .93 - 28.2\,\frac{C}{P}, \qquad .$$

and so depends on C/P. When C/P is zero, the elasticity is 0.9; when C/P is 3.3 per cent, the elasticity is zero; when C/P is 5 per cent, the elasticity is -0.48. *Other* saving therefore first increases almost dollar for dollar with contributions, but the increase falls to zero as contributions approach 3 to 4 per cent of pay. Thereafter, contributions substitute for other saving and do so by larger amounts as contributions rise further, the rate of substitution being about one-half when the contribution is 5 per cent of pay.[8] This is a strong effect, but, being

[7] In addition, the midpoint of 7½ for the open-end contributory group may be too low, which would make the slope of the regression steeper than it should be.

[8] These figures probably understate the absolute magnitude of the income elasticity somewhat because the percentage contribution and the difference between contributory groups is overstated (see footnote 4). On the other hand, the magnitude

less than dollar for dollar, reflects the less-than-perfect substitutability of pension funds for other assets. Unless the substitution is exactly dollar for dollar, increased contributions will add to total personal saving entirely apart from the recognition effect.

2. Inclusion of Employers' Contributions

Employers usually contribute much more than employees to group pension plans (except chiefly in the case of government workers, who make closer to one-half of the total contributions to their plans based on current schedules). The size of the recognition and substitution effects may vary with the amount of both contributions. The preceding estimates of size explicitly took only the employee's contribution into account, though they partly took the employer's into account indirectly insofar as the amounts of the two contributions are correlated. By ignoring the employer's contribution, however, the estimates of elasticity could be overstated, especially if, as seems likely, the two are correlated. We need to supplement the analysis with data on employers' contributions.

There are data on the growth of pension funds in the aggregate, but none broken down for individual employees. Plans in which the employer contributes a specified percentage of the employee's pay check are unusual. In most industrial plans employees have no direct way of knowing even approximately their employer's contribution. The employer incurs an obligation for specified benefits to a group of workers, many of whom will later change jobs and not receive any benefits, and the employer decides himself how much to lay aside to meet his obligations. Typically he contributes to a fund set up on an actuarial basis to meet his expected obligations, and no part can be identified as providing for the retirement income of a particular employee except under group deferred annuity contracts. Estimates by employees of their employer's imputed contribution are therefore likely to be unreliable. At best the participant in most plans can be

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may be overstated because the midpoint used for the open-end class may be too low (see footnote 7). That the elasticity becomes a *larger* negative number as contributions rise is a consequence of using a quadratic rather than some other curvilinear regression function. No test was made of alternative functions, so that this characteristic of the elasticity may not describe the data accurately.

expected to know the promised amount of his retirement income (coming to him if he has or acquires fully vested rights), though most may not have even this knowledge; variable-annuity plans do not specify the benefits in terms of a fixed dollar retirement income, although they do specify the employer's contribution.

For most households, therefore, the estimate of retirement income under a plan (question 4) is likely to be more reliable than their esti-mate of the total cost, and so it seems best to estimate the latter indirectly from the former. This can be done from actuarial tables with information on the retirement income, the age of the worker, and the number of years covered by a plan.[9] For example, a worker of 45 who has been covered fifteen years started his payments at age 30; his pension contribution per $100 of monthly retirement income is $150.72 per year until retirement (assumed age 65), to be covered by his own and his employer's contribution.

The total contribution to a pension fund, including in this way the imputed contribution attributable to employers, can be calculated for each sample household and expressed as a percentage of total reported income. Because of deficient information, the estimate was computed for only about half of the covered households analyzed in the pre-ceding tables. Midpoints were used of the five-year intervals for age and years covered and of the intervals for monthly retirement income.

[9] The figures used were as follows, rounded to the nearest dollar. Level contribu-tion paid annually in advance until retirement, for ages at five-year intervals be-ginning at age 20, required to fund a pension of $100 per month for a male life starting at age 65 (no refund on death either before or after retirement, interest earnings of 3½ per cent, and using the Group Annuity Table for 1951 with no projection or age setback):

Age at Start of Contri- butions	Years to Retirement	Level Contribution
20	45	$ 93
25	40	118
30	35	151
35	30	197
40	25	265
45	20	372
50	15	559
55	10	950
60	5	2,163
Lump sum at 65	0	12,761

Arbitrary guesses had to be made for the midpoints of the two open-end intervals, years covered fifteen and over and monthly retirement income $500 and over. The resulting error is likely to be especially large for the older age groups.

With these estimates the average ratio of total contributions (by employee and employer) to income is 6.5 per cent, which is seven-tenths of the average ratio of other saving to income (9.1 per cent) for these same households.

The 6.5 figure is only a rough indicator of total pension contributions because of numerous sources of error. It understates the cost to the employee of a comparable private annuity and the actual cost to the employer, because it excludes disability or death benefits, retirement before age 65, declining mortality rates, part of the higher premiums required for any increases in benefits coming after coverage was acquired (past service credits),[10] and loading charges (commonly 3 to 7 per cent of the premium) to cover administrative expenses. Increases in benefits produce a downward bias in the estimate that rises with the age of the worker. An offsetting bias is the overstatement due to ignoring the turnover of workers. Employees without fully vested rights who change jobs do not qualify for all the benefits attributable to their employer's contribution. Whether the estimate is higher or lower on the average than the actual total cost cannot be determined.

Although these biases distort the level of the estimated pension saving for each household, they do so much less relatively to each other, so that a grouping of the covered households by the relative amount of the total contribution given by these estimates should be tolerably accurate. They are intended, not to show the total dollar growth in pension funds (for which more representative data are available), but to rank the sample households by the total imputed contribution to their pension funds. From a breakdown similar to that of Table 14, we can determine whether the recognition and substitution effects are different by using the total rather than just the employees' contribution. Table 15 presents the figures. They show a recognition effect when the total contribution increases from zero to around 5 per cent

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[10] That is, the estimates assume that the particular benefit schedule in force at the time of the survey had been in effect since the household was first covered.

of income as well as when some vested rights are acquired, and a substitution effect when the contribution (except for the some-vesting column) and vesting go further. The differences in Table 15 are not

TABLE 15

Average Ratios of Total Other [a] Saving to Income of Covered Households [b] by Vesting and Total Amount of Contribution

Total Amount Contributed [c] (per cent of income)	Vested Rights			
	None	Some	Full	Combined Groups
0 - 2.9	8.6	9.7	8.3	8.8
3 - 4.9	8.9	10.2	8.5	9.3
5 and over	8.5	10.2	8.0	9.1

[a] Excluding contributions to group pension plans and social security taxes.

[b] Same exclusions as Table 14 as well as households for which total contribution could not be estimated (i.e., did not answer questions 4 and 15C—see Appendix). Number of households, arrayed in the same pattern:

457	239	177	873
653	445	250	1,348
1,246	1,177	513	2,936

[c] Employee's and employer's contribution; estimated from age, years of coverage, and expected retirement income (see text footnote 9), and divided by family income.

statistically significant, though they are all in a direction consistent with the previous results.

Yet the effects are much smaller than in Table 14, based on employees' contributions alone. The elasticity of the substitution effect from that table, as estimated by the regression function, was 50 per cent at a contribution level of 5 per cent, and this was possibly an underestimate (see footnote 8, above). A corresponding estimate of the elasticity for Table 15 is 6 per cent.[11] Although the maximum recognition effect implied by the second row and column is not much smaller

[11] This was found by taking the change in the saving ratio from the 3–4.9 to the 5-and-over contributory groups, averaged for the three vesting groups, and dividing by the average change in contributions (that is, the difference between 4 per cent as the midpoint of the 3–4.9 contributory group and 7½, the midpoint assumed for the 5-and-over group).

here than in Table 14, it mostly reflects the classification by vested rights and hardly at all that by total amount contributed. The result of including employers' contributions in the amount contributed, therefore, is to reduce greatly the relative size of its effect.

In summary, the elasticity of the recognition and substitution effects in these data is substantial for employees' contributions alone, but only a twentieth or less when employers' imputed contributions are included. Apparently the elasticity with respect to employers' contributions alone is close to zero.[12]

3. Length of Time Covered

Having found two factors—degree of vesting and amount contributed—on which the recognition effect seems to depend, we are led to look for óthers. One possibility is the length of time a household has been covered by a plan. If the recognition effect reflects participants' awareness of the costs and benefits of their plans, one might expect the effect to increase over time. This is easily tested by classifying the covered households by how long they have been covered. Since the large growth in group pension plans has occurred since World War II, a classification by five-year intervals with an open-end class over fifteen years divides the covered households into four groups of about equal size. The data are so organized in Table 16.

Surprisingly, the table reveals no effect on saving of the length of time covered. The saving ratio neither rises with this period, which would indicate that the recognition effect increases over time, nor falls, which would indicate that the substitution effect increases over time. Nor do such changes appear in the subsample of ages 50 and over. The small size of this subsample subjects the ratios to large random variability, but the average for the two subgroups enclosing zero to nine years of coverage shows the absence of any systematic tendency for the saving ratio to rise or fall. The analysis in Chapter 3, Section 4, found that length of time covered and age are only moderately correlated in this sample; otherwise we should expect the ratios to rise with length of time covered as a reflection of advancing age, since the saving ratio

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[12] Since the measures of contribution in Tables 14 and 15 have different denominators, they cannot be subtracted to obtain the employer's imputed contribution. Hence we cannot directly compare the separate effects of the employers' and employees' contributions.

does rise with age. The absence of high correlation between time cov-
ered and age is perhaps surprising; presumably it reflects the newness

TABLE 16

Average Ratios of Total Other [a] Saving to Income of Covered
Households [b] by Length of Time Under a Plan

Length of Time Covered	All Ages	Ages 50 and over
Less than 5 years	8.4	8.1 ⎫ 9.6
5 to 9 years	9.1	11.3 ⎭
10 to 15 years	8.2	9.8
Over 15 years	9.2	9.6

[a] That is, excluding contributions to group pension plans and
social security taxes.

[b] Same exclusions as for Table 6 as well as households not
reporting length of time covered. Number of households in rows
1 to 4, respectively: 1st col., 2,991, 2,065, 1,406, and 1,497; 2nd
col., 227, 197, 296, and 692.

of pension plans and will be less true of samples drawn in future
decades. In any event, there is no evidence that the passage of time
produces marked changes in the response of saving to pension cover-
age. And this is true for a sample composed of people above average
in education and income. For this reason these conclusions seem ap-
plicable to the total population of this country in the near future.

Conceivably a falling and rising tendency both exist and just offset
each other to account for the observed constancy. This possibility can-
not be ruled out, though it seems implausible. It does not show up in
cross classifications of length of coverage by occupation or amount
contributed (not presented). Another possible explanation for this re-
sult is that even fifteen to twenty years is insufficient to produce the
reaction to pension coverage that may come in two generations or so.
In that time everyone will know people at first hand who have had a
plan during their working life and have enjoyed its benefits during
retirement. Such palpable evidence of how these plans work may per-
haps evoke a stronger response to coverage—though whether to enhance
the recognition or the substitution effect, or both, cannot be said. At
present the recognition effect appears to depend only on degree of
vesting and amount of contribution (chiefly by the employee himself).