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POSSIBLE EFFECTS OF PENSION PLANS ON AGGREGATE PERSONAL SAVING

The growth of group pension plans has given a new importance to the old question of whether they affect the total volume of saving in the economy. As this institution spreads, saving in other forms may be reduced by an equal amount, leaving the rate of total saving unchanged, as is to be expected with most shifts in demand. Substitution among products is the reflection in the marketplace of changing production techniques and standards of taste in the economy at large. And this is true for substitutions among forms of saving when financial needs and institutions change. Alterations in form will not materially change the total volume of saving so long as the new assets are close substitutes for the old.

In several respects, however, group pension plans are imperfect substitutes for other forms of saving and may on balance add appreciably to the total. They are set up to cover large groups; as a result, they require nearly all eligible workers to participate and do not allow variations in provisions—particularly the amount contributed—to suit particular individuals. In addition, most plans do not permit loans or lump-sum payments before retirement and so cannot be counted on as a reserve fund for contingencies. In short, the plans are inflexible and illiquid compared with other outlets for saving, such as savings accounts, securities, or life insurance with a cash-surrender value. Furthermore, most do not vest the benefits from the employer's contribution in the employee at an early date, which means that, though the participant in a contributory plan is sure of receiving his own contribution in a lump-sum refund or retirement income should he ever change jobs, he will not qualify for benefits financed by his employer should he change jobs before a stipulated age and term of service. This uncertainty over whether he will benefit from the em-

ployer's contribution sharply reduces its value to the employee and its substitutability for his other saving.

The rapid growth of pension funds must be attributed to advantages other than flexibility or liquidity. A possible attraction is the very inflexibility of the plans. Some people may prefer to save under formal arrangements, possibly because of the convenience (regular deductions made from the paycheck) or the strong inducement to save regularly and avoid backsliding. Also, group plans are presumably cheaper to administer (offer more benefits per dollar of contribution) than individual ones.

There may be advantages to the employer to induce him to incur the trouble and expense of paying part of gross wages in the form of contributions to a pension plan. He may hope to improve his public relations with the community by fostering a reputation for taking care of his workers after they retire. Another, more tangible, advantage is the dampening effect of pensions on turnover, since an employee without vested rights who changes jobs receives no benefits from the employer's contribution.[1]

Another advantage—income tax deferment—deserves emphasis because it has become important concomitantly with the rapid growth of plans and also because it ought to induce a substitution of pension contributions for other forms of saving.

The federal income tax has usually applied to income received in cash or its equivalent. Nonwage fringe benefits provided by employers, including their contributions to qualified pension funds as well as the interest earnings, are not taxed as income to employees. (Any contributions to plans by employees are taxed and are not involved in this exemption.) When the employee draws on the pension in his retirement years, of course, the payment is taxed as income, but his income tax is then reduced by the double exemption (if he is over 65) and probably also by a lower effective tax rate. Thus, the exemption of the employer's contribution allows employees to receive a tax deferment on part of their pay if it is put into a pension fund. To meet the technicalities of the tax code, employees' paychecks do not list employers' pension contributions as part of total income. For economic

[1] On these points, see W. C. Greenough and F. P. King, *Retirement and Insurance Plans in American Colleges*, New York, 1959, pp. 11–14.

analysis (even if not tax law), all fringe benefits belong in total income.[2] It would, of course, be difficult to attach a precise dollar figure to many of them, especially pension contributions made on a group basis. Nevertheless, a dollar of total income so defined purchases more equity in a pension fund than in a private annuity—typically from 20 to 30 cents more at current tax rates.[3] This can be viewed as a fall in the price (or a rise in the return) of those assets purchased through approved plans. Since a fall in price leads to an increase in the amount demanded, the sharp rise in income tax rates may in large part explain the growth of pension plans since the early 1940's without assuming any change in consumer preferences for them.

The probable efficiencies of providing annuities in large numbers would explain the prevalence of group plans, but not their rapid growth at this particular time. An important factor associated with World War II was the sharp rise in income tax rates. Government wage controls, by exempting employers' contributions, were also important at that time because they enabled firms to attract labor in a tight market by offering higher gross wages. Then, in the early 1950's, the rate of growth of new pension plans spurted. This occurred at about the same time that income taxes were increased in the Korean war; in the same period, also, the Supreme Court (in the Inland Steel case) confirmed a 1948 ruling of the National Labor Relations Board that labor unions may bargain for pension programs.

With the tax exemption, saving through pension plans yields a higher return. The theory of consumer choice—assuming preferences and total income unchanged—implies that total personal saving in-

[2] The Department of Commerce includes estimates of supplementary labor income (fringe benefits not in kind) in personal income and saving, and statements about aggregate personal saving in the following pages adhere to this definition. In the sample survey, discussed subsequently, income and saving reported by households undoubtedly exclude nonwage fringe benefits, and references to income and saving as reported by these households should be understood to exclude all such benefits.

[3] Total revenues from income taxes are reduced by the same amount, because the employer's contribution is a deductible business expense. Paying wages and salaries in this form does not raise before-tax profits and so does not produce more revenue for the corporate income tax.

Restrictions on the deductibility of this expense were extended by the Internal Revenue Code of 1942, which specified that pension plans had to be nondiscriminatory among employees to be deductible. This regulation was intended to prevent the use of plans to pay high benefits to executives only, as might otherwise have happened, especially because of the excess profits tax then in effect.

creases because the price of a pension fund has declined, but increases by no more than the amount contributed to pensions because their provisions allow no higher contribution. Also, pension contributions may substitute for other forms of saving. At one extreme—full substitution—total saving will be unchanged, and at the other extreme—no substitution—it will be higher by the full amount contributed. Accordingly, nonpension saving might stay the same or might decline by some fraction of the amount contributed to pension funds.

In a statistical comparison of households designed to explore this range of possibilities, *reported* income will not include the value of nonwage fringe benefits. The total income of a household covered by a pension plan is thus higher by the discounted value of the expected return from pension benefits (taking account of possible job changes) attributable to the employer's contribution; but, as reported by the household, pension coverage has not changed total income. Ordinarily, households with higher total incomes spend more on a variety of items. But here the extra income is received in the form of an equity in a pension fund and in contributory plans entails additional payments by the household, so that, in order to spend more on other items, households must somewhere reduce expenditures. Reductions would logically occur among the substitutes for pension contributions, namely, other saving, but not by the full amount of pension saving because income is higher. The ratio of total saving to reported income would therefore be higher; that to total income, including fringe benefits, would be the same or higher, and not lower unless the income elasticity of the saving ratio was negative (which no one contends).

Other kinds of fringe benefits create complicating effects. Households covered by pensions are likely to have more of other fringe benefits and so to have higher incomes, including all such benefits. On this score, they should spend more on everything, including financial assets. If many fringe benefits were substitutes for other forms of saving, however, covered households would then save less in other forms. The total effect of fringe benefits on saving is not clear. One might guess that the total effect is to reduce other saving, since these benefits consist mainly of contributions to pension funds and various kinds of insurance that reduce the need for reserve funds. On this reasoning,

covered households might have lower ratios of other saving to reported income.

Averages for a representative sample of households large enough to suppress random errors should bear out these conclusions, so long as the assumption of no change in preferences remains valid. Quite different results seem possible, however, once other kinds of behavior ruled out by this assumption are admitted. Many households may display ignorance or indifference toward pension plans and react passively to becoming covered, in which case they would make no change in their consumption expenditures other than minor reductions here and there if necessary to make up for any contributions deducted from their paychecks. Such a reaction is equivalent to a change in (or lack of) preferences, because the covered households do not adjust to the new array of possibilities opened up by the pension plan; this behavior can be rationalized as a shift in preferences. Nevertheless, it does not lead to observable results different from the preceding theory. The passive response also produces no change or a slight decline in other saving, and a rise in total saving by nearly the full amount contributed to pension funds by employees and employers.

One possibility that gives a different result is suggested by the oft-repeated contention of insurance salesmen that their best prospects are veterans with G.I. insurance. "Get a man to break the ice with his first dollar of insurance or saving," their adage seems to go, "and other dollars will follow the first." The implication is that a man buys information as well as a claim with his first purchase of these items, and perhaps also cultivates a taste thereby for financial security; he takes a new look at retirement needs and available ways to save for them, and overcomes an indifference bordering on distaste that previously discouraged these expenditures. To be sure, financial salesmen could be observing a tendency for young men with G.I. insurance to have higher than average propensities to save and so be the best prospects for further purchases. This is in line with the foregoing theory. But if the first acquisitions do change preferences in favor of more, a different phenomenon will be observed: government insurance distributed among the population at random, such as G.I. insurance seems to have been, induces the insured households not to substitute it for their other insurance but to acquire even more. Applied to pensions, this behavior

suggests that a plan instituted among a large group of workers more or less at random crystallizes dormant saving intentions and induces an increase in their other saving. This sort of behavior cannot be deduced from the pure theory of consumer choice, not at least assuming full knowledge.

Economists have not been unaware of this possibility. In 1950 George Garvy, assessing the effect of the rapid growth of group pension plans, wrote: "Some individuals may even be inclined to save more to supplement the (on the whole) relatively meager pensions, now that for many the prospect of spending their last years working or with relatives or in an institution are no longer the only alternatives." [4]

George Katona has voiced a similar opinion:

> Do collective security arrangements obviate the need for independent saving? We must remember that in former generations, financial protection for old age was not generally achieved by individual savings efforts. In many socioeconomic groups this type of aid was provided by relatives, particularly grown children. Also, at the present time and probably for years to come, there is a considerable gap between the standard of living to which an employed family is accustomed and the standard of living provided by social-security benefits and private pension plans. Therefore it is conceivable that the minimal protection afforded by collective insurance plans stimulates people to save in order to achieve a more adequate and complete level of protection.[5]

From all these considerations it may be concluded that pension plans ought not to decrease aggregate personal saving, but whether they have increased it none at all (because they substitute perfectly for other saving) or by more than the amount contributed (because of the opposite effect just discussed) is not clear.

Briefly, the evidence presented in the following chapters suggests that pension plans do in fact increase aggregate personal saving and by about (possibly slightly more than) the full amount of employees' and employers' contributions to the plans. A detailed analysis of the data also reveals evidence of the partial substitution of pension con-

[4] "The Effect of Private Pension Plans on Personal Savings," *Review of Economics and Statistics,* August 1950, pp. 223–226. Cf. Charles L. Dearing, *Industrial Pensions,* Washington, 1954, pp. 173–174, who foresees zero substitution.

[5] "Attitudes Toward Saving and Borrowing," in Board of Governors of the Federal Reserve System, *Consumer Instalment Credit,* Washington, 1957, Part II, Vol. I, pp. 453–454. Also see his book, *The Powerful Consumer,* New York, 1960, pp. 98–99.

tributions for other saving in households having fully vested rights and making fairly large contributions of their own. Covered households as a group, however, increase their *other* saving, which appears to reflect an effect of the kind suggested. This evidence, it must be emphasized, is based on a sample survey of a select population that cannot be considered representative of the total population of the United States. Nevertheless, the argument of the next chapter, which describes the sample, is that these data may be indicative of the future effects of pension plans and may magnify but should not distort their present effects.

The increase in aggregate personal saving to be inferred from these data implies an increase in aggregate national saving only if the other two economic sectors—government and business—do not reduce their saving by enough to offset the increase. Although nothing definite is known about their reactions to pension plans, there are strong grounds for believing that their saving is affected comparatively little. See Chapter 6.

Payments from pension funds to retired workers must also be taken into account. When and if the funds stop growing (that is, when they have been in effect a long time and if the labor force stops growing), payments will just balance contributions plus interest earnings. Presumably their effect on saving will then be nil—at that time, indeed, aggregate net saving in the economy solely to provide for old age may approximate zero. That time is not yet in sight; the labor force will continue to grow within the foreseeable future. Present payments to retired workers (if nearly all spent on consumer goods, as seems likely) offset part of the effect on saving of contributions to pension plans. These payments therefore must be deducted in figuring the net effect, which may be described as the combination of three quantities: the net growth in pension funds (contributions plus interest earnings less benefit payments), the change in business and government saving, and the change in personal saving in other forms.