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SEX AND 401(K) PLANS

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Introduction

Over the past two decades, private pension coverage has shifted from defined benefit plans to 401(k) plans. This shift has many important implications for the retirement security of older Americans. One so-far-overlooked consequence is that it has changed the relative price of annuities for men and women. Annuities are financial instruments that guarantee retirees a lifetime stream of income in exchange for an initial premium payment. The reason for the change in the price is that annuities provided under the two types of plans are regulated by different legal regimes.

Federal labor law covers annuities provided through defined benefit pension plans, and labor law requires equal pay for equal work. The Courts have interpreted this requirement to mean that a man and a woman with equal earnings histories should receive equal monthly pension benefits. Since women and men have different average life expectancies, they will receive different lifetime benefits.

In contrast, 401(k) plans do not generally offer annuities; they provide lump-sum payments at retirement.¹ Retirees who want to annuitize the lump sums must take the money to an insurance company, which will sell them a single premium individual annuity (SPIA). Insurance companies, which are regulated by state insurance law, will

provide smaller benefits to women and larger benefits to men than would defined benefit plans. Since women live longer than men do on average, men and women as groups will receive equal lifetime benefits.²

Labor Law Requires Defined Benefit Plans to Provide Unisex Annuities

Defined benefit pension plans generally provide pensions that are based on a percentage of final pay for each year of service. For example, for each year of service, a plan might provide a benefit equal to 2 percent of final earnings. So, employees who worked for an employer for 25 years would be entitled to a benefit equal to 50 percent of final salary. The benefits are typically paid as an annuity — that is, retirees receive a benefit each month for as long as they live.³

Two U.S. Supreme Court decisions mandate equal benefits for men and women under defined benefit plans. In 1978, in *City of Los Angeles Department of Water & Power v. Manhart*, the Court ruled in a 6-2 decision that employer-provided pension plans may not require female employees to make larger contributions than their male counterparts in order to receive the same monthly benefits. According to the Court, such a practice violates Title VII of the 1964 Civil Rights Act by treating “individuals as simply components of a group.” Alluding to the fact that not all women outlive all

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¹ 401(k) plans may offer an annuity withdrawal, which would also be required to provide equal benefits to men and women, but few 401(k) plans offer such an option. In the future, the percentage of plans offering only a lump-sum option is likely to increase sharply, because the Internal Revenue Service recently issued regulations permitting

sponsors of defined contribution plans to discontinue all options other than lump-sum payments (U.S. Department of the Treasury, 2000).

² Group annuities are cheaper than individual annuities, and so would still provide a larger benefit to all participants, even if individual annuities were priced on a unisex basis.

³ Lump-sum payments are also becoming more frequent options among defined benefit plans, in large part due to the conversion of conventional defined benefit plans to so-called “cash balance plans.”

men, the Court pointed out that, “Even though it is true that women as a class outlive men, that generalization cannot justify disqualifying an individual to whom it does not apply.”⁴ The Supreme Court compared the practice of differential pricing of annuities for men and women to classifying employees by race or national origin and basing compensation on the differential life expectancies of those groupings.

Five years later, in *Arizona Governing Committee for Tax Deferred Annuity and Deferred Compensation Plans v. Norris*, the Court expanded its earlier ruling in a 5-4 decision to also require equality between the sexes in deferred compensation plans sponsored by the employer but administered by outside companies.⁵ In this case, the employer did not accumulate funds in anticipation of future benefit payments. Instead, employees’ contributions went directly to the ultimate provider of the annuity, one of several insurance companies selected by the employer. Male and female employees who retired at the same age with the same amount of deferred compensation would then receive different monthly benefits because of their differing life expectancies. The Court’s decision requires that, if an employer contracts with an insurance company to administer its retirement plan, such a plan must provide equal monthly benefits to male and female participants since the benefits are part of an employee’s compensation.

Federal non-discrimination standards in employment require that employers provide equal monthly benefits for men and women, but civil rights law places no constraints on how the necessary funding level for a pension plan should be determined. In general, the actuaries for a defined benefit pension plan use sex-distinct mortality tables to estimate the lifetime benefits the plan can expect to pay out to a man and a woman. The Internal Revenue Service requires employers to use a 50-50 average of male and female mortality tables for the firm’s tax calcula-

tions. Since pension law requires only that the actuaries’ assumptions be “reasonable,”⁶ they use a variety of methods to combine estimated benefits for men and women to determine the required employer contribution. In all cases, the goal is to assure that enough funds will be available to pay equal benefits to men and women.

State Insurance Law Allows Annuity Payments to Vary by Sex

While annuities provided through defined benefit plans are subject to federal labor standards, individual annuities sold by insurance companies, such as the SPIA, are regulated under state laws. Some states prohibit the use of sex in setting premiums for certain products such as auto insurance, but every state — except Montana — allows insurance companies to vary premium rates and benefits by sex for annuities and other products.⁷

The issue of sex-based insurance pricing has been a topic of frequent debate in some states. For example, in Massachusetts, the Insurance Commissioner ruled to eliminate sex-based pricing for auto insurance in 1978, and the legislature soon after passed conforming legislation. In 1988, the Massachusetts Insurance Commissioner issued regulations that prohibited sex discrimination in all insurance products, but the Supreme Judicial Court ruled that only the state legislature had the authority to make such a change. Each year, the legislature faces a proposal to require that all insurance rates not differ by sex.

Regardless of efforts to change the law, under current rules in Massachusetts and elsewhere, annuities vary by sex. According to on-line quotes from GE Financial Network obtained in 2001, a 65-year-old woman purchasing a \$100,000 lifetime annuity contract could expect to receive \$695 per month while a man of the same age would get \$740 per month. Again, given differences in average life expectancy, lifetime benefits for men and for women would be expected to be equal.⁸

⁴ *Los Angeles Dept. of Water & Power v. Manhart*, 435 US 702 (1978).

⁵ *Arizona Governing Committee v. Norris*, 463 US 1073 (1983).

⁶ ERISA §302 (c) (2).

⁷ A similar pattern emerges abroad. A European Union directive requires sex neutrality in occupational pension schemes, comparable to U.S. labor law governing employer-provided pensions. However, the directive excludes from this sex-neutrality requirement “insurance contracts to which the employer is not a party,” so that retirees who

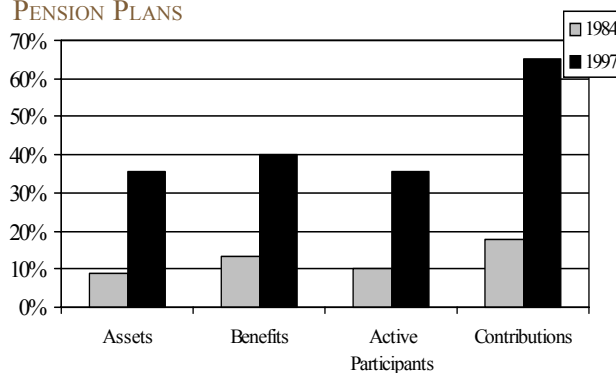
purchase annuity contracts individually are not covered by this requirement (Council Directive 96/97/EC of 20 December 1996). In the United Kingdom, where the law stipulates that retirees must use at least 75 percent of their occupational or personal pension accounts to purchase annuities upon retirement, men and women receive different monthly benefits but the same expected lifetime benefits.

⁸ In fact, few people covered by a 401(k) plan actually purchase annuities. In 1999, sales of SPIAs amounted to only \$7 billion (LIMRA International, 2000).

It's Becoming a 401(k) World

The treatment of the sexes in individual annuity pricing has arisen as an issue because of the marked shift over the last two decades in the character of private pension plans. As shown in Figure 1, by 1997, 401(k) plans had come to account for a significant share of total pension plans in every major measure of comparison: assets, benefits paid out, active participants, and contributions. These plans have grown enormously for a number of reasons. They are more attractive to workers, who appreciate their greater flexibility and portability. Employers usually find 401(k) plans to be less costly to administer than defined benefit plans and find themselves relieved of the investment risk, which shifts to the employee. The shift to 401(k) plans means that those who want annuities will be buying a product regulated by state law rather than federal labor standards.

FIGURE 1: 401(k) PLANS AS A PERCENT OF TOTAL PENSION PLANS



Source: U.S. Department of Labor, 2001.

The Underlying Issues in Annuity Pricing

Given the pattern of annuity pricing, it may be useful to examine how different legal regimes interpret data on life expectancy. On average, life expectancy at 65 is 19.1 years for women compared to 16.1 years for men (U.S. Department of Health and Human Services, 1999). In addition, as shown in Table 1, women continue to have longer life expectancies than men at each subsequent age. Insurance companies use this information to pay a larger monthly benefit to men, since on average they expect to make fewer such payments to men than to women. In the end, the total amount insurers expect to pay out should be equal for men and women.

TABLE 1: LIFE EXPECTANCY FOR THOSE LIVING TO SELECTED AGES

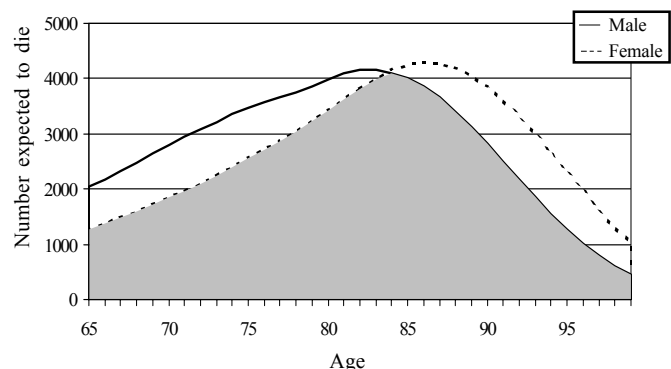
AGE	MALE	FEMALE
65	16.1	19.1
70	12.8	15.4
75	10.0	12.1
80	7.5	9.1
85	5.5	6.6
90	4.1	4.8
95	3.0	3.5

Source: U.S. Department of Health and Human Services, 1999.

The Supreme Court's rulings did not focus on average life expectancy for men and women. Instead the Court considered the full distribution of mortality rates and the uncertainty implicit in the distributions. Figure 2 shows the projected distribution of deaths for a group of 100,000 men and 100,000 women who are alive at age 65. What the figure reveals is that the death ages of men and women overlap significantly. In fact, it is possible to match 86 percent of the death ages of these two groups, the shaded area in the graph. The remaining 14 percent of the population is divided evenly between long-lived women and short-lived men.

Although the men and women in the 86-percent group are equally situated in terms of life expectancy, sex-based annuity payments give the lower price charged to short-lived men to all men in the overlap group and the higher price charged to long-lived women to all women in the overlap group. Given the overlap in death rates, the Supreme Court emphasized in *Manhart* and *Norris* that it is not possible to know how long an individual will live simply by knowing his or her sex. That is, even though women on average outlive men, any individual woman might die early. Based in part on

FIGURE 2: ACTUAL MORTALITY DISTRIBUTIONS FOR MEN AND WOMEN



Source: U.S. Department of Health and Human Services, 1999.

this finding, the Court disallowed the use of sex as a predictor of an individual's life expectancy, and instead required equal monthly benefits for equal contributions.

It is important to note that the Supreme Court, in requiring unisex pricing, faced a somewhat simplified problem in that in most cases, individuals in defined benefit plans must take their benefits as annuities. In contrast, individuals who receive lump sums from their 401(k) plan can choose whether to purchase an annuity. One concern with unisex pricing in a voluntary environment is that it could amplify the adverse selection problem already associated with annuities. That is, the people who purchase annuities today – both men and women – are those who expect to live for a long time. To cover their expenses, insurance companies have to price annuities accordingly, which makes them expensive for the average person – both male and female.

If insurers are required to implement unisex pricing, they might choose to use a simple average of life expectancies for men and women to determine the price. As a result, average-lived men would face an even higher price than they do now, while average-lived women would find annuities more affordable. In this case, on balance, the adverse selection problem would remain about the same. Alternatively, insurers may feel that only long-lived women will buy a unisex annuity. In this case, they might price unisex annuities more in line with the price for long-lived women. To the extent that companies choose this approach, women with average life expectancy will remain at the same disadvantage as they do today and men will face an even higher price than they would under simple unisex pricing. Such an outcome could result in an even greater adverse selection problem than exists in the current sex-differentiated market.

Implications for Social Security

Sex differences in individual annuity pricing raise an important consideration for designers of proposals to create individual accounts for Social Security in the United States. The current Social Security system provides unisex benefits, so that men and women of the same age with the same history of contributions receive the same monthly benefit, regardless of their life expectancies.

Since a stated goal of the Social Security system is to provide economic security for those who have retired, some proposals for individual accounts include provisions for annuitization in order to insure retirees against the risk of outliving their savings. If annuities are included, deciding whether to follow the Social Security tradition of unisex benefits or to opt for the prevailing industry practice of sex-distinct pricing will be an important public policy question.

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