

MAKING ECONOMIC SENSE OUT OF UNISEX LIFE INSURANCE

(Or the Difference Between Cost and Value and Why It Matters to Real People)

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If there is any situation in which sex discrimination seems to be justified, it is in the pricing of life insurance and related products. Women live longer than men on the average.¹ It is therefore cheaper for an insurance company to insure the life of a woman because the benefits will be paid out later, and the present value of the payoff is therefore lower. Thus, the insurance industry and numerous commentators have argued that to charge men and women of the same age the same price for life insurance would constitute a subsidy running from women (who would pay too much) to men (who would pay too little).² As a result, men would buy too much insurance and women would buy too little. Similarly, an annuity should cost more for a woman than for a man because the longer an annuitant is likely to live, the more costly it is for the insurance company to pay the annuity.³ With unisex pricing women would buy too much in annuities and men would buy too little. Or so the argument goes.

Despite this compelling argument, the Supreme Court has held that gender-based insurance rates constitute illegal sex discrimination in connection with employment.⁴

¹ While there is no doubt as a matter of statistics that women live longer than men, several commentators have questioned whether this is a matter of gender or other factors and thus whether it is true at all times and in all cultures and indeed whether it is true as a predictive matter at present in the United States. See Lea Brilmayer, Richard W. Hekeler, Douglas Laycock & Teresa A. Sullivan, *Sex Discrimination in Employer-Sponsored Insurance Plans: A Legal and Demographic Analysis*, 47 U. Chi. L. Rev. 505 (1980); Lea Brilmayer, Douglas Laycock & Teresa Sullivan, *The Efficient Use of Group Averages as Nondiscrimination: A Rejoinder to Professor Benston*, 50 U. Chi. L. Rev. 222 (1983); Barbara D. Underwood, *Law and the Crystal Ball: Predicting Behavior with Statistical Inference and Individualized Judgment*, 88 Yale L. J. 1408 (1979). As I argue here, it makes no difference anyway. Thus, I do not address the question in any detail.

² See generally Kenneth S. Abraham, *Efficiency and Fairness in Insurance Risk Classification*, 71 Va. L. Rev. 403 (1985).

³ *Id.*

⁴ In *Arizona Governing Committee for Tax Deferred Annuity and Deferred Compensation Plans v. Norris*, 463 U.S. 1073 (1983), a bare majority of the Court agreed that the Civil Rights Act of 1964, 42 U.S.C. 2000e-2(a), prohibits an employer from offering a even a privately administered retirement plan that pays lower monthly benefits to women than to men who have made the same contributions. See *Norris*, 463 U.S. at 1098-99. See generally Craig Joseph Robichaux, *Note: Norris v. Arizona: A Move Toward Unisex Insurance*, 45 La. L. Rev. 149 (1984); *Note, Sex and the Single Mortality Table*, 8 Geo. Mason U. L. Rev. 149 (1985). See also *City of Los Angeles Department of Water v. Manhart*, 435 U.S. 702 (1978) (same result under state administered plan). In *Manufacturers Hanover Trust Co. v. United States*, 775 F.2d 459 (2d Cir. 1985), the Second Circuit upheld the use by the IRS of gender based mortality tables in connection

Legal scholars of the law and economics persuasion (of which I count myself one) have generally condemned the Supreme Court's position as inconsistent with the principle that ordinarily individuals and enterprises should bear their own identifiable costs so as to avoid the misallocation of society's resources.⁵

It is the thesis here that the Supreme Court is correct and that the argument for gender-based rates is wrong *as a matter of economics*. In addressing the issue of gender-based insurance rates, most commentators have focused on the competing goals of economic efficiency on the one hand and non-discrimination under the civil rights laws on the other hand. As a result, the issue has been defined as one in which one or the other of these goals must yield. The approach here is different. It is not founded on any notion of what is right or wrong under the civil rights laws, although it may well have implications for how those laws should be interpreted. Rather, the approach here is distinctly economic in that it focuses on how consumers of insurance would bargain with each other if they were able to do so. This article also parts company with the existing literature in that it does not treat the insurance company as a party to the bargain. This is not to say that insurance companies do not have an interest in this debate. It is only to say that insurance is in essence a contractual arrangement by which consumers share risk with *each other* and thereby reduce or eliminate that risk.⁶ Thus, in order to think clearly

with the valuation of reversionary interests of a decedent's estate. Nevertheless, the IRS adopted a unisex mortality table the very next year.

⁵ See Abraham, *supra*; Regina Austin, *The Insurance Classification Controversy*, 131 U. Pa. L. Rev. 517 (1983); George J. Benston, *The Economics of Gender Discrimination in Employee Fringe Benefits: Manhart Revisited*, 49 U. Chi. L. Rev. 489 (1982); Merton C. Bernstein & Lois G. Williams, *Title VII and the Problem of Sex Classifications in Pension Programs*, 74 Colum. L. Rev. 1203 (1974); Spencer L. Kimball, *Reverse Sex Discrimination: Manhart*, 1979 Am. B. Found. Research J. 83; George Rutherglen, *Sexual Equality in Fringe-Benefit Plans*, 65 Va. L. Rev. 199 (1979); Leah Wortham, *The Economics of Insurance Classification: The Sound of One Invisible Hand Clapping*, 47 Ohio St. L.J. 835 (1986). But see Lea Brilmayer, Richard W. Hekeler, Douglas Laycock & Teresa A. Sullivan, *Sex Discrimination in Employer-Sponsored Insurance Plans: A Legal and Demographic Analysis*, 47 U. Chi. L. Rev. 505 (1980); Lea Brilmayer, Douglas Laycock & Teresa Sullivan, *The Efficient Use of Group Averages as Nondiscrimination: A Rejoinder to Professor Benston*, 50 U. Chi. L. Rev. 222 (1983); Robert H. Jerry II & Kyle B. Mansfield, *Justifying Unisex Insurance: Another Perspective*, 34 Am. U.L. Rev. 329 (1985). See generally Freedman, *Sex Equality, Sex Differences, and the Supreme Court*, 92 Yale L. J. 913 (1983); Bergmann & Gray, *Equality in Retirement Benefits*, Civ. Rights Dig., Fall 1975, at 25. During the course of her confirmation hearings, Judge -- now Justice -- Ruth Bader Ginsburg mused that sometimes laws against discrimination may operate unfairly. As an example, she cited the rule set down in *Norris* that a state may not discriminate between male and female employees in granting insurance and pension benefits. Justice Ginsburg explained that even though it is well known that women live longer than men, it is nonetheless wrong to grant women cheaper life insurance and men cheaper pension benefits even though as a matter of economics it seems to make sense to do so. In other words, the principle that it is wrong to discriminate on the basis of gender trumps what would otherwise be a compelling cost-benefit analysis. It is remarkable that the controversy over unisex insurance remains so troubling.

⁶ Indeed, an insurance company would be the first to note that it is only practical to write an insurance policy if there is a large enough group of consumers to allow the risk to spread widely. Otherwise, insurance is nothing more than financing arrangement. Insurance is by definition a cooperative venture. A consumer buys into a pool of risk that is shared with other consumers. The insurance company may be seen as a mere trustee of sorts. One might even wonder whether insurance should be considered a public good. Recent efforts to reform the health insurance system in the United States suggest that many policymakers

about unisex life insurance rates, one must focus on the interests of policyholders *vis a vis* each other.⁷

Commentators of all persuasions have recognized the obvious point that men and women pay different rates for life insurance products under a gender-based insurance scheme. Those who argue in favor of unisex rates have focused on the obvious inequality in premium payments or benefits. Those who argue in favor of gender-based rates argue that inequality in premiums or benefits is superficial and that they are in fact equal given the differing life expectancies of men and women. Both sides, however, have missed the crucial point that people do not buy life insurance for the lump sum death benefit but rather for the *income* it will generate for the beneficiary.⁸ And it almost goes without

are sympathetic to such a view. Indeed, the insurance industry has traditionally been based on a cooperative structure. Until very recently most big insurance companies were mutual companies, that is, companies owned by the policyholders. To be sure, mutual insurance companies seem to be evolving away in favor of stock companies. But that does not change the fact that insurance depends on risk sharing among policyholders. Moreover, a stock company is just as able to compete with other insurance companies to devise policies and pricing that are the more attractive to consumers. Indeed, a stock company may be more inclined to compete because management has an interest in pleasing the stockholders, whereas with a mutual company the policyholders may figure that if they pay too much for insurance they will probably get it back in the form of dividends. Thus, it is inherently less efficient for an insurance company not to be owned (which may be why whales are endangered and chickens are not even though people eat a lot more chicken than whale). See Garrett Hardin, *The Tragedy of the Commons*, 162 Science 1243 (1968).

⁷ Lea Brilmayer, et al., argue that the claim that it costs more to insure a man or provide an annuity to a woman is based on the inappropriate application of group averages to individuals and that this is “quintessential disparate treatment” because the averages are calculated on the basis of sex. Lea Brilmayer, Richard W. Hekeler, Douglas Laycock & Teresa A. Sullivan, *Sex Discrimination in Employer-Sponsored Insurance Plans: A Legal and Demographic Analysis*, 47 U. Chi. L. Rev. 505, 511-514 (1980). Moreover, they argue that averages are a “crude predictor” of how long an individual will live. *Id.* at 530. These arguments misconceive how insurance works in that they do not recognize the need for a large pool of individuals over which to spread the risk. In other words, groups and group averages are a fundamental feature of insurance. Brilmayer, et al., also argue that the justification of gender-based pricing as achieving equal treatment among groups is wrongheaded in that theories of group impact were developed as an evidentiary surrogate for individualized proof. Although one could argue that sauce for the goose is sauce for the gander, there is no reason to think that insurance companies sought to achieve equity among groups through gender-based pricing. Indeed, as I argue here there is no reason to assume that individuals would identify with their own gender in thinking about insurance. Thus, it seems quite clear that gender based pricing is all about the cost of writing insurance.

⁸ To be sure, people often buy life insurance with the idea that the proceeds will be used to pay off debts (such as a mortgage). But even though one might think of this rationale as tied to the lump sum value of the policy, the ultimate reason for (say) paying off a mortgage is to relieve one’s heirs of the need to make periodic payments that will reduce income. Moreover, although the focus here is on term insurance (that is, pure life insurance without a savings or investment component), the same is true of whole life and universal life which build up cash value over time and are used by many consumers (usually unwisely) as a vehicle for retirement planning. That is, although a consumer may think in terms of the lump sum worth of the policy as of the date it is paid up, the value of the policy inheres in the income it can generate. Finally, I do not here consider the various possible uses of insurance purely for tax planning purposes. It suffices to say that the peculiar tax attributes of insurance benefits (which are generally tax free to the recipient) are ultimately derived from a tax policy that is based on treating insurance differently because it is insurance and not some sort of investment.

saying that people buy annuities to provide themselves income when they are worried about outliving their money. In both cases, the value of the insurance product inheres in the income it generates and not the length of time over which that income will be received. Thus, even though the present value of a man's death benefit is higher than a woman's because it will likely be paid sooner, what matters most is the income it will generate for the beneficiary.⁹

⁹ It is (after all) a pay as you go world. For the same reason, a consumer cares about the insurance premiums he or she must pay in the here and now. Paying for insurance reduces income available for other purposes, and the premiums are not even tax deductible. (Arguably, insurance premiums should be tax deductible given that the primary function of insurance -- of all sorts -- is in some sense to protect existing wealth or future income. On the other hand, in the real world, insurance is often used as an investment vehicle to some extent because the insurance industry has touted the tax-free status of benefits.)

The distinction between the present value of the benefits and the income it will generate is similar in some ways to the distinction between earnings value and discounted cash flow in estimating the going concern value of a business. With an earnings approach, one attempts to predict the future income of the business under generally accepted accounting principles (GAAP) and to reduce it to a present value. With discounted cash flow, the goal is to determine how much cash the business could theoretically distribute to its investors over the coming years and to reduce those numbers to a present value. The two approaches may (and often do) yield very different results for a variety of reasons. For example, under GAAP if a company uses available funds to invest in additional inventory or to finance customer purchases, the increase in assets is still income even though it is not available for distribution to shareholders until that inventory is sold or the customer pays up. Discounted cash flow analysis has supplanted reliance on GAAP earnings as the method of choice in the financial community, because analysts now recognize that investors care about the timing of returns.

In a similar vein, one might liken the distinction between present value and periodic income to the difference between yield to maturity and current yield for a bond. In addition, it is worth noting the traditional injunction against invading principal, a concept that infuses much of English literature not to mention trust law.

Related issues may arise in connection with placing a value on life for purposes of calculating (say) a wrongful death award. In such cases, courts typically calculate the present value of the deceased's expected income for the remainder of his or her life without regard to the amounts that the deceased would spend on necessities. Although it may sound hard-hearted to say so, it is unclear that any monetary award is justified in the case of a deceased who just breaks even. In any event, if an award is made to survivors it should suffice for the defendant to take out an annuity for the benefit of the plaintiff. Indeed, it is standard practice for state lotteries to do so for those winners who choose receive their winnings over a number of years. Incidentally, it is quite misleading for lottery advertising to describe the "annuity value" of the pot in terms of the annual payment multiplied by the number of years over which it will be paid. A winner who chooses to receive a lump sum up front gets far less than the advertised stake.

Finally, it may be that human mortality affects valuation (and indeed values) in ways that have largely been ignored by economics. For example, even though there may be very good economic reasons to discourage drug addiction, it is unclear that they apply with much if any force to someone who is terminally ill and in pain. Moreover, and more fundamental, risk aversion may be partly a function of finite life expectancy. Option pricing theory tells us that the longer the life of an option, the more valuable it is. (A permanent option (one that does not expire) is arguably worth *more* than the underlying asset in that one need not ever buy the asset unless it increases in value to a point beyond the exercise price.) The point for present purposes is that if one were immortal one would likely be inclined to assume more risk. Indeed, investment advisers routinely counsel older investors to assume less risk. By the same token, insurance companies often decline to sell life insurance *at any price* to potential buyers beyond a certain age because of the inclination to over-insure or because consumers tend to confuse the risk of death with the need for

This difference in perspectives is critical. Corporations live forever.¹⁰ People do not. Hence, although the *cost* of writing insurance policies and annuity contracts quite rightly concerns the insurance company, it has nothing to do with the *value* perceived by the insured. From the point of view of the consumer, the purpose of life insurance and annuities is to hedge against the risk that one will die early or late. The present value of the benefits is irrelevant. Thus, because it is value and not cost that motivates someone to buy something, the idea that there is a subsidy implicit in unisex insurance rates is mistaken.¹¹

I. An Example

Suppose that Fred and Wilma, who are husband and wife, are both 40 years old and work at comparable jobs for comparable pay. They have each saved \$5000 to buy a single-premium paid-up life insurance policy. How much can they buy under a system of gender-based rates? The answer depends primarily on life expectancy and prevailing interest rates. Ignoring administrative expenses and profit margin, the insurance company can provide coverage equal to the amount it can earn with the premium paid over the insured's expected life. At age 40 Fred has a life expectancy of 36.7 more years, and Wilma has a life expectancy of 41.3 more years.¹² Assume further that the rate of return that the insurance company can obtain on its investments is eight percent. The insurance company can expect Fred's premium to increase to \$84,260 by the time he dies, while the

insurance (a confusion that seems to have motivated some insurance companies to hire prominent spokespeople to pitch such products on television).

¹⁰ Even though a particular corporation may be dissolved, presumably its business will be sold off and continued, rather than abandoned.

¹¹ This is not to say that present value does not matter to individuals. Indeed, present value is the most basic tool for evaluating an investment. But there is a critical difference between life insurance products (including annuities) and investments. With life insurance or an annuity, a portion of the benefits derives from the failure of other policyholders (or their beneficiaries) to collect some or all of the benefits that might have been paid to them. With life insurance, the benefits paid out to an individual's beneficiary will usually exceed the premiums and investment returns attributable to that individual. The reason is that many policyholders will survive beyond the term of the insurance and their premiums together with the returns generated on them may be paid out to those who collect. The insurance value of an annuity is perhaps more obvious. With an annuity, the annuitant typically pays a lump sum up front in exchange for a guaranteed periodic payment. Under the most common type of annuity, if the annuitant lives longer than expected, the insurance company continues to make the periodic payments even though the amount paid out to the annuitant exceeds the contribution and the returns on it. This mortality benefit is the essential factor that distinguishes an insurance product from a mere investment. It is critical under tax law in gaining tax free treatment for benefits and under securities law in gaining an exemption from registration and reporting requirements. See *SEC v. United Benefit Life Insurance Co.*, 387 U.S. 202, (1967); *SEC v. Variable Annuity Life Insurance Co.*, 359 U.S. 65 (1959) (both holding that insurance company must assume meaningful mortality risk for contract to be viewed as insurance); *Kess v. United States*, 451 F.2d 1229 (6th Cir. 1971) (life insurance contract must impose some insurance risk on insurance company in order to be treated as life insurance for tax purposes).

¹² See STATISTICAL ABSTRACT OF THE UNITED STATES (2000), Table No. 118 (1997 data).

value of Wilma's premium will increase to \$120,052 by the time she dies.¹³ Thus, under a system of gender-based pricing, Fred can buy only about 70 percent of the amount of insurance that Wilma can buy.

Consider what would happen (1) if Fred or Wilma died on the day after taking out the policy and (2) the surviving spouse decided to purchase an annuity with the proceeds from the insurance policy. If Wilma died, Fred would have in hand \$120,052 and could buy a lifetime (36.7 year) annuity for about \$12.70 for each dollar of income he would receive yearly thereafter.¹⁴ In other words, Fred could provide himself with an annual income of \$9454 for the rest of his life. On the other hand, if Fred died, Wilma would receive only \$84,260 from the proceeds of Fred's policy and because of her longer life-expectancy she would need to pay about \$12.94 for each dollar of income she would receive under a lifetime (41.3 year) annuity. That means that Wilma could provide herself with an income of \$6513 for the rest of her life, or about 69 percent of the income that Fred would enjoy. The following chart sets forth these results.

	FRED	WILMA
Premium	\$5000	\$5000
Life Expectancy	36.7 years	41.3 years
Value at Predicted Date of Death (8% Annual Return)	\$84,260	\$120,052
Amount Available for Purchase of Annuity	\$120,052	\$84,260
Annuity Premium per Dollar of Lifetime Income (8% Annual Return)	\$12.70	\$12.94
Lifetime Income (Amount Available divided by Annuity Premium)	\$9454	\$6513

As this simple calculation demonstrates, Fred and Wilma end up in very different circumstances if the other dies. On the other hand, with unisex pricing Fred and Wilma could buy the same amount of coverage and would end up with the same annual income.¹⁵

¹³ That is, \$5000 invested at 8% compounded annually will have grown to the respective amounts during Fred's and Wilma's expected lives. See HAMILTON & BOOTH, BUSINESS BASICS FOR LAW STUDENTS 8-13 (1998). It should be noted that a single premium lifetime term insurance policy is not a common sort of insurance contract (if indeed any such policies are commercially available) in that it has no expiration date. It is used here only to illustrate the concept of present value and future value and how an insurance company would go about determining the amount of the benefits it could pay. In other words, these numbers are not intended to reflect actual premium rates but only to illustrate the underlying principles.

¹⁴ *Id.* at 25-38. The example is based on a non refundable annuity (an annuity under which one or one's estate has no right to any return of principal in the event of early death). There are many other types of annuities, but non refundable annuities are the most basic and illustrate the point most simply.

¹⁵ Although there is certainly no requirement that one use insurance benefits to purchase an annuity, the purchase of an annuity maximizes income for the beneficiary and thus minimizes the premium payments (and maximizes remaining income) for whoever pays the premiums.

A. *A Negotiated Solution*

Although one could argue that Fred and Wilma are treated equally under gender-based pricing, would they willingly pay the same amount for this result? Fred might argue that life is not necessarily fair and that he wants the biggest benefit he can get no matter how he gets it. But Wilma has a say in the argument too. The enhanced benefit Fred gets comes as much from Wilma's ability to afford more insurance as from Fred's own ability to buy a cheaper annuity. Thus, if Wilma were free to negotiate with Fred (and inclined to do so), she would refuse to buy insurance or name Fred as the beneficiary unless Fred agreed somehow to equalize the outcome.

Obviously, Fred and Wilma cannot dictate terms to an insurance company, but they might be able to deal with an insurance company that offers unisex rates. The problem is that no insurance company would likely do so voluntarily, because men would flock there to buy insurance while they would continue to buy annuities at companies offering gender-based rates. And women would continue to buy insurance from companies offering gender-based rates while they would flock to the unisex company to buy annuities. In other words, any company that voluntarily offered unisex pricing would face a serious adverse selection problem.

Another possibility is that Fred would agree to increase his insurance coverage by enough to equalize the outcome for Wilma.¹⁶ Or Wilma might agree to pay the difference. Or they might agree to split the expense so that both could maintain their current levels of income. Both would likely prefer, however, for the insurance industry to shift to unisex rates if only because it relieves them of the need to figure out the relative benefits and negotiate about them. In short, although Fred and Wilma can fix the problem (if they understand it), they probably have at least a mild preference for the convenience of unisex pricing. At the very worst (for purposes of this argument), they are indifferent between the pricing schemes.

In the real world, most married couples probably pool their income anyway, so that the expense of the man's additional insurance would effectively be borne by both partners. But it is also likely that many working couples who make similar incomes buy similar amounts of insurance. And they may do so even if the cost of the insurance differs because of gender-based pricing. But it seems quite unlikely that many realize that the same lump sum benefit has a very different value in terms of the annuity income it will

¹⁶ The argument that a woman could adjust her benefits by buying more insurance was made and rejected in *Norris*.

generate. The risk of bad planning is a risk like any other. And inasmuch as unisex pricing would reduce that risk, consumers would gain.¹⁷

Clearly, Fred and Wilma would do the deal. It follows that for them there must be some gain from unisex pricing.¹⁸ Nevertheless, the fact that Fred and Wilma are married may distort the example.¹⁹ Suppose that an utterly unrelated man and woman are afforded the opportunity to bargain with each other about the rates they will pay for insurance. That is, they may agree with each other to be governed by unisex rates or not. Will they make a deal or will they walk? Neither one knows whether he or she will die early or late. Thus, neither one knows whether he or she will leave behind dependents or rather become dependent on an annuity. Although the man knows that the odds are somewhat higher that he will die early, and the woman knows that the odds are somewhat higher that she will die late, both are presumably concerned about *both* how their dependents will fare and how they themselves will fare. The odds really do not matter much if in fact they matter at all.²⁰

The deal is similar in many ways to a futures or options contract. In the futures market, potential buyers and sellers of a commodity agree with each other to pay a specified price on a specified date in the future in order to avoid the risk that the price of the commodity will rise (for the buyer) or fall (for the seller). Even though there is no aggregate gain or loss to the system -- no *social* cost or benefit -- the parties to the futures contract enjoy a gain because they reduce their risk. The proof is that they are actually willing to pay to enter into the contract. If they were not, there would be no futures or options markets.²¹ If the value of insurance lies ultimately in the income it will generate, and if that income differs markedly depending on gender, then consumers stand to gain

¹⁷ Insurance agents may, of course, attempt to explain these considerations, but there is no requirement that they do so. Moreover, much insurance is bought without the help of an agent. In those cases in which an agent is involved, any change that reduces the need to meet with the agent presumably constitutes a gain.

¹⁸ Presumably, if there is something to gain from a trade, the trade will occur in the absence of some sort of barrier. *A fortiori*, if a trade does in fact occur, there must have been a perceived gain in excess of the cost of trading. This would seem to be a straightforward implication of the Coase Theorem albeit stated in reverse.

¹⁹ For example, it may be that one of the underlying rationales for marriage is risk reduction through diversification, and that a married couple will therefore think about risk in a different way.

²⁰ If anything the odds militate in favor of unisex rates. The man is probably somewhat more worried about providing for dependents, and the woman is probably somewhat more worried about depending on an annuity. Both will therefore gain from making a deal.

²¹ Incidentally, the existence of futures and options markets also proves that people are risk averse. So does insurance. Paradoxically, there is no social gain from hedging even though everyone involved is made better off individually. Similarly, insurance and hedging are arguably wasteful if the beneficiary is risk neutral. See Richard A. Booth, *Stockholders, Stakeholders, and Bagholders (Or How Investor Diversification Affects Fiduciary Duty)*, 53 Bus. Law. 429 (1998); Richard A. Booth, *Reducing Risk Doesn't Pay Off*, Wall Street Journal, March 15, 1999, at A18.

from unisex pricing because unisex pricing reduces risk. And ironically that is precisely why people buy insurance -- to reduce risk -- not because of the prospect of gain.²²

Moreover, gender-based pricing creates unnecessary complications (and thus risk) for consumers of insurance.²³ With gender-based pricing the buyer must consider the sex of the beneficiary in deciding how much insurance to buy.²⁴ A buyer (irrespective of sex) must buy more insurance for a female beneficiary of a given age than for a male beneficiary of the same age. Thus, a husband must buy relatively more insurance for his wife than for a dependent son, brother, or father.²⁵ Again, the buyer is more interested in the value of the benefits to the beneficiary than in the amount of insurance for its own sake. And if the buyer's circumstances change, the random variable of the sex of the beneficiary may be missed.

B. What Women (and Men) Want

Although Fred and Wilma likely would negotiate their way to the equivalent of unisex rates, Fred would not likely have favored an unequal outcome anyway. The idea that he would is based on the assumption that men and women would choose the rate structure that favors their own gender. That may be true with regard to most goods, but life insurance is an unusual product. People buy insurance *for* others or *on* others. In other words, Fred is not thinking of himself when he buys a policy (if he is thinking clearly). He is thinking about Wilma and how well she will be able to live on the proceeds. Although one should ordinarily be skeptical of arguments based on altruistic motives, life insurance that is bought by the insured is by definition bought for the benefit of someone else.

²² From a financial point of view, risk is defined as variability in income or cash flow. See HAMILTON & BOOTH, *supra* at 207. Merger of the groups thus reduces risk, which is what insurance is supposed to do. See also Sykes, *supra* (discussing similar risk reduction rationale -- from the point of view of employees -- for vicarious liability). Although it may go without saying, it is assumed here that both consumers have the same need for money. In the real world, of course, the need for money may differ and may lead different people to buy different amounts of insurance as opposed to their choosing in effect to self insure. For example, a single mother may want more insurance and thus may be unwilling to forgo gender-based rates, whereas a married couple faces somewhat lower risk because if one dies the other will likely survive to care for the children if any.

²³ See, e.g., *Fluid Components International v. Corporate Benefit Consultants*, 977 F. Supp. 1046 (S.D. Cal. 1997) (malpractice claim against consultants who advised use of gender-based mortality tables in connection with setting up pension plan).

²⁴ The assumption here is that the beneficiary is an *adult* dependent (not one that will be earning his or her own living in a few years) that will use the proceeds to purchase an annuity. The purchase of an annuity is not crucial to the argument. All that matters is that annuities be available. It is, however, realistic to assume the purchase of an annuity in that *a priori* there is no reason to think that there will be more demand for either insurance or annuities.

²⁵ The amount will of course also depend on the age of the beneficiary.

Still, the argument may prove too much. Wilma, in thinking about Fred, may prefer gender based rates because they give Fred the biggest benefit. But there is no reason to think that Wilma would be willing to sacrifice her own security to make Fred better off if he is the one that survives. Thus, there is no reason to think that consumers would choose a pricing system that results in radically different standards of living for beneficiaries depending on their sex. It seems clear that if consumers were able to bargain with each other, they would agree to unisex rates -- with equal contributions and benefits -- rather than a gender-based system.

C. Who Really Buys Insurance?

It is not unusual for one person to buy insurance on another person. For example, it is quite common for a business to buy insurance on a key employee to compensate for disruptions that may result from the employee's death. For similar reasons, it is quite common for working spouses to buy insurance on each other. Many employer-sponsored insurance plans permit an employee to purchase spousal insurance in an amount up to half of the amount purchased by the employee for himself or herself. Indeed, there is a sense in which the (seemingly) more normal pattern of an insured buying insurance on himself or herself is more accurately seen as akin to key person insurance in which the beneficiary buys the insurance.²⁶ After all, the cost of insurance reduces the disposable income of the marital unit. Finally, there are strong tax incentives for the beneficiary to buy the insurance.²⁷

If insurance is more often bought by someone other than the insured (or should be so viewed), then the argument that individuals would prefer gender-based pricing -- because of how they themselves would fare -- breaks down. It is the *buyer's* preference that counts, and because there is no reason to presume that all men buy for women and all women buy for men, there is no reason to presume that men and women will favor their own gender. In other words, it is unclear that there is much of any incentive to form gender-based groups.²⁸

D. Insurance and Annuities as a Tying Arrangement

Notwithstanding the argument that consumers would not focus on their own gender in choosing between unisex and gender-based pricing, self-interest also dictates a preference for unisex pricing. Gender-based rates effectively force a link between insurance and annuities: Men must make up for their insurance losses by buying annuities

²⁶ For example, it may be that in some cases people buy insurance because of a nagging spouse or out of a sense of guilt.

²⁷ Under I.R.C. §2042 the proceeds of insurance are includable in the decedent's estate only if the decedent owned the policy at the time of death or the proceeds are paid into the decedent's estate.

²⁸ Indeed, if there were, it would be men who would lobby for cheap insurance for women. But there is no reason to think that preferences would follow gender lines except (perhaps) in the context of a heterosexual marriage.

(or less insurance), and women must make up for their annuity losses by buying cheaper insurance (or less in annuities). In effect, both groups are forced into a package deal. Whatever one group gains from creating a separate pool for one product is lost as a result of being excluded from the cheaper pool for the other product. In other words, it is not unisex pricing that creates cross-class subsidies. Rather, it is gender-based pricing that creates artificial incentives. Unisex insurance thus affords consumers more choice, because they are not faced with a tie in.²⁹

E. The Problem of Opportunism

To be sure, the situation is different with annuities. Annuities are often -- perhaps usually -- purchased by the annuitant. Thus, an annuitant will clearly prefer the pricing scheme that affords the largest benefit. But if the buyer does not know in advance that he or she will survive to buy an annuity -- if a buyer does not know in advance that he or she will pay or will collect -- the buyer will prefer unisex pricing at least upon entering the insurance system. Thus, it seems fairly clear that women would forgo the upfront benefits of cheaper insurance if they could be assured of cheaper annuities. But what is to keep men from forming their own annuity companies once they are retired or their spouse dies even though unisex rates look like a good idea in the beginning?³⁰

The fact that someone might renege on a deal does not mean that it was a bad deal in the first place. But clearly some sort of enforcement mechanism is necessary. The answer is that if surviving men remain free to break away from the deal and to form their own annuity companies, then women must be free to form their own insurance companies. And that will eliminate any upfront gains for men.³¹ Thus, it should be

²⁹ By the same token, it may well be that insurance companies prefer gender-based pricing precisely because it operates as a tying arrangement, which (incidentally) is usually illegal as a matter of antitrust law. In any event, there must be some gain for insurance companies from gender-based pricing or they would not oppose it so. For example, it may be that by offering cheaper insurance to women, more women are drawn into the insurance system at an earlier stage. (After all, one almost invariably buy insurance much earlier in life than one would buy an annuity.) Then again, the insurance industry may oppose unisex rates simply because the changeover would entail some expense, though given that unisex pricing is mandated where state action is involved, the actuarial models presumably already exist that would allow for its implementation.

³⁰ Oddly, the fact that men have a shorter life expectancy seems to give them an edge.

³¹ This is a classic prisoner's dilemma. Men and women as groups are more or less compelled to engage in opportunistic behavior because of the danger that the other group will do so. Women may also be tempted to hold out because they can buy cheaper insurance if they do not agree to unisex rates. But they would presumably be less inclined to do so (and more inclined to strike a deal) because one typically buys insurance earlier in life (and annuities later). Assuming they understand the Fred and Wilma example, women who think they may need an annuity later would be inclined to deal as long as they can be assured that men will not renege. On the other hand, if women form a separate group to get cheaper insurance, men must form a separate group to get cheaper annuities. If women exclude men from their insurance pool, men will be forced to pay more for insurance and thus to exclude women from their annuity pool in order to make up for the loss. And neither women nor men may be allowed to obtain the cheaper product from the other group because to do so would raise the cost for the other members of the group. The obvious solution is to impose some sort of external coordinating mechanism such as mandatory contract terms. But one need not always be so heavy-handed. Another way to avoid the problem is to put the matter up to a binding vote or to require a one-time irrevocable election to participate in the unisex pricing system (which is roughly

possible to exact a promise from men to remain in a unisex pricing system as a condition of getting unisex insurance in the first place. Obviously, it would be quite extreme to *require* men to buy unisex annuities as a condition of obtaining insurance.³² Indeed, that would be an even more objectionable form of bundling than the rather subtle form of bundling we have under a gender-based pricing. Moreover, it would be quite a radical reform to prohibit private contracting.³³ Mercifully, neither step is necessary. It should be quite sufficient for insurance law to prohibit insurance companies from using gender-based rates, because in order for men to gain the benefits of gender-based annuities someone would need to form an insurance company to offer the product.³⁴

the same thing as a vote conducted over time). With voting, one avoids the problem of knowing how the other side will behave (again assuming that the vote can be enforced). That is the central idea behind control share statutes adopted by many states to deal with the (perceived) problem that shareholders who are offered a modest premium in a front end loaded two tier tender offer may be inclined to tender their shares for less than they really think they are worth. The solution was to suspend the vote of the shares acquired by the bidder and to allow the remaining shareholders to vote on whether they should be re-enfranchised. See Richard A. Booth, *The Promise of State Takeover Statutes*, 86 Mich. L. Rev. 1635 (1988). Thus, another way to see that consumers would likely choose unisex pricing if they had a choice is to consider how they would likely vote if given the chance. The assumption in the foregoing is that the vote is *ex ante* (i.e., that those who vote do not know their own fate under the system they will choose and that they must choose up front). That is a fair characterization of reality in the context of insurance, but it is not true for annuities.

³² The argument for unisex rates does not depend on the relative number of men and women in a unisex pool. If there are relatively few women in a unisex pool, their longer life expectancy will cause the price of insurance to fall slightly and will cause the price of annuities to rise slightly. With more women in the group, the changes in price become more dramatic, but they are still presumably offsetting. Neither is it necessary that insurance and annuities be based on a common pool of risks and premiums. Indeed, it would probably be impossible to do so, because the motivations for buying each product are too different. (And indeed state law generally requires segregation.) Moreover, there is no reason to assume that the amount of insurance and annuities will be equal or even roughly so over time. Insurance industry statistics indicate, however, that in recent years a roughly equal amounts have been paid out as death benefits as under annuity contracts. Interestingly, until 1984 death benefits exceeded payments under annuities, and since 1984 the reverse has been the case by a slight but increasing margin. Nevertheless, there is no *a priori* reason to assume that aggregate insurance benefits will even roughly equal aggregate annuity premiums or benefits or even that most insurance proceeds will be used to buy annuities. In other words, it is entirely possible under a system of unisex pricing that insurance may be more or less expensive than annuities in the sense that one product may be more susceptible to adverse selection than the other and that the insurance company may therefore need to exact a higher mortality fee from one than the other. Indeed, it would be quite surprising if insurance and annuities did not differ in price in this sense. That does not, however, undermine the argument that consumers gain from unisex pricing. All that matters to the argument is that men and women of equal ages be charged the same amount for the same product. *A fortiori*, the argument does not depend on setting up a rule that requires everyone who collects under an insurance policy to use the proceeds to buy an annuity. That would, of course, run contrary to the argument that consumers gain from the unbundling of insurance and annuities.

³³ There are some areas in which private contracting is prohibited. For example, it is illegal to enter into an off exchange futures contract if there is a comparable exchange traded contract.

³⁴ Practically speaking, one cannot form an annuity pool with a handful of annuitants. There must be a critical statutory mass and if there is, the pool will invariably be large enough to qualify as an insurance company subject to nondiscrimination rules. Thus, it is not necessary to enact a law forbidding men from joining together to provide such benefits. It is enough for states simply to amend their insurance law to include nondiscrimination provisions. It may be, however, that insurance-like benefits might be offered

II. Extending the Argument

The foregoing examples are just that -- examples. Even though the most common pattern may be for one spouse in a heterosexual couple to buy life insurance for the other, there are many other situations in which people buy life insurance. Moreover, the examples assume the purchase of an annuity with the proceeds. In the end, however, none of these assumptions undermines the conclusion that consumers would prefer unisex rates.

First, it is fair to assume that insurance is purchased for a dependent (broadly defined) and to focus on the welfare of the dependent. By law, every life insurance policy must name a beneficiary (who is someone other than the insured) and only someone with an insurable interest in the insured may be named.³⁵ It is also fair to assume (for purposes of the foregoing example) that the couple is heterosexual. Same sex couples (as between themselves) are clearly indifferent between pricing schemes because the gain or loss with the insurance is offset by the gain or loss with the annuity.

Second, it is also realistic to assume that the beneficiary will use the proceeds to purchase an annuity even though that may not usually be the case in the real world. At least in theory, an annuity (because of the insurance component) results in the maximum income that the beneficiary can generate with the proceeds. That is, the insurance company can afford to pay a bit more to each annuitant because some will die before they have collected. Thus, the assumption that the beneficiary will buy an annuity is consistent with value maximization.³⁶ Moreover, annuities are what the insurance industry has to offer. And given that the business of insurance is the focus here, annuities are part of the problem and part of the solution.

Finally, although there are many other situations (outside marriage) in which people buy insurance, the arguments for unisex pricing tend to be even stronger outside this paradigm case. Sometimes people buy life insurance to provide for their children or other relatives or dependents. And sometimes people buy life insurance on their business partners. In these other situations, there is no reason to assume that the insured will be any particular gender and thus no reason to think that one class will systematically gain or lose from the pricing system no matter what it is. Thus, outside the context of a

under the guise of clubs or lodges. Indeed it may be that many existing clubs and lodges exist in part to perform such functions.

³⁵ Thus, it might be possible in theory to limit unisex pricing to interspousal insurance though presumably it would be necessary to restrict any change of beneficiary and to prohibit any use of benefits by men to buy and gender-based annuity. Or it might be possible to limit unisex pricing to some sort of product that rolls together first-to-die insurance with an annuity, though (again) that ties insurance and annuities together more strongly than under the current system.

³⁶ In the real world, of course, the insurance company may charge such high fees for an annuity that one could do better with a substitute investment such as a mutual fund.

heterosexual pair, consumers are even more likely to prefer the predictability of unisex rates.³⁷

Of course, a buyer will typically *know* the gender of the person for whom insurance is being bought and in any given case may prefer a rate structure that maximizes the outcome. For example, a business whose CEO is a woman may prefer lower gender-based insurance rates for women. But a business is just as likely to set up a retirement plan for its key employees. Thus, whatever the business gains from gender-based pricing of one product it loses on the other (assuming that it spends similar amounts on both). In the end, businesses face many of the same considerations as individuals. It is more expensive to insure a male partner, but it is more expensive to provide a retirement for a female partner (assuming a traditional retirement plan).³⁸

In the case of business partners, then, there is simply no reason to think that the buyer will prefer to pay different rates depending on whether the insured is male or female. Unlike Fred, the business itself does not stand to gain from gender-based pricing. Indeed, there is every reason to think that businesses will have a distinct preference for unisex rates rather than merely being indifferent. Unisex pricing avoids the risk of discrimination claims in connection with benefits, reduces the cost of calculating benefits, and eliminates a potential artificial incentive for hiring or retaining employees based on gender.

Moreover, most individual consumers buy numerous insurance products over the course of a lifetime and may not know in advance whether they and their family and associates will gain or lose from gender-based pricing. Indeed, as previously noted, many employer sponsored plans offer spousal insurance. Thus, many individual consumers buy insurance on themselves and their spouse simultaneously although the amounts may differ.³⁹

In summary, the case for unisex pricing is just as strong, if not stronger, outside the context of a heterosexual marriage. Indeed, it may well be that the heterosexual

³⁷ The one situation in which this may not be true involves a single mother or a pair of women buying insurance for the benefit of a child who then buys an annuity running through a certain age. Presumably, the cost of such an annuity will differ little (if at all) depending on the gender of the child because differences in life expectancy only become relevant among older people. Thus, one or two women who seek to provide for a dependent child will be able to offer larger benefits to the child under gender-based pricing.

³⁸ Although the two considerations balance out at the outset, over time the incentives may well change as insurance becomes less important and employees approach retirement age. Clearly, it would be illegal to discharge women employees in order to reduce pension expense. Thus, a business would have a distinct preference for unisex pricing because it would equalize the costs related to older employees (who presumably all are subject to the same retirement age if any).

³⁹ Thus, there is no reason to assume that the debate over unisex rates would necessarily pit men against women as groups. Quite to the contrary, the tendency to focus on the conflict between men and women is because that is where the opportunity for gain resides. In other words, these two groups stand to gain the most from making a deal to abide by unisex pricing.

marriage is the most difficult case. Yet even here it is clear that the parties would negotiate for unisex pricing and therefore that there must be some gain.⁴⁰

III. The Underlying Assumptions of Gender-Based Pricing

The problem with gender-based rates lies in two unstated premises. First, it assumes that the risk-adjusted present value of insurance benefits accurately measures the value of those benefits from the point of view of consumers. Second, it assumes that unisex pricing will therefore cause consumers to buy more or less insurance or annuities than they would under gender-based pricing and (implicitly) that the allocation of these insurance products is optimal under gender-based pricing.

A. *Present Value and the Value of Insurance*

As for the first assumption -- that the consumer values the prospect of a death benefit primarily on the basis of the probability of his or her own death -- how long one will live is largely beside the point for the consumer, even though it is central from the point of view of the insurance company. Indeed, virtually all insureds can expect to live beyond the term of their insurance policies. Thus, most people buy insurance against the possibility of untimely death. In other words, the primary value of life insurance is in the spreading of risk among insureds and over time. In what sense, then, is insurance less valuable to someone who is likely to live a long time than to someone who is not? For the individual, the function of an insurance policy is to reduce risk by providing for survivors. Actuarial life expectancy has very little to do with the value perceived in most cases, because most people act as if they expect to live forever. They just worry that they might not. Life expectancy has mostly to do with how much it costs the insurance company to provide the policy.⁴¹

⁴⁰ Does the argument hold if men and women *start out* in separate groups as under the *status quo*? It might be argued that in order to justify a shift to unisex rates, one must show some positive reason for a change from the *status quo*. After all, change entails cost. If consumers are merely indifferent between the alternatives, it makes no sense to rock the boat. Thus, the logic of unisex rates may be path dependent. In other words, it may matter where one starts out. But even if men and women start out in separate groups, both groups stand to gain from a merger. Because both groups are presumably most concerned about a smooth and predictable income stream, merging the groups and eliminating gender-based pricing represents a gain for both groups. Moreover, policing gender based groups presumably entails some cost which at the very least would be saved by eliminating gender distinctions.

⁴¹ Admittedly, someone who is likely to die sooner faces greater risk and thus may be seen as getting more value for each dollar of coverage. Moreover, such an individual may be inclined to buy more insurance with unisex pricing. This is the well-known, but ill-named, "moral hazard" of insurance. *See generally* Abraham, *supra* at 405, n.7. *See also* Alan O. Sykes, *The Boundaries of Vicarious Liability: An Economic Analysis of the Scope of Employment Rule and Related Legal Doctrines*, 101 Harv. L. Rev. 563 (1988) (discussing moral hazard of making employer liable for job-related accidents). (I say "ill-named" because it is absurd to suggest that those who think they need insurance most should be impugned for seeking it any more than one should be criticized for minimizing taxes.) The moral hazard problem is vastly over-estimated in connection with life insurance and indeed may not exist at all. In the first place, worries about the purchase of insurance by the terminally ill or suicidal or others who have substantial expectation of early death is a non-actuarial concern that does not affect the present analysis. Such people generally cannot obtain insurance anyway, and if they do, either pay rates based on their peculiar condition or cannot

Gender-based pricing means that a man must set aside more from his pay during life in order to secure the same insurance benefits as a woman. And a woman who uses the proceeds to buy an annuity must suffer lower benefits *for a longer time* than a man. In short, if one looks either at the periodic outlay by the insured or at the income available to the beneficiary under an annuity, gender-based pricing appears to be quite unfair, both in terms of price and benefits. To be sure, gender-based pricing assures that men and women bear their own costs. But it is far from clear that insureds care much about cost. Indeed, it is inconceivable that Fred and Wilma would see themselves as equally well off with lifetime incomes of \$9454 and \$6513, respectively.⁴²

collect when they die and their pre-existing condition is discovered. Similarly, someone who has relatively few years left to live is not likely to be able to buy insurance. In practice insurance companies require a surprisingly long expected (remaining) life before agreeing to provide insurance. For example, even though the average sixty-year-old can expect to live about 21 more years, it is very difficult for a sixty-year old to buy insurance. In part, the difficulty is that it is very expensive to insure a 60 year old, both because the insurance company has relatively little time to invest the premiums and because as life expectancy decreases risk (in the sense of predictability of mortality) increases. Thus, one might say that life insurance is only readily available for those who are quite unlikely to die and therefore have little reason even to think about life expectancy. There is also, however, a significant moral hazard in that a 60 year old who is approaching retirement has less to insure. Someone who is working may be seen as buying insurance to replace his or her earning capacity in the event of death. The motives of someone who is or soon will be retired are less clear. Although it may go without saying, the assumption here is that age discrimination is permissible in setting life insurance rates. To be sure, one might argue that age discrimination is also unnecessary (at least up to some minimum age) in that consumers buy insurance against the possibility of unexpected death. But there is every reason to believe that people would buy more insurance as they got older (and wealthier) if the cost were subsidized by younger buyers who in effect paid too much. The problem is similar to that faced by the health insurance industry where rates generally do not depend on age at least where the plan is employer sponsored.

⁴² The example assumes that insurance proceeds are paid to a surviving spouse of the opposite sex. This is probably the most common pattern. There are, of course, many other situations in which people buy life insurance. For example, insurance is often purchased for the benefit of children or business partners. As will be seen, the problems created by gender-based pricing may be even more evident in these other situations. It bears noting also that there is nothing artificial about considering the situation of the beneficiary. There is little reason to purchase life insurance unless one has dependents of some sort. And indeed insurance law requires both that a beneficiary be named and that the purchaser of insurance have an insurable interest in the insured. The example also assumes that the beneficiary under the insurance policy will purchase an annuity. Although this is not critical to the argument against gender-based rates for either product alone, it is also realistic. An annuity allows the beneficiary to maximize income and thus is probably the best use of the proceeds unless the payout is large enough that the beneficiary can live on the investment return without invading principal. See note above on mortality risk. In any event, the arguments against gender-based rates are the same for both insurance and annuities. In other words, if it makes sense to mandate change for insurance, it also makes sense to mandate change for annuities. Although it may go without saying, the problems created by gender-based rates do not affect same sex couples as long as they buy both insurance and annuities and rates are calculated consistently for both. The situation facing same sex couples does, however, illustrate the fact that gender-based rates have the effect of requiring consumers to buy both insurance and annuities if they are to end up with an equal package of benefits. In other words, a man can only recoup the losses from higher insurance premiums by buying annuity. A woman, of course, may keep the insurance benefits and decline to buy an annuity, thus subtracting assets from the aggregate pool and thus presumably raising rates somewhat for all insurance products.

It is simply not believable that Fred and Wilma would place an equal value on their prospective benefits. Consider the position of a beneficiary under a gender-based regime. If the insured is male, the beneficiary stands to collect less for each premium dollar spent by the insured than would be the case under a unisex system. The reason, again, is that the man is likely to die earlier. But if the money is intended to meet living expenses for the beneficiary, the smaller benefit means *a smaller income for a longer time* than if the insured had been a woman. The insurance company would argue that such a result is fair because it reflects the cost of insurance. From the point of view of the beneficiary, however, the costs are irrelevant. What matters is how well one can live on the benefits. And looking back at the process of paying for the insurance it appears doubly unfair: in order to have provided as much of a benefit, the male insured would have had to forgo more in the past. The unfairness is compounded if a woman beneficiary uses the proceeds of a man's insurance policy to purchase an annuity (as is often the case). A male survivor of a female insured who follows the same strategy will fare much better, because he will receive a bigger death benefit in relation to premiums paid, and he will be able to buy a cheaper annuity or one that pays out more during each period.

It is a fact that women live longer than men. But no fact itself tells us what its significance is. Moreover, the facts one finds are the facts one seeks.⁴³ That women live longer than men may be a fact, but to extrapolate that insurance rates for women should be lower is to say more. The fallacy is that cost is the best indication of value. When one takes a close look at the value of insurance, it is clear that the present value of the benefits is far less important to an insured than the income that can be generated with them.

B. *Subsidies and Insurance -- Know the Difference*

As for the second assumption -- that unisex pricing will cause consumers to buy more or less insurance than they would under gender-based pricing -- although it is true that it costs an insurance company more to insure a man than a woman, it does not follow that a man will buy more insurance under a system of unisex pricing. People buy insurance for the beneficiary. And what really matters to a beneficiary is income, that is,

⁴³ See Lea Brilmayer, Richard W. Hekeler, Douglas Laycock & Teresa A. Sullivan, *Sex Discrimination in Employer-Sponsored Insurance Plans: A Legal and Demographic Analysis*, 47 U. Chi. L. Rev. 505, 511-514 (1980). See also Mayer G. Freed & Daniel D. Polsby, *Privacy, Efficiency, and the Equality of Men and Women: A Revisionist View of Sex Discrimination in Employment*, 1981 Am. Bar Found. Res. J. 585 (criticizing statistics based on self-fulfilling prophecies). There seems to be little doubt that it is inappropriate and quite illegal to consider race in setting insurance rates even though it is quite clear as a matter of statistics that life expectancies differ among the races. See Scot J. Paltrow, *Life Insurers' Race Bias in Decades Past Affects Policyholders Even Now*, Wall St. J., December 26, 2000, at A1; Scot J. Paltrow, *Georgia Regulator to Lead Investigation into Insurer's Rates for Black Customers*, Wall St. J., December 15, 2000, at C13. The next question seems to be whether genetic information may be considered. See Jill Gaubling, *Race, Sex, and Genetic Discrimination in Insurance: What's Fair?*, 80 Cornell L. Rev. 1646 (1995).

how well the beneficiary will be able to live on the proceeds. It is *value*, not cost, that motivates one to buy something.⁴⁴

Moreover, it makes little sense to buy insurance if the *beneficiary* does not need protection in the event of the insured's death. After all, paying for insurance reduces the income that may be shared with (or saved for) the beneficiary in the meantime.

The most important factor that determines the amount of insurance one will buy is the amount one can spend, at least up to the point of adequate coverage. Thereafter, it is unlikely that cheaper insurance will induce people to buy more. It is important to remember why people buy insurance. Insurance is a hedge, not a bet. And it makes no sense to hedge more risk than you have.⁴⁵

Cost may be a more important factor in connection with an annuity, because usually the person who purchases an annuity also collects under it. Unlike life insurance, one can buy them late in life at a time when the difference in life expectancy between men and women becomes more immediate. Thus, there is a more significant potential for women to take conscious advantage of unisex pricing by buying more annuities and for men to shy away from such instruments.⁴⁶ But the idea that a woman might take advantage of unisex pricing in buying an annuity is largely at odds with the idea of an annuity.

⁴⁴ Regarding the value-laden notion of subsidies and their proper definition, see Abraham, *supra* at 429-31. There has been significant pressure in several state legislatures to require unisex rates in other forms of insurance such as car insurance. See Jerry & Mansfield, *supra*. The fact that unisex rates make sense in life insurance and retirement benefits, however, implies nothing about its wisdom in connection with other forms of protection. See Abraham, *supra* at 443-44. It is only because of the nature of the benefits of life insurance and retirement plans that value becomes disconnected from cost. Where the insured has some control over the likelihood of a claim, such as is the case with car insurance, fire insurance, or even health insurance, it is important to create incentives for classes of insureds to take the steps that are within their peculiar control. See Abraham, *supra* at 413-17. This is not to say, however, that control is the only factor to be considered or that it is easy to determine the matters over which one has control. See Deborah S. Hellman, *Is Actuarially Fair Insurance Pricing Actually Fair?: A Case Study in Insuring Battered Women*, 32 Harv. Civ. Rights Civ. Lib. L. Rev. 355 (1997). Nevertheless, control is probably a sufficient condition for mandating disregard of a risk factor. Clearly, one cannot exercise (much) control over one's sex. At the very least, it is safe to say that the transaction costs for exercising any control are quite high.

⁴⁵ This is essentially the rationale behind the requirement that a buyer must have an insurable interest in the life the insured.

⁴⁶ Presumably, there is less of a moral hazard problem with respect to annuities because although one can sometimes know when one is likely to die and thus take advantage of insurance, one cannot know that one will live longer than others and therefore derive greater benefits from an annuity. Moreover, many individuals are subject to mandatory retirement at some age, which is presumably the same for both male and female employees in any given company. Indeed, federal law generally requires that one begin taking retirement distributions under an IRA or similar plan at age 70 1/2, and many elect at that point to buy an annuity. At 70, a man can expect to live about 12.7 more years, while a woman can expect live about 15.5 more years. See STATISTICAL ABSTRACT OF THE UNITED STATES (2000), Table No. 118 (1997 data).

First, annuities are a way to hedge against the possibility of outliving one's money. In other words, an annuity is another kind of insurance policy. It protects against untimely death where the untimeliness is a matter of living too long. On the other hand, another function of an annuity is to trade a lump sum of money for a higher regular income than one could generate by simply investing the money and living on the return. Clearly, if one has enough money to live comfortably off the interest, there is no need for an annuity, although even in such cases an annuity may serve a spendthrift function.

Second, as with any bargain, one must give up something. In the case of an annuity, the annuitant must give up control over his or her money. Moreover, the insurance company subtracts a management fee and there are often upfront commissions to be paid. It is possible to lose with an annuity. If one dies sooner than expected, the insurance company keeps the money. Thus, one must give up the prospect of leaving an estate. In short, it seems unlikely that one would be much tempted to buy an annuity because of unisex pricing given the enormity of the other factors to be considered. In other words, moral hazard would not seem to be a worry if there are more important factors dictating a decision than the potential for opportunism.⁴⁷ What woman would buy an annuity simply because it is a relatively good deal, if there are administrative costs, commissions, etc., to be paid and if the company that writes the annuity gets to keep the remaining principal if the annuitant dies sooner than expected? Clearly, one buys an annuity in order to assure oneself of a steady income and not as a bet that one will live longer than average.

In the end, the very existence of annuities makes the argument that people buy insurance products for the income they will produce and not based on some guess as to longevity. Indeed, the product only exists because many people are willing to make that trade. The primary selling point for an annuity is that it provides a guaranteed income to the annuitant. In other words, the essential idea behind an annuity is that people care more about income than about lump sum values. Every insurance salesman would agree.

C. Opportunism and Intergenerational Conflicts

Although it should suffice simply to prohibit gender-based pricing, it is not beyond the pale to consider some sort of mandatory bundling of life insurance and annuity products as a way of dealing with the problem of opportunism in connection with annuities. Exit restrictions are often imposed in connection with pension plans and retirement accounts and indeed plain vanilla mutual funds. For example, one may be precluded from switching between alternative retirement plans after making an initial choice. Or one may be allowed to move funds into an annuity from a mutual fund but precluded from moving the money out of the annuity and back into the fund.⁴⁸

⁴⁷ In other words, incentives are not necessarily additive.

⁴⁸ Likewise, corporations generally do not issue classes of preferred stock with permanent conversion rights unless the corporation also retains the right to redeem the stock.

Similar though more severe intergenerational problems affect health insurance. With health insurance, younger and healthier individuals may be inclined not to buy insurance until they get older and are more likely to get sick, thus raising the rates that must be paid by older consumers. Of course, the problem could be eliminated by charging different rates depending on age, but that would also require older consumers to pay much higher rates. Even on such terms, it would still make some sense to buy health insurance as a way of spreading the cost of health care over many people. But consumers stand to gain the most (in the sense that the expense of health insurance remains constant) if all agree to participate, or at least if the risk pool includes all age groups and entrance at an older age is restricted. The only way to achieve that result, however, is to require younger consumers to participate as a condition for getting health insurance under the same plan when they get older.

One might liken such a plan to a system of forced savings in which payments by the young grow through investment and pay for health care in older age. The investment component is not, however, critical, and indeed it is somewhat artificial. The real point of the system is spreading the cost, both over individuals of the same age and across age groups. Indeed, any *actual* set aside of funds for investment purposes would be inefficient, just as it is inefficient to require a bank to keep the cash of individual depositors on hand and segregated. Although it may go without saying, the system suggested here is essentially the same as the Social Security (FICA) system we have. And as with FICA, it is crucial that younger participants be assured that the system will remain solvent and thus that future generations will choose to participate. But because the solvency of the system does not depend on investment returns -- and thus is effectively able to guarantee the required return -- it should not be difficult to attract new participants as long as the population is not declining or aging without a concomitant increase in the retirement age. This suggests, however, that it may be a mistake to allow individually directed investment of social security funds at least if the system is to remain actuarially driven. To be sure, there is a significant intergenerational problem with such a plan at the startup stage (at least if older age groups are allowed to participate) as the flap over the reforms proposed by the Clinton Administration well illustrate. One could perhaps argue, along the same lines, that life insurance should not be priced according to age at all and that to do so constitutes age discrimination. But that would clearly create strong incentives to buy more insurance later in life (if it were permitted to do so) as a way of building an estate. No such incentives arise in connection with health insurance because health insurance merely pays expenses that most would prefer to avoid in any event.⁴⁹ Nevertheless, to some extent FICA amounts to flat rate insurance system but one that imposes a cap on the amount of insurance that any individual may obtain.

Yet another factor that may distinguish health insurance from life insurance is that not everyone collects under health insurance (or any other form of hazard insurance). But neither does everyone collect under life insurance if it is term insurance. With health

⁴⁹ Cf. Richard A. Booth, *Punitive Damages and Securities Arbitration in the Wake of Mastrobuono*, 9 Insights, No. 6, at 20 (June 1995).

insurance, the temptation is to wait until one is older and then to join the pool. With term life insurance, coverage is arguably more valuable (purely as a matter of insurance) when one is younger and has a relatively small estate with which to provide for dependents and when the implications of untimely death are presumably much more disruptive. Thus, it is more likely that a young consumer would be willing to agree to unisex pricing up front than that a young consumer would be willing to pay higher health insurance rates as a way of subsidizing older consumers. Moreover, aside from the fact that the temptation to cheat the life insurance system would be unduly increased if life insurance were not priced according to age (at least for coverage beyond some minimal amount), it is arguable that the need for term life insurance should decrease with age (because of likely increasing wealth and likely decreasing life expectancy of beneficiaries) and therefore that insurance companies are justified in being somewhat more suspicious of older consumers and thus in charging them relatively higher rates. In other words, consumers would be tempted to use term life insurance as a way to build an estate.⁵⁰

Finally, it should be noted that because life insurance is sometimes used precisely to plan for intergenerational transfers of wealth (even if it is term insurance), intergenerational conflicts are somewhat reduced. In other words, consumers enter the life insurance system planning to some extent to provide for other generations and thus will be less likely to resent what may be viewed as free-riding by other generations under the health insurance system.

IV. A Coasean View

At first blush, the argument for pricing insurance according to its cost might seem to be a simple application of the principles propounded by Professor Ronald Coase in his landmark 1960 article *The Problem of Social Cost*.⁵¹ It is sometimes said that the Coase Theorem, as the thesis of that article has come to be known, stands for the proposition that people and firms should bear their own costs. Although that generally turns out to be true, it is an over-simplification. In truth, the Coase Theorem does not involve any determination of who generates a cost. It focuses on whom is able to avoid or reduce the cost. By placing liability on that party, the law assures that cost-saving measures that make economic sense will be taken. In other words, it assures that investments of resources that should be made -- those that are economically efficient -- will be made.

To be more precise, the Coase Theorem states that in the absence of transaction costs, the initial placement of an entitlement or liability will have no effect on who ends up with it. If a good is more valuable to someone other than the party to whom it is allocated under the law, the parties will bargain with each other and the good will end up in the hands of the party that places the highest value on it. The central implication of the Coase Theorem is that ordinarily the law should not seek to determine who deserves a

⁵⁰ A traditional whole life insurance policy is designed to balance these two considerations by building cash value.

⁵¹ 3 J. L. & Econ. 1 (1960).

good, but rather should seek out market failures, which is to say, instances in which the parties are unable to bargain with each other because transaction costs are too high or for some other reason. In such situations, failure to assign an entitlement or liability to the proper party may result in unnecessary costs being borne by one party when the other has some way of reducing those costs. Is there any reason to believe that the market for insurance is beset with failure? If so, how would the parties to an insurance contract bargain with each other if they were able to do so?

The existing literature invariably treats the issue as if it were a negotiation between insurance companies and consumers. But given that the primary value of life insurance is risk spreading and reduction among consumers, the real question should be how would potential consumers bargain with each other in the absence of barriers to contracting? Would they focus on cost or value? The Coase Theorem itself is based on the assumption that parties to a negotiation focus on the gains they can enjoy if a beneficial trade is consummated. Who will bear the cost is not necessarily central to the bargain. What is crucial is whether the gain from the transaction is large enough to justify the cost.

If the relevant negotiation is one among consumers, it would appear that the market for insurance is beset with failure. A consumer cannot choose unisex pricing unless insurance companies offer it. Competition to please and attract consumers should lead to such products being offered. But no single insurance company can offer unisex pricing because of the danger of adverse selection. Moreover, individual insurance companies have an incentive to offer cheaper insurance to groups that are cheaper to insure.⁵² Individuals may be able to roll their own unisex insurance.⁵³ But it is unclear that consumers know to do so and in any event such arrangements presumably entail costly negotiation. Thus, even the Coase Theorem counsels a legal solution.

⁵² In other words, unisex pricing would require insurance companies to form a cartel. And that would constitute illegal price fixing. Moreover, Any individual participant in a cartel stands to profit by undercutting fellow cartel members while other members continues to adhere to the price fixing agreement. A similar dynamic (known as *cherry picking*) occurs in connection with health insurance where providers seek to attract the healthiest insureds by offering them reduced rates, thereby increasing the rates that must be charged to less healthy groups. Presumably, it is costly for insurance companies to engage in such competition, and they should therefore prefer a system that prevents it. It is therefore curious that the insurance industry has been so opposed to unisex pricing. Even if there were nothing to be gained by unisex pricing, an insurance company should be indifferent as between the two pricing systems as long as all insurance companies are required to adhere to the same system. In any event, it appears that unisex pricing may only be imposed by law.

⁵³ It is possible, as argued above, for consumers to reach private arrangements about paying for insurance that have the effect of unisex pricing, but it is far from clear that most consumers would know to do so and thus that there is anything close to perfect information. Interestingly enough, however, such derivative arrangements have arisen between the terminally ill and investors who are willing to buy the benefits of their life insurance policies at a discount. See, e.g., *SEC v. Life Partners, Inc.*, 87 F.3d 536 (D.C. Cir. 1996). In some cases, insurance companies themselves have offered early payout, presumably at least in part because the attraction of viatical settlements demonstrated that there was a market for such benefits. One would think, therefore, that insurance companies would voluntarily offer unisex pricing, but for the adverse selection problem that apparently can only be fixed by legal mandate.

Conclusion

The central argument for gender-based pricing of insurance is that any other system will lead to misallocation because those who can buy insurance for less than its true cost will buy more than they would if they had to bear the full cost. But it is far from clear that unisex pricing constitutes a subsidy. Whether a subsidy exists depends on one's point of view. If one adopts the viewpoint of the insurance company, there is a subsidy without differential rates. If one looks at equal rates as an individual consumer of insurance, it seems clear that there is no subsidy. Moreover, the fact that one class subsidizes another is not dispositive. It is similar to arguing that those who live long subsidize those who die early when it comes to paying for insurance. Clearly that is true, but it is also totally beside the point. Indeed that sort of subsidy is the very goal of insurance. In the end, it is not necessary to conclude that present value is irrelevant to the pricing of insurance. Rather, it is quite sufficient simply to recognize that there is a conflict between competing and valid views of how to value life insurance and annuities. If rational consumers do in fact value insurance on some basis other than what it costs the insurance company to provide it, then the worry over subsidies is misplaced and the argument that insurance should be priced according to its cost must fail.