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The Honorable Lowell Weicker
United States Senate

The Honorable Nancy L. Johnson
House of Representatives

Subject: Comparison of Estimates of Effects of Fair Insurance Practices Act on Women's Insurance Costs (GAO/OCE-84-8)

In separate letters dated July 28, 1983, and August 2, 1983, respectively, you requested that we comment on divergent estimates of the effect on women's insurance costs of S. 372, the proposed Fair Insurance Practices Act (unisex insurance). As you know, we have analyzed the general nature of these effects in our recent report, "Economic Implications of the Fair Insurance Practices Act" (GAO/OCE-84-1, April 6, 1984). As agreed with your offices, we did not begin work on your request until after our earlier report was completed. This report discusses the two sets of estimates cited in Senator Weicker's letter--those prepared by the National Organization for Women (NOW), which supports the bill, and by the Insurance Services Office (ISO), which opposes it. Table 1 shows the NOW and ISO estimates of the "typical" differences between premiums paid by males and females in the various lines of insurance under current pricing practices.[1]

We conclude, first, that the concept of a "typical" woman is ambiguous. Different interpretations of the meaning of "typical" produce different estimates of the effects of the bill, and to some extent each of the estimates presented in table 1 uses a definition of "typical" which produces a result favorable to the position of the organization preparing the estimate.

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[1]The implication of the estimates is that these differences would be eliminated if S. 372 were enacted. Eliminating the difference between premiums paid by men and premiums paid by women would not mean that the new unisex premiums paid by women would be $15,732 lower (NOW's estimate) or $8,455 higher (ISO's estimate) than they are now. Because the new unisex premium would most likely fall somewhere between the current premium for men and the current premium for women, the effect of the bill on raising or lowering premiums for women would be less than the current differential between men's and women's premiums.

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Second, we find that regardless of how the "typical" woman is defined, both of the estimates presented in table 1 to some extent use unrepresentative insurance policies in calculating the effects of the bill on women.

Third, we believe that it probably is not possible to develop a reliable estimate of the effect of the bill on any particular woman, even if it were agreed that a particular woman who purchased particular insurance policies was "typical." The effect of the bill would still be uncertain because it would

Table 1

Estimated Differences Between Lifetime Insurance Premiums Paid by Males and Females on Identical "Typical" Policies

Type of insurance	NOW[a]	ISO[b]
Health	$ 6,662[c]	$ 0
Disability	4,854	0
Life insurance and pension	5,856	-3,210
Automobile	-1,640	-5,245
Total	$15,732	-$8,455

[a]Estimate by the National Organization for Women, described as "Four Typical Policies to Cover a Lifetime."

[b]Estimate by the Insurance Services Office, with the assistance of the American Council of Life Insurance, described as "a more representative picture of the typical experience for a woman."

[c]Positive numbers indicate premiums paid by females are more than those paid by males.

depend on such factors as how insurance companies changed their risk classification systems in response to the bill, how life insurance companies and pension plans recovered the costs of the bill, and how the woman was affected by changes in policies held by other members of her family.

Moreover, both the NOW and the ISO analyses in general assumed that women's policies are paid for only by women and that men's policies are paid for only by men. Insofar as men's and women's policies are paid for jointly by families, the effect on any particular woman would become difficult to calculate. No particular definition of how a woman's share of a family's insurance premiums should be calculated has been accepted by all those studying this issue. In any case, data on the family status of insurance policyholders are generally lacking.

This report is limited to a comparison of the NOW and ISO estimates of the effect of sex-distinct pricing of insurance on women. A more general analysis of the economic effects of the unisex legislation can be found in our earlier report. We examined and analyzed readily available data relating to the effect of sex-distinct pricing of insurance on women. We also interviewed and discussed our findings with representatives of NOW and ISO. They generally did not dispute our findings, though they had some comments which we incorporated in the report as we thought appropriate. This review was made in accordance with generally accepted government audit standards.

INTRODUCTION

The unisex insurance legislation

The proposed unisex insurance legislation (H.R. 100/S. 372) would prohibit distinctions based on race, color, religion, sex, and national origin in the marketing and pricing of insurance and pensions. So far as we know, the only one of these characteristics which is explicitly used in the pricing and marketing of insurance and pensions is sex. Sex is used to varying degrees as a distinguishing characteristic in setting premiums in medical, disability, life, and automobile insurance, as well as in pensions. Most group policies, however, and some individual policies are already unisex. Some pension benefits are on a unisex basis, while others are on a sex-distinct basis. The bill would require that sex-distinct premiums and benefits in existing and future pension and insurance contracts be equalized. A "topping-up" provision in the bill (sec. 4(c)(2)) would require that no one's benefits be reduced as part of the equalization process (see app. I, pp. 3 and 4 of GAO/OCE-84-1). The bill also would require that maternity costs be covered on the same basis as other health conditions in health and disability policies.

"Typical" insurance policies

Both the NOW and the ISO data purport to show how a woman with "typical" insurance policies is affected by sex-distinct pricing. It is important to distinguish among possible meanings of the word "typical." In some lines of insurance, such as medical and disability insurance, most women are not affected by sex-distinct pricing because their policies are already unisex. A minority of women, however, do have sex-distinct policies and pay higher premiums due to sex-distinct pricing. If a "typical" policy is the type of policy held by the majority of women, then sex-distinct pricing has no effect on the woman with the typical policy, because her policy is already unisex. On the other hand, if a "typical" policy is in some sense an average of the policies held by all women, then the higher premiums paid by the minority of women with sex-distinct policies would be averaged with the equal premiums paid by the majority of women who hold unisex policies. The result would be that sex-distinct pricing leads to a modestly higher average premium on the policies held by all women. Finally, if the word "typical" is used to mean that the policy is representative of sex-distinct policies, then estimates of the effect of sex-distinct pricing would show the effect on women holding such policies, but would overstate the effect of sex-distinct pricing on women as a whole. We do not conclude that any of these ways of looking at the matter is intrinsically superior to the others. In the remainder of this report, we merely note which meaning of "typical" policy is meant in each case.

Effects on women would be diverse and complex

The initial, direct effect of S. 372 on women's insurance costs would vary widely, depending upon what sorts of pension and insurance plans they have. In pensions, women with either defined contribution pension plans or individually purchased annuities would generally gain from the bill, while women with defined benefit pension plans would either be unaffected or would lose.[2] Women with individually purchased health and disability coverage would gain from the bill, while women with group health and disability coverage would be unaffected. Women with individually

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[2]A defined contribution pension plan is one in which the pension benefits are accumulated as a lump sum. If the employee elects to receive the benefits as an annuity, the monthly annuity benefits are often calculated on the basis of sex-distinct annuity tables, so that women receive lower monthly benefits. A defined benefit pension plan is one in which benefits are normally paid out as an annuity on a unisex basis, although optional benefit forms are available (such as joint and survivor options) which in many plans pay higher benefits to female employees.

purchased life insurance policies would lose from the bill unless, as in the case cited by NOW, their policies were combined with annuities. Women with auto insurance policies could either gain or lose from the bill, depending upon factors such as their age and family circumstances (for example, a woman whose teenaged sons were operators of her car would generally gain from unisex pricing, while a single woman in her twenties would generally lose).

In all lines of insurance, the extent to which any given woman was affected by the bill would depend also upon how insurance companies adjusted their rate structures after the bill was enacted. Women might also be affected by changes in the benefits which they received as survivors or beneficiaries from their husbands' pension plans and life insurance policies. Finally, the impact on women would also depend on the particular adjustments that insurance companies and pension plans (or their sponsors) made in order to recover the costs imposed by the bill.

A COMPARISON OF THE ASSUMPTIONS USED IN THE NOW AND ISO ESTIMATES

The differences between the two estimates cited in Senator Weicker's letter can be explained primarily by the fact that the estimates treat different women as being "typical." We find that, for health and disability insurance and for pensions, the "typical" woman assumed by ISO is more representative of the majority of women, while the "typical" woman assumed by NOW is more representative of women with sex-distinct policies. For auto insurance, the "typical" woman assumed by NOW is more representative of the majority of women and of the average for all women, while the woman assumed by ISO is more representative of women with sex-distinct policies. Neither of the women assumed in the estimates for life insurance is representative of the majority of women, the average for all women, or women with sex-distinct policies. In general neither NOW nor ISO focuses on a "typical" woman whose situation represents the average effect on all women.

NOW's estimate looks at the effect on a woman who buys her pension and most of her insurance at sex-distinct prices; that is, she has individually purchased health and disability insurance and a privately purchased life insurance/annuity policy. For automobile insurance, however, NOW's analysis assumes that the woman marries at age 25, and hence pays unisex prices for auto insurance thereafter. ISO's estimate looks at a woman who has unisex-priced group health and disability insurance and a unisex-benefits defined benefit pension. However, ISO assumes that she pays sex-distinct auto insurance premiums because she remains the sole operator of her car through age 65, which most commonly would occur because she never marries. Both analyses assume the woman carries $100,000 in individually purchased life insurance coverage priced on a sex-distinct basis.

Health and disability insurance

The ISO estimate, which assumes unisex group health and disability insurance, more accurately represents the effect of the bill on women's insurance costs in these lines, both for the majority of women and for the average of all women. However, by taking no account of sex-distinct pricing in these lines, ISO's estimate understates the average savings which women would receive under the bill in these lines.

Most people who have health and disability insurance have unisex group coverage. However, a substantial minority have individual coverage. According to the Health Insurance Association of America (HIAA) and the Blue Cross/Blue Shield Association, about 27 percent of all those with private health insurance have individual coverage (some of these also have group coverage). Of these, 58 percent pay sex-distinct premiums. Hence, about 16 percent of all women with private health insurance have policies that would be affected directly by the bill's enactment;[3] most of these women would have their premiums reduced.[4]

Similarly, according to HIAA, about 29 percent of all those with private disability insurance have individual coverage. According to the American Academy of Actuaries, about 90 percent of the individual coverage is on a sex-distinct basis. Hence, if male and female policies had the same percentage of sex-distinct coverage, about 26 percent of female disability policyholders would experience a premium reduction as a result of the legislation.[5] Definite information on the proportion of female disability policies which are on a sex-distinct basis is unavailable.

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[3]This calculation assumes that these percentages are the same for women and men. However, information on whether or not this is true is unavailable. We do know that 63 percent of individual health insurance policies are held by women. If this is higher than the percentage of group policies held by women, then the percentage of women with individual policies, and probably also the percentage with sex-distinct policies, would be higher than the percentages for men and women combined shown here.

[4]The cost of required maternity coverage could cause health insurance premiums to rise for some women, particularly young women. The value of the added coverage would, of course, at least partly offset the additional premiums.

[5]A few group hospital indemnity plans, which pay a fixed amount for each day that the insured is hospitalized, are also priced on a sex-distinct basis.

Because the NOW estimate assumes the woman has individual coverage for both health and disability, when only a minority of women have such coverage on an individual basis, the policies assumed in this estimate cannot be considered to be representative either of the policies held by the majority of women or of the average of all policies held by women in these lines of insurance. ISO's estimate for these lines of insurance is based on the more common situation, coverage on a group basis. However, by not accounting for the minority of women paying sex-distinct prices, ISO's estimate understates the average premium savings for all women.

Pensions and life insurance

As was the case with health and disability insurance, ISO's estimate of the impact of S. 372 on pensions better represents the situation of the majority of women. As we indicated in our earlier report (see app. I, p. 16), the average impact of the bill on women's pension benefits is uncertain. For life insurance, neither ISO nor NOW assumes a reasonably representative policy, and both overstate the effect of the bill, whether on the majority of women or on the average premium for all women.

Pensions and life insurance can either be combined in a single policy, as NOW assumes, or they can be provided separately, as ISO assumes. When the pension is a privately purchased annuity, as NOW assumes, or is drawn from a defined contribution pension plan, women would generally be affected favorably by S. 372's enactment. In life insurance, on the other hand, S. 372 would generally affect women adversely. When the annuity and the life insurance policy are combined, as in NOW's example, it is possible for the favorable effect under the annuity to outweigh the adverse effect under the life insurance policy. ISO's analysis uses a defined benefit pension plan, whose basic benefits are provided on a unisex basis. When combined with a life insurance policy whose cost to women would rise under S. 372, the two policies together would cost more for a woman if S. 372 were enacted.

Pensions and annuities

It is more common for women to have a unisex defined benefit pension plan than a sex-distinct annuity or defined contribution plan. Thus ISO's assumption represents the pension plan to which most women with pension plans belong. However, as with health and disability insurance, a substantial number of women are covered either by a sex-distinct privately purchased annuity or by a sex-distinct defined contribution pension plan where the woman's benefits would increase if the bill were enacted. About 26 percent of all employees in private pension plans participate in sex-distinct defined contribution plans, where women would gain. While the exact number is uncertain, it appears that between 4

and 12 million women, out of an adult female population of about 87 million, either own sex-distinct private annuities or participate in sex-distinct defined contribution pension plans whose benefits would rise if S. 372 were enacted. Again, by not accounting for women with annuities or defined contribution plans, ISO's analysis understates the benefits of the bill for women, while NOW's estimate overstates them.

Life insurance

The life insurance policies used in the NOW and ISO analyses are both unrepresentative in that they both assume a much larger policy than is commonly held by women. Both analyses assume that the typical woman has $100,000 worth of life insurance. In fact, according to American Council of Life Insurance (ACLI) data, about half of all adult women have no individually purchased life insurance of the type that uses sex-distinct rates, and those who do carry coverage averaging only about $10,000. Even new purchases of life insurance by women average less than $25,000 per policy. The median purchase would probably be less.[6] The larger the policy, the larger the cost impact of a given percentage difference between men's and women's rates. If we take $10,000 as a "typical" policy, the total cost differential between ages 35 and 65 would be about $535, not the $3,120 cited by ISO. If we take $25,000 as a "typical" policy, the lifetime difference would be about $1,183. Similarly (although data on average annuity purchases are unavailable), ACLI data indicate that average monthly annuity benefits are $142 per month, not the $1,000 per month assumed by NOW. The cost differential between men and women for an annuity of this average size would be about $1,413. Both the NOW and ISO estimates, therefore, overestimate the impact of the bill on women because they assume a much larger policy than is common. The estimates represent neither the experience of the majority of women nor the average experience of all women.

Automobile insurance

The NOW and ISO estimates about the effect of S. 372 on women's automobile insurance premiums use different assumptions about the typical woman's "sole operator" status, her "good student" status, and the base premium paid for her policy. While we believe that NOW's assumption about "sole operator" status more accurately represents both the situation of the majority of women and the average situation for all women, we are unable to evaluate the appropriateness of the other conflicting assumptions used in these estimates.

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[6]This is the mid-value purchase--the dollar amount that is exceeded by half of the purchases and which exceeds the other half of the purchases.

In auto insurance, women generally pay a reduced premium only if they are single or the sole operators of their cars. Auto insurance policies insure cars, not people; the premium for a given car is based on the highest risk driver using the car. A teen-aged female driver would thus not enjoy any discount if her teen-aged brother also drove the car, and married women in general pay premiums based on the higher risk posed by their husbands. Thus, the younger a woman marries, the less she benefits from the female discount, and the less she would lose if S. 372 were enacted (assuming both she and her husband are operators of her car). According to the National Center for Health Statistics, women on the average have married by age 22. NOW's estimate assumes that the woman pays sex-distinct premiums from ages 17 through 24, but then marries and pays premiums based on her husband's risk. ISO's estimate assumes that the woman remains the sole operator of her car through age 65. Since on average a woman marries by age 22, so that she would normally no longer be the sole operator of her car, the case assumed by NOW for auto insurance appears to represent better the case of both the majority of women and the average for all women. This difference in assumptions accounts for about $1,365 of the $3,605 difference between the NOW and the ISO estimates for auto insurance.

The second difference in assumptions between the two estimates for auto insurance is the difference in "base premium" assumed. This is the premium that would be charged to a middle-aged male with a clean driving record, driving a standard car. Base premiums vary from city to city and from company to company. NOW's estimate assumes an average base premium of $200, while ISO's estimate assumes one of about $375. Since all individual premiums are proportional to the base premium, the higher the base premium, the larger the difference between men's and women's rates. This difference in base premiums accounts for $1,434 of the difference between the two estimates.

We do not know which base premium figure is more representative. ISO's figure is based on a survey of base premiums in the capital city and the largest city in each state. Since base premiums are generally higher in urban areas, this may tend to overstate the average base premium, though it would be representative for the large number of people who live in urban areas. NOW's figure is based on data for Michigan and Florida, and appears to be reasonably representative of those limited data.

The third difference in assumptions between the two estimates is that NOW assumed that the woman qualified for the "good student" discount, while ISO assumed she did not. We do not know which of these assumptions is more representative. This difference accounts for $806 of the difference between the two estimates.

EVEN WITH GIVEN POLICIES, EFFECT OF BILL ON WOMEN IS UNPREDICTABLE

Even if there were agreement on the identity of a "typical" woman with "typical" policies to use as the basis for assessing the effect of the bill, there would still be substantial uncertainty about the effect of the bill on that woman. First, insurance companies could respond to the unisex legislation in various ways, and the effect of the bill on any given woman would depend on how the companies responded. Second, the effect of the bill would depend on the woman's status as a beneficiary under policies held by other members of her family. Finally, the effect would depend on how insurance companies and pension plans recovered the costs which the bill would impose on them.

Effect on women would be altered by changes in the risk classification system

As discussed on pages 19 to 21 of appendix I of our earlier report, insurance companies which can no longer use sex as a risk factor might well rely more extensively on other risk factors to maintain as much as possible of the predictive power of the risk classification system. For example, in life, health, and disability insurance, companies might rely more on occupation and smoking as risk factors. In auto insurance, companies might rely more on annual miles driven as a risk factor, or on accident and violation records, although many automobile insurance companies argue that as a practical matter it is not possible to use these factors more intensively than they are now used. Any of these changes in rating factors would probably reduce the average price change for each sex. Alternatively, life insurance companies might reduce premiums on smaller policies which, because they are disproportionately sold to women, would experience lower loss rates.

Effect on women depends on effects on policies held by other family members

The effect of the bill on women also would depend on its effect on those policies held by men under which women are the beneficiaries or have survivorship benefits. If life insurance companies responded to the bill by increasing coverages on men's policies so that they were equal to coverages on policies held by women paying equal premiums, the result in many cases would be to increase death benefits received by the men's wives. In cases where men's pension benefits were increased under defined benefit plans, part of this benefit increase would be received by surviving spouses. In auto insurance, since a "man's policy" is often in fact a family policy on which a man happens to be the highest risk driver, all family members, male and female, would benefit from a premium reduction. Conversely, if a young woman happened

to be the highest risk driver on a family policy, an increase in her premium rate would affect male as well as female family members. In short, to the extent that men and women live together as families, we cannot make any definite calculation of the relative effect on men and women of the bill's enactment.

Effect on women depends on pattern of cost recovery by insurers

Finally, the effects of the bill on women would depend partly on how insurance companies and pension plans recovered any costs imposed by the bill. In a defined contribution pension plan, for example, the women's benefits would rise while the men's, at least initially, would stay the same. There would be nothing to prevent an employer, however, from reducing future wage increases to adjust for the increased costs of the pension plan. In this case, some of the costs of the increased benefits for women would be borne by female employees and some by male employees, though we do not know how much would be borne by each sex.

CONCLUSION

ISO's analysis better represents the types of policies held by the majority of women in health and disability insurance and in pensions, while NOW's analysis better represents the policies of the majority of women in auto insurance. In life insurance, neither analysis comes close to representing the policies of the majority of women. Except for NOW's analysis of auto insurance, neither estimate represents the average effect on all women, though ISO comes closer for health and disability insurance and pensions. NOW's analysis better represents women with sex-distinct pricing in health and disability insurance, while ISO better represents such women in auto insurance.

Both ISO's and NOW's analyses, however, are misleading in the sense that no single case could typify the policies held by all women, or even of a majority of women. The policies held by individual women vary widely, and the impact of the bill would correspondingly vary widely. Attempting to identify the "typical" woman obscures the sometimes very significant effects on atypical women. Moreover, describing the prima facie effects of the bill on women ignores the fact that these effects could be changed significantly either by changes in the risk classification system, or by benefits received by women as beneficiaries and survivors of males, or by efforts on the part of insurers and employers to pass their increased costs back to their policyholders and employees. The ultimate pattern of premium and benefit changes resulting from the bill for any given woman is therefore impossible to estimate.

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Charles A. Bowsher

Comptroller General
of the United States