

# Agenda

Advancing economics in business

## Gender and insurance: impact on EU consumers of a ban on the use of gender

According to a recent European Court of Justice ruling, by the end of 2012 all insurance products will need to be priced the same for men and women. Previous Oxera studies have shown that the ruling could have unintended market consequences. But how might this affect consumers across Europe in terms of prices and demand for insurance products? Is there evidence to quantify the potential impact?

The EU Gender Directive of 2004 provides for equal treatment between men and women in the access and supply of goods and services.<sup>1</sup> It does not, however, prohibit insurers from using gender in the calculation of premiums and benefits; Member States can opt out from banning the use of gender and can allow 'proportionate differences' in insurance premiums and benefits for men and women. At the time of the Directive, all Member States chose to use the opt-out for what are known as 'life' products—eg, life insurance and pension annuities—and almost all chose to opt out for non-life products—eg, car insurance.

On March 1st 2011, the European Court of Justice ruled that this time-unlimited opt-out provision was inconsistent with EU law ('Test-Achats ruling').<sup>2</sup> Depending on how the Court's judgment is implemented, it could require all EU Member States to ban the use of gender in determining insurance premiums by December 21st 2012.

A previous *Agenda* article assessed the potential economic impact of a ban on the use of gender in insurance pricing, and potential unintended market consequences.<sup>3</sup> This article builds on those results with new analysis from a recent Oxera study for the German insurance association (Gesamtverband der Deutschen Versicherungswirtschaft) into the potential impact on consumers across Europe. This study focused on two key aspects that are often absent in the wider public debate:

- quantitative estimates of the potential impact of banning the use of gender in insurance premiums;
- wider social consequences arising from changes in consumer demand.

### What could be the impact on insurance premiums?

Oxera's previous work produced estimates of the potential impact on selected insurance premiums in the UK from the cross-subsidisation of premiums between men and women under unisex pricing.<sup>4</sup> New work was done to expand this analysis using data from seven EU Member States, including two countries (the Netherlands and Belgium) where a ban on the use of gender for pricing motor insurance policies is already in place. This analysis provided empirical estimates for the impact of a ban on the use of gender in practice, which supports the previous theoretical finding that unisex prices are likely to be higher than the average of gender-based prices.

### Redistribution effects in Europe: winners and losers

There are significant differences between men and women in their accident risk and mortality risk. The costs of providing insurance products that cover these risks therefore differ between men and women. It was found that these cost differences explain gender-differentiated prices for life insurance, pension annuities and motor insurance in a range of Member States.

The removal of gender as a rating factor would require insurers to introduce unisex premiums, which would result in the lower-risk gender experiencing increases in premiums (or a reduction in benefits) in order to cross-subsidise the higher-risk gender. This change in premiums due to cross-subsidisation is referred to as the 'redistribution effect', since it does not result in any change to the overall average premium. For the

This article is based on Oxera (2011), 'The Impact of a Ban on the Use of Gender in Insurance', December 7th, available at [www.oxera.com](http://www.oxera.com).

selected insurance products and samples of customers considered in the 2011 study:

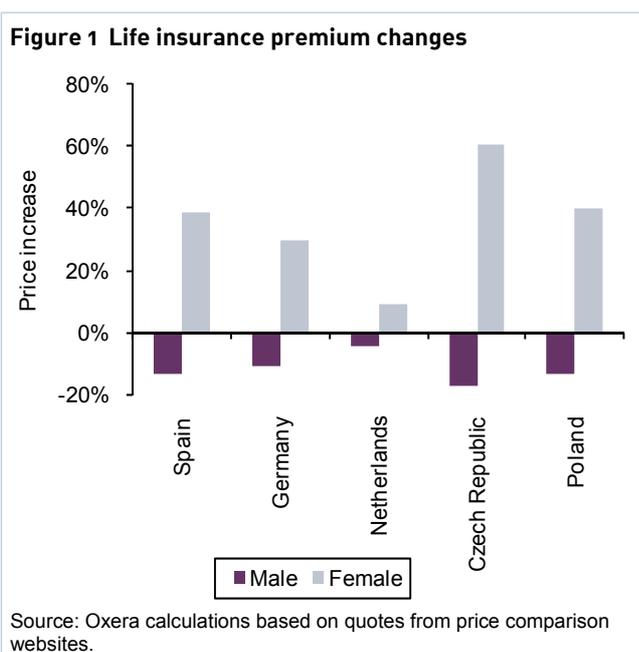
- men (aged 65) could see a reduction in pension income from pension annuities of around 5% or more on average;
- women (aged 40) could see life insurance premiums rise by around 30% or more on average;
- young women (aged 20) could see motor insurance premiums rise by 11% or more on average.

There are some significant variations between countries, however, since accident and mortality rates vary widely across Europe. For example, the difference between the mortality risk of middle-aged men and women is greater in Spain, Poland and the Czech Republic than it is in the Netherlands or Germany. Consequently, the redistribution effect on life insurance premiums would be greater for Spain, Poland and the Czech Republic, as presented in Figure 1 below.

### Potential additional costs due to unisex pricing requirements

The impact of removing a relevant risk-rating factor goes beyond the pure redistributive effects. It restricts the way in which insurers price risks, and requires adjustments in the supply of insurance, with potentially adverse consequences for consumers, who would ultimately bear any cost increases or other supply-side adjustments due to the competitive nature of insurance markets.

There are two main aspects of the supply-side response to a ban on the use of gender.



- **Direct costs.** A ban on the use of gender as a rating factor imposes compliance costs on insurers in the form of system changes, re-pricing, reprinting of documents, etc. These costs are mainly one-off, but could be significant. There may also be an increase in ongoing costs, such as in marketing and distribution.
- **Portfolio mix effect.** Significant costs may arise with respect to pricing risks and the unintended adverse consequences that result from the less accurate pricing of risks in insurers' portfolios. With unisex pricing, insurers have to set unisex premiums without knowing the resultant mix of male and female customers. The uncertainty of the gender mix adds a new element of risk to the insurance business, and consequently could require additional economic capital to be set aside to cover this risk. This is particularly significant for long-term products, such as pension annuities and life insurance, where the claims costs take many years or decades to emerge.

Discussions with European insurance companies suggest that the potential extent of one-off compliance costs for altering systems varies considerably between companies, but for most companies such costs are not likely to drive up premiums significantly.

Unisex pricing creates an incentive to insurance companies to attract the lower-risk gender as customers, since claims paid to the lower-risk gender are lower on average, while the premiums in unisex pricing are the same. In theory, at least, an insurance company should be willing to increase its spending on sales and marketing by as much as the difference in expected claims from attracting the lower-risk gender. Insurance companies that did not target the lower-risk gender would be at risk of having a portfolio of customers that is skewed towards the remaining higher-risk gender customers. Portfolios with more of the higher-risk gender would need to have higher premiums in order to cover the higher cost of claims, even though they had not increased expenditure on sales and marketing. This dynamic is commonly referred to as 'adverse selection'.

Except for in the UK, there is currently little evidence that large insurance companies in Europe target customers by gender. That said, this situation could change if the introduction of unisex pricing creates the incentive to attract the lower-risk gender.

With a ban on the use of gender in insurance pricing, the gender mix of an insurance portfolio becomes an additional risk factor for the company. For any business, additional risk can create additional costs, due to either higher returns being required by investors or additional costs being required to mitigate the risk of default. For insurance companies, additional capital

may be required in response to increased risk. The extent to which these additional costs might arise due to the introduction of unisex pricing is ultimately an empirical question. One way to investigate this is to look at motor insurance premiums in the Netherlands and Belgium, where unisex pricing is already in place.

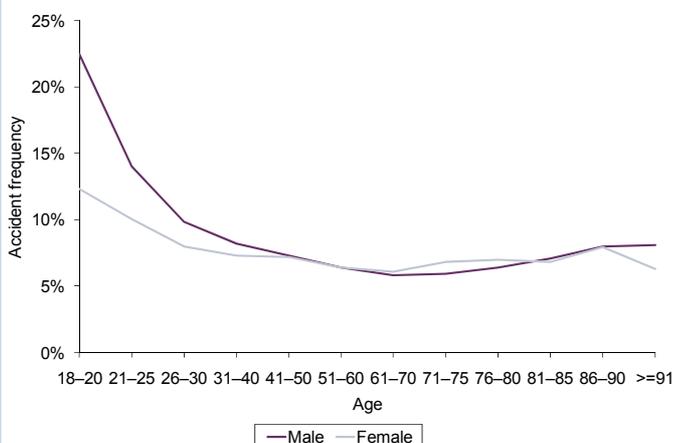
### Unisex insurance premiums in practice

The Netherlands and Belgium mandated unisex pricing for motor insurance in 2008. Gender is an important determinant of the cost of providing insurance to young people, however, since young women are significantly less likely to make a claim than young men (see Figure 2 below). In these countries, therefore, young women as a group pay more in premiums relative to the amount of claims made (known as the claims ratio) than young men as a group.

Direct comparisons of insurance premiums between countries are difficult because many determinants of insurance premiums vary between countries, such as taxes, the average value of motor vehicles, and road conditions. However, if the ratio of insurance costs for young drivers compared with older drivers is used, rather than the absolute costs, these country-specific factors in principle drop out of the equation. There are numerous reasons why claims vary between drivers aged 20 and aged 40 (such as driving skill, risk-taking behaviour, quality of motor vehicle). However, if one can assume that this relationship between age and the likelihood of claiming on car insurance is relatively stable across European countries (claims data for Germany, the Netherlands and Belgium support this assumption), this ratio can be compared between countries.

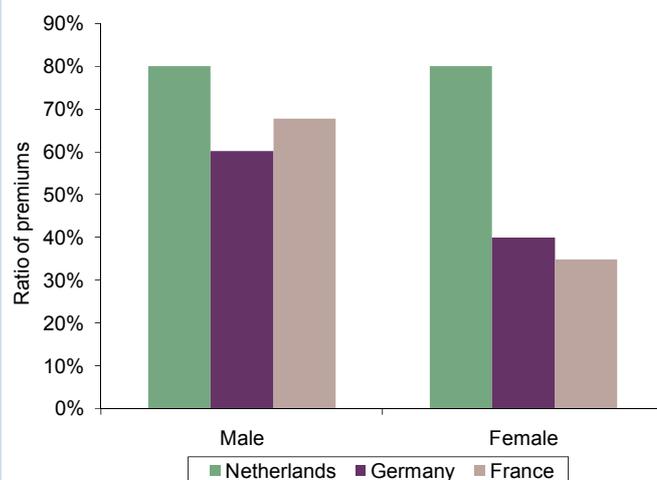
Figure 3 illustrates that, in the Netherlands, premiums for 20-year-old drivers, both male and female, are about 80% higher than those for 40-year-old drivers.

**Figure 2 Frequency of car accidents by gender and age in Belgium**



Source: Assuralia.

**Figure 3 Premiums for 20-year-old drivers relative to 40-year-old drivers**



Source: Oxera calculations based on quotes from price comparison websites.

This ratio is closer to the ratio for male drivers in the countries with gender-differentiated pricing (ie, 60–70%) than to the ratio for female drivers in such countries (ie, 35–40%). This evidence could be indicative of young female drivers having to pay motor insurance premiums that are close to the high rates that young males would pay, despite the fact that female drivers are lower-risk. Similar evidence is found in Belgium.

Although it is difficult to place a firm estimate on the likely extent of additional costs being passed on to consumers, empirical evidence from motor insurance (in the Netherlands and Belgium) does suggest that the unisex premiums are significantly higher than the weighted average of gender-based premiums.

### How could unisex pricing affect demand?

These results also have implications for the two life products that were included in Oxera’s 2011 study: life insurance and pension annuities. Arguably, the extent of additional costs could be greater for these two products, since (unlike motor insurance) they are not compulsory. Additional costs passed on to consumers could mean that:

- as the gender mix for life insurance is skewed towards men, unisex life insurance premiums may end up being much closer to the currently higher male premiums than the female premiums;
- there would be little improvement in pensions from annuities for women, while there may be a reduction in old-age provision by men.

The main concern for life insurance would be that women, who are taking an increasing role in providing financial support to the family unit, are discouraged from buying policies by the increases in premiums that could result from unisex pricing. With women making up only a relatively small minority of many insurers' life insurance portfolios, there may be a concern that discouraging women from buying life insurance would lead to even greater proportions of men in the portfolio, and hence unisex premiums being set close to the current male premiums. This could lead to even more women finding term life insurance to be poor value for money and hence not purchasing it.

The differences in mortality rates between men and women aged 40 (say) are considerable (particularly in Poland and the Czech Republic, in Oxera's 2011 study). Hence, unisex prices could produce significantly poorer value for money for women such that they could end up being largely excluded from this market in some countries.

The difference between men and women is less stark for pension annuities, but in this case customers may perceive that very similar alternative products are available, and therefore the impact on consumer demand could also be significant. Men, who would be disadvantaged by unisex pricing, may face a reduction in benefits of only around 5%, but this reduction could still be material if a large proportion of men switch to other financial products as a result.

While there are other options for old-age provision, a pension annuity is the only commonly used one that provides insurance for longevity risk—ie, a lifetime income guarantee. Although pension annuities may be preferable from a social point of view, since they provide a guaranteed lifetime income, individuals may choose to divert pension savings into other financial products or more immediate consumption.

### Wider social implications

To the extent that a ban on the use of gender leads to changes in consumer demand through adverse selection, there could be implications for wider social issues. For example:

- a reduction in women buying life insurance could reduce financial security for families as women become increasingly important in terms of family financial provision;
- there could be some inappropriate incentives (in terms of road safety) for young men arising from reductions in their motor insurance premiums, although this effect is likely to be very limited;
- policies for ensuring that people save for their old age could unintentionally be put at risk by unisex pricing, threatening to worsen old-age poverty in the future.

The potentially adverse impact on incentives for people to save for their old age should be considered in the wider context of European pension policies. Provision for old age is typically considered in terms of three 'pillars': 1) state pensions; 2) occupational pensions; and 3) personal pensions and other savings. Ageing societies and other fiscal pressures are forcing societies to place less reliance on state pensions (pillar 1), and, with occupational pensions being limited in some countries as well, there is an increasing reliance on pillar 3. Any policy that inadvertently reduces incentives for households to save for their retirement would seem to be particularly inappropriate from this perspective.

### Overall impact on consumers

Overall, the main impact on consumers will come from changes in premiums due to the requirement of unisex pricing. There may be winners and losers from the redistribution of premiums, but there are also likely to be additional costs that are passed on to consumers, which would mean that unisex prices will be higher than the weighted average of gender-based prices.

The extent of additional costs is uncertain, but empirical evidence suggests that they could be significant and could result in unisex prices being significantly closer to the current gender-based, high-risk gender price than the weighted average of current prices. There may also be unintended social consequences arising from the ban, particularly with regard to individuals providing for their old age. It could disadvantage the third pillar of the pension provision system—private insurance.

<sup>1</sup> Council Directive 2004/113/EC.

<sup>2</sup> Case C-236/09, *Association Belge des Consommateurs Test-Achats and Others v. Conseil des Ministres*, March 1st 2011.

<sup>3</sup> Oxera (2010), 'The Use of Gender in Insurance Pricing: Unfair Discrimination?', *Agenda*, September.

<sup>4</sup> *ibid.*

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email [g\\_niels@oxera.com](mailto:g_niels@oxera.com)

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