Oxera

Agenda

Advancing economics in business

Age-based pricing: unfair discrimination?

Financial services providers use age as one of the key determinants of the price and characteristics of products offered to customers. This may soon be restricted, however, due to the recently published Equity Bill, which aims to prohibit age discrimination. There is also debate in Europe around the use of age in the pricing and provision of financial services products and services. What are the implications of this legislation for financial services providers? Importantly, are their current practices justifiable?

Financial services providers use age as one of the key determinants of the price and characteristics of certain types of products offered to customers. This is of some interest to the age lobby and policy-makers, who are concerned that this may amount to 'unfair discrimination', in particular in light of the recent publication of the Equality Bill in the UK. This Bill would create a general prohibition on discriminating in relation to the terms and conditions of the supply of services on the basis of 'protected characteristics'—one of which is age. However, there are two significant general exceptions:

- the legislation does not apply to those under 18;
- 'If the protected characteristic is age, A [eg, a service provider] does not discriminate against B [eg, a prospective customer] if A can show A's treatment of B to be a proportionate means of achieving a legitimate aim'.[1]

The second point is explained thus:

> The clause also provides that:
>
> for age, different treatment that is justified as a proportionate means of meeting a legitimate aim is not direct discrimination:[2]

As a result it will still be possible to treat customers (including customers of financial services) differently based on their age, as long as the difference in treatment (eg, charging different prices) is justified, proportionate and a means of meeting a legitimate aim. Although these terms are not explicitly defined in the Bill, there is a fuller explanation given in a recently published consultation document. This is set out in the box below.

It is not only in the UK that the use of age as a means of varying the terms and conditions under which services are provided is being looked at. There is also a debate in Europe on the topic of age discrimination. In particular, the European Commission is currently looking at the use of age, disability, sex, race/ethnic origin, religion/belief and sexual orientation in the supply and design of financial products, with the aim of reviewing the current practices of Member States in relation to Article 5 of Directive 2004/113/EC.

This article examines the current use of age in the provision of financial services—in particular motor and travel insurance, and personal loans—in the UK, and whether this is justified by economics, using data from the industry, as well as an independent survey, gathered as part of a study by Oxera for the Government Equalities Office (GEO). However, as the consultation paper makes clear in the box below, unless some specific exclusions are also introduced, it will ultimately be for the courts to decide if the current behaviour by financial services providers meets the test of proportionality and legitimacy of aims.

Current use of age in the provision of financial services

Financial services providers use age as one of the major proxies for the level of risk associated with a customer. For example, in the provision of both travel and motor insurance, the age of a customer, alongside several other factors, helps providers determine:

- the likelihood that the customer will make a claim;
- the size of the claim.

This article is based on the Oxera report 'Use of Age-based Practices in Financial Services', prepared for the Government Equalities Office, May 2009. Available at www.oxera.com.

Age discrimination as explained by the GEO

The GEO's recently published consultation document ('Equality Bill: Making it Work') outlines those instances in which different treatments (on the basis of age) can be justified.

- *What is objective justification?* Different treatment because of age can sometimes be justified. However, this does not mean that unfair discrimination will be allowed to continue. Service providers will not be able to make arbitrary decisions, which are not supported by evidence.

  We want to preserve the opportunity to take an age-based approach where it is appropriate. Objective justification is the test that service providers will have to use if they want to continue to undertake age-based practices where they are not supported by an exception.

  The objective justification test is met where a service provider can show that the treatment complained of is a proportionate way of achieving a legitimate aim.

- *What constitutes a legitimate aim?* A wide variety of aims may be considered legitimate, but they must correspond with a reasonable need on the part of the service provider. Economic factors such as business needs and efficiency may be legitimate aims, but arguing that it could be more expensive not to discriminate will not in itself be a valid justification.

  It will be for the service provider to show that the aim is legitimate. Ultimately though, if challenged it will be for the courts to decide what constitutes a legitimate aim.

- *What is proportionate?* The treatment in question must be an appropriate way to achieve the aim referred to above, and it must also be necessary in order to achieve it. Thus if, for example, the legitimate aim can reasonably be achieved by less, or non-discriminatory means, or if the service provider cannot show that the discriminatory effect of the treatment is sufficiently outweighed by the importance and benefits of its legitimate aim, then the defence of objective justification will not be made out.

- In practice, it will be necessary to provide evidence if the age-based practices are challenged in order to demonstrate all the elements discussed above. The service provider's assertions alone will not be sufficient.

Source: Government Equalities Office (2009), 'Equality Bill: Making it Work. Ending Age Discrimination in Services and Public Functions: A Consultation', June, Annex 4.

This has a direct impact on the prices charged and the products offered to different age groups. In particular, it can affect them in the following ways.

- Prices for motor and travel insurance vary depending on the age of the customer. Older people pay more than (some) other age groups to obtain similar cover for motor and travel insurance; for motor insurance, it is the youngest drivers (those under 25) who tend to pay most.

- Prices for travel insurance often stay flat within an age band (which may be quite wide), but can then jump in a step-wise manner (and often significantly) as the customer moves to the next age band.

- Providers of motor and travel insurance specialise—targeting specific age groups (and not selling policies to other age groups) is common practice. There are therefore fewer providers of motor and travel insurance for some specific age groups—particularly the older age groups (for motor and travel insurance) and the young (for motor insurance).

- Age (for those over 18) has less of an impact on personal loan offerings and pricing, and there is no age-based specialisation of lenders similar to that found in the motor and travel insurance markets.

- Age is often used as a filter to determine how risk is assessed and a product sold, so prospective customers of different ages can be treated differently in the transaction process, as well as in the products they are offered or the prices charged. For example, older customers can be asked to provide additional information (eg, medical screening) or to buy products in a different way (eg, by phone rather than through the Internet).

These patterns show that age is used as a significant piece of information in determining how prospective customers are treated, including whether the provider will offer a service at all, and at what price.

However, the current markets for travel and motor insurance also display the following features.

- No age group is excluded from the market—all age groups can find providers who are willing to supply them. For example:

  - more than 30 different motor insurance quotes are available for individuals aged 80 or over from one price comparison website alone. An external market report lists 60 different policies for an 85-year old, and more than half of these insure ages up to 99 or are without age limit. Also, motor insurers generally do not apply maximum age limits for their existing customers, so renewal is possible irrespective of age;

- about 20 different travel insurance policies (single-trip cover) are offered to an 80-year old from one price comparison website alone. An external market report lists more than 60 single-trip policies for those aged 85 years, of which more than one-third are without maximum age limit.

- While it is possible that older respondents may be refused cover for conditions which are the inevitable result of ageing, only a small proportion of people (3% of respondents) aged 80 or over have been refused travel insurance cover in the last year for reasons they believe to be explicitly and solely related to their age. For motor insurance, the percentage of refusals experienced by those aged 80 or over is even lower, at 1.5%, and is similar to the refusal rate experienced in the 18–24 age group (1.4%).[3] Furthermore, most of those refused insurance because of their age subsequently find an insurer willing to provide cover.

- The number of suppliers varies according to the size of the group of potential customers who have a similar profile—there are more suppliers in the larger markets, and fewer in those markets with fewer potential customers.

This shows that motor and travel insurance, and personal loans, are generally available to all age groups, though pricing varies, often significantly, by age. The following section looks at whether these pricing differences are justified by differences in the costs of provision to different age groups.

Relationship between age and cost of provision

- The evidence gathered in the study for the GEO suggests that, from an economic perspective, the risks that are correlated with age are being correctly priced at the market level. Unlike many other products or services, in motor and travel insurance, age is strongly correlated with the cost of provision. Figure 1 illustrates how the (expected) average claims cost per travel insurance policy increases with the age of the insured—in particular in relation to medical claims.

- Given the considerable differences in the risks and costs of provision, risk-reflective and cost-based pricing will imply significant price differences between age groups.

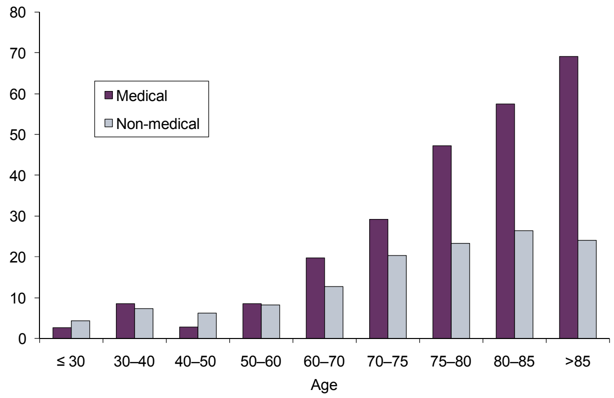
- There is no obvious systematic bias in the pricing of motor or travel insurance such that certain age groups are being overcharged and are more profitable for the insurer than others, notwithstanding the higher premiums paid by these age groups—this is supported by, for example, the evidence on loss ratios provided below.

- Loss ratios in insurance (which measure claims costs relative to insurance premiums) are reasonably similar across age groups.[4] Figure 2 below shows an example of the loss ratios for motor insurance, calculated from aggregate market data on claims costs and premiums.

- The aggregate loss ratio for the 17–18 age group exceeds 100%—ie, claims costs exceed the premiums earned on the policies sold to this group. With this exception, and taking account of the random element in claims costs, loss ratios are reasonably similar, at between 65% and 75%, irrespective of whether the age groups of 31–40-year olds are considered (4.8m policies are included in the data) or the 51–60-year olds (4.3m policies), or indeed those aged 81 or over (0.4m policies).

- Separate data made available by a sample of motor insurers confirms that there is no systematic overcharging of older drivers. In fact, any bias in pricing tends to work in favour of the oldest group of drivers: the available data shows that policies sold to

Figure 1 Expected average claims cost per travel insurance policy, by age group (£)



Note: The expected average claims cost is calculated by multiplying the average cost of claims by the frequency of the claims occurring in each age group, distinguishing between medical and non-medical claims. The data refers to a large travel insurance scheme for underwriting year 2008.
Source: Oxera analysis based on data from a travel insurance provider.

drivers above the age of 90 do not, on average, cover the costs of claims.

- In travel insurance, the loss ratios examined also show that premium levels do not always increase sufficiently with age to cover the higher claims costs (and the greater uncertainty around these claims costs).

For both motor and travel insurance, there was no significant evidence of systematic overcharging of certain age groups. If there is a bias in pricing relative to the risks and costs of provision, it tends to work in favour of older people (as well as the young in the case of motor insurance). However, some age-based practices, such as the use of broad age bands combined with significant price increases between age bands, may still appear arbitrary, and the risks of insuring specific individuals may not follow the average risks of their age group. However, these apparent anomalies can be explained by the interplay of risk considerations and transaction costs, where simple age rules are being used to keep down transaction costs while preserving a pricing structure that broadly reflects risks.

This suggests that at the aggregate level the differences in pricing are driven by the real differences between age groups in the costs of provision (and the level of demand). The specialisation of providers, combined with differences in the economics of supply, can explain much, if not all, of the differentiation experienced by consumers of different ages in the market.

Impacts of removing the use of age by providers

The UK government has made clear that the new law would not mean the complete removal of age-based practices in financial services provision. The policy objective is to ban the use of those practices that are unreasonable and cannot be justified on the basis of objective evidence. Nonetheless, when evaluating the impact of different policy proposals, a number of general economic considerations are likely to apply as restrictions are put on the use of age as a means of differentiating offerings to customers.

Any policy measure that restricts the use of age in risk underwriting and product supply decisions will impose some costs. The costs that can more easily be quantified are the pure administrative or system costs of complying with the new requirements, but these are often small. The more significant sources of cost are likely to relate to adverse impacts on the efficiency of pricing and the wider functioning of the market.

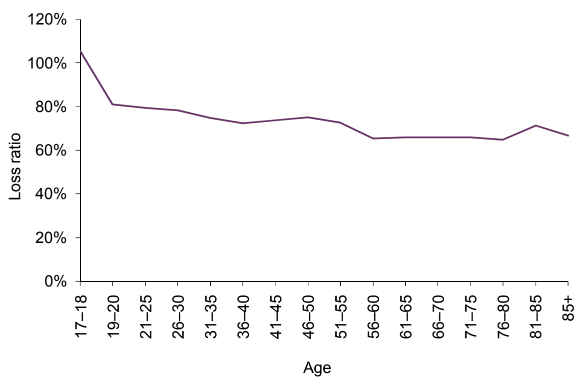
- If the risks correlated with age are correctly priced, a restriction in the use of age cannot, in general, make the supply of products more efficient. In other words, the outcome will not be ‘more or better products for consumers at a lower price’. Any increase in the risks or other costs of provision as a result of a policy change will ultimately be borne by customers.

- While some age groups may benefit from a restriction on age-based practices, this will almost certainly be at the cost of other age groups. If a policy measure does not correct a market failure and deliver overall efficiency benefits, any improvement in the outcome for one consumer group (eg, older people) will be to the detriment of other groups (eg, younger people).

- The removal of age as a criterion will encourage (and make commercially viable) the use of other characteristics to assign customers to different risk groups (eg, direct measurement of reaction times to determine motor insurance premiums). These alternatives may entail more costs (eg, measuring reaction time is more expensive than asking a customer their age), which raises the total costs that have to be recovered (ie, prices will, in general, go up). In addition, if age and the new characteristic are both highly correlated with risk, the total premiums paid by the target group will not change significantly (because they will largely be the same people in the high-risk group(s) and the total risk of the original group will not have changed).

As a result, the general impact of restricting the use of age as a factor (intentionally or unintentionally) may not be as expected. Rather than giving the target group a better deal, it could end up unintentionally giving them a worse deal, albeit the detailed distribution of prices

Figure 2 Loss ratios in motor insurance, by age group



Note: Loss ratios calculated by dividing total claims costs by total gross written premiums for each age group. Data captures more than 90% of the market for private vehicle insurance (cars) and refers to underwriting year 2005.
Source: Oxera analysis based on Association of British Insurers data.

would change—there would be some individual winners, and some individual losers to balance these.

In any case, as shown above, prices at the market level currently seem to be largely risk-based and cost-reflective, and there appear to be no market failures on the pricing side. If there are failures in the market, they are more likely to be in the way it currently matches demand and supply—ie, there is evidence of some consumers having greater difficulty in finding the relevant products or providers because of their age.

This could potentially be solved with signposting and referrals, which seek to address access problems directly and improve market outcomes by changing the distribution process—ie, consumers refused a financial services product at the point of sale because of their age would be given the relevant information about, or be directly referred to, a provider catering for their particular age group.

Conclusion

From a market-wide economic perspective, there is no evidence of significant demand from certain age groups not being met—although there is a clear differentiation of consumers in the market on the basis of their age. However, the differences are generally driven by the real differences between age groups in the costs of provision (and the level of demand). The specialisation of providers, combined with differences in the economics of supply, can explain much, if not all, of the differentiation experienced by consumers of different ages in the market. Whether this outcome in the market is acceptable or fair (from a pure equity perspective) is a matter of policy, rather than economics. And whether the current outcome would meet the new tests in the Equality Bill is a matter of law. However, any policy which does aim to alter the differentiation of consumers on the basis of age will impose costs which, if incurred, will ultimately be borne by consumers. Such costs would have to be weighed against the expected benefit of the policy.

---

[1] Equality Bill, Clause 13 (2).
[2] Equality Bill, Explanatory Notes, para 74.
[3] Based on a consumer survey conducted face to face with more than 2,000 consumers, of whom nearly 700 are in the 60+ age group and just over 200 in the 80+ group.
[4] Loss ratios cannot be directly translated into profitability as they do not include all expenses incurred by insurance companies, or any returns on the investment of premiums.

If you have any questions regarding the issues raised in this article, please contact the editor, Derek Holt: tel +44 (0) 1865 253 000 or email d_holt@oxera.com

Other articles in the July issue of *Agenda* include:

- **do utilities provide a good hedge against inflation?**
- **lost property: the European patent system and why it doesn't work**
  Bruno van Pottelsberghe, Bruegel and the Université Libre de Bruxelles
- **the debate on trading and post-trading: clear and settled?**

For details of how to subscribe to *Agenda*, please email agenda@oxera.com, or visit our website

www.oxera.com