



The latest equality and anti-discrimination legal developments: implications for credit scoring

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ECJ judgement on gender in insurance



- On March 1, 2011 the European Court of Justice banned the use of gender in assessing insurance risk and calculating insurance premiums as from 21 December 2012
- Prior to this ruling, Council Directive 2004/113/EC of 13 December 2004 implementing the principle of equal treatment between men and women in the access to and supply of goods and services (Gender Directive) permitted the use of gender, so long as it could be justified by the underlying actuarial and statistical data.
- Otto Thoresen, ABI Director General, said: “...The decision by the European Court to ban gender in the use of insurance pricing was disappointing as it could have an impact on our customers. Insurers are working hard to mitigate any effects...”
- ABI further stated: “While insurers will look to do all they can to minimise any impact for customers affected, it is likely that for some premiums could rise”. Source: Association of British Insurers
- “ECJ ruling against sex discrimination in insurances key victory for women’s rights, say civil society organisations” Source: AGE Platform Europe



Outline



- Economic theories of discrimination
- Overview of the anti-discriminatory provisions
- Studies of the impact of anti-discriminatory provisions
 - ‘Study on the use of age, disability, sex, religion or belief, racial or ethnic origin and sexual orientation in financial services, in particular in the insurance and banking sectors’ commissioned by EC DG Employment, Social Affairs and Equal Opportunities (Civic Consulting, 2010)
 - ‘Age discrimination in financial services: final report of the Experts’ Working Group’ (HM Treasury, 2008)
 - ‘The use of gender in insurance pricing’, Research paper (CEA, 2011)
 - “The use of gender in insurance pricing, Analysing the impact of a potential ban on the use of gender as a rating factor”, ABI Research Paper No 24, 2010 (Oxera , 2010).
- Results of the survey of CS&CC 2009 participants
- Some examples
- Conclusions



Economic definitions of discrimination

- Economic theory:
 - Taste-based (subjective discrimination) arises from preferences or prejudice (Becker, 1971);
 - Statistical (objective discrimination) arises from the lack of information necessary to calculate the degree of risk. It is assumed that individuals will behave like the group of which they are members, since there is insufficient information on the individual (Phelps, 1972).
- The Law does not make the above distinction and is concerned with 'equal treatment'



Anti-Discrimination Legislation

- USA
 - Equal Credit Opportunity Act (ECOA, 1974) prohibits characteristics from being used in credit scoring (race, colour, national origin, gender, marital status, religion, receipt of public assistance, or exercise of consumer protection rights). Age has a special status.
- EU
 - Articles 8, 19 of the Treaty of the Functioning of European Union (TFEU);
 - Gender Directive - Council Directive 2004/113/EC of 13 December 2004
 - Proposal for a Council Directive on implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation, COM(2008) 426 final.



Legal definition of discrimination (EU)



- “ **Direct discrimination** occurs where one person is **treated less favourably** than another is, has been or would be treated in a comparable situation on the grounds of sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation...
- **Indirect discrimination** occurs where an apparently neutral provision, criterion or practice would put persons of a particular sex, a particular racial or ethnic origin, a particular religion or belief, a particular disability, a particular age, or a particular sexual orientation at a particular disadvantage compared with other persons, unless that provision, criterion or practice is objectively justified by a **legitimate aim and the means of achieving that aim are appropriate and necessary.**”

Source: Civic Consulting, Main Report, p.89-90



UK - Equality Act (2010)

- “Direct discrimination
 - (1) A person (A) discriminates against another (B) if, because of a protected characteristic, A **treats B less favourably** than A treats or would treat others.
 - (2) If the protected characteristic is **age**, A does not discriminate against B if A can show A’s treatment of B to be **proportionate means of achieving a legitimate aim...**
- Indirect discrimination ...
 - A person (A) discriminates against another (B) if A applies to B a provision, criterion or practice which is discriminatory in relation to a relevant protected characteristic of B's ... if—
 - ... (b) it puts, or would put, persons with whom B shares the characteristic at a particular disadvantage when compared with persons with whom B does not share it,
 - ... (d) A cannot show it to be **a proportionate means of achieving a legitimate aim.**”



Views on 'treatment' – Group 1



- Civil society organisations
- Any use of sex, age and disability in the design and supply of financial services constitutes discrimination:

“The general rule to apply in order to decide whether a complaint constitutes a case of discrimination is considering whether the discriminatory factor is a characteristic on which the individual can decide upon (e.g. lifestyle choices, individual behaviour). If not (e.g. age, sex), lack of access or penalising conditions constitute a problem of discrimination”. AGE (EU)

“Using the sex of a person to define an insurance premium or pension constitutes a breach of the fundamental right to equality between women and men as guaranteed by the European Treaty”. (European Women Lobby)

Source: Civic Consulting, 2010



Views on 'treatment' – Group 2



- Mainly industry
- It depends on the circumstances whether the use of sex, age and disability for the provision of financial services constitutes discrimination: “The starting point is Art. 19 of EC Treaty that does not foresee an absolute prohibition to differentiate. The principle of nondiscrimination states that persons equally situated must be treated equally, but also that persons unequally situated must be treated differently. Consequently, discrimination would then mean that equals are treated unequally and that unequals are treated equally. So the starting point is the comparability of situations. Different risk exposures are different situations. These different situations need to be treated differently according to the non-discrimination principle. On that basis, risk differentiation does not represent discrimination. An eventual denial of coverage is the result of risk assessment, but is not discriminatory.” (CEA - the European Insurance and Reinsurance Federation)

Source: Civic Consulting, 2010



Views on 'treatment' – Group 2



“Age discrimination can constitute a problem if it is not a proportionate means of achieving a legitimate aim. The aim must reflect a real and objective need which is not discriminatory in itself.

The means of achieving the aim must be:

- justified by relevant and accurate evidence – which could include actuarial or statistical data or a bona fide professional opinion in the case of insurance, for example.
- a proportionate response – that is, the same aim could not be achieved by less discriminatory means, and/or the justification is important enough to override the impact of the discriminatory treatment.”

AGE Concern and Help the Aged (UK)

Source: Civic Consulting, 2010



Proportionality

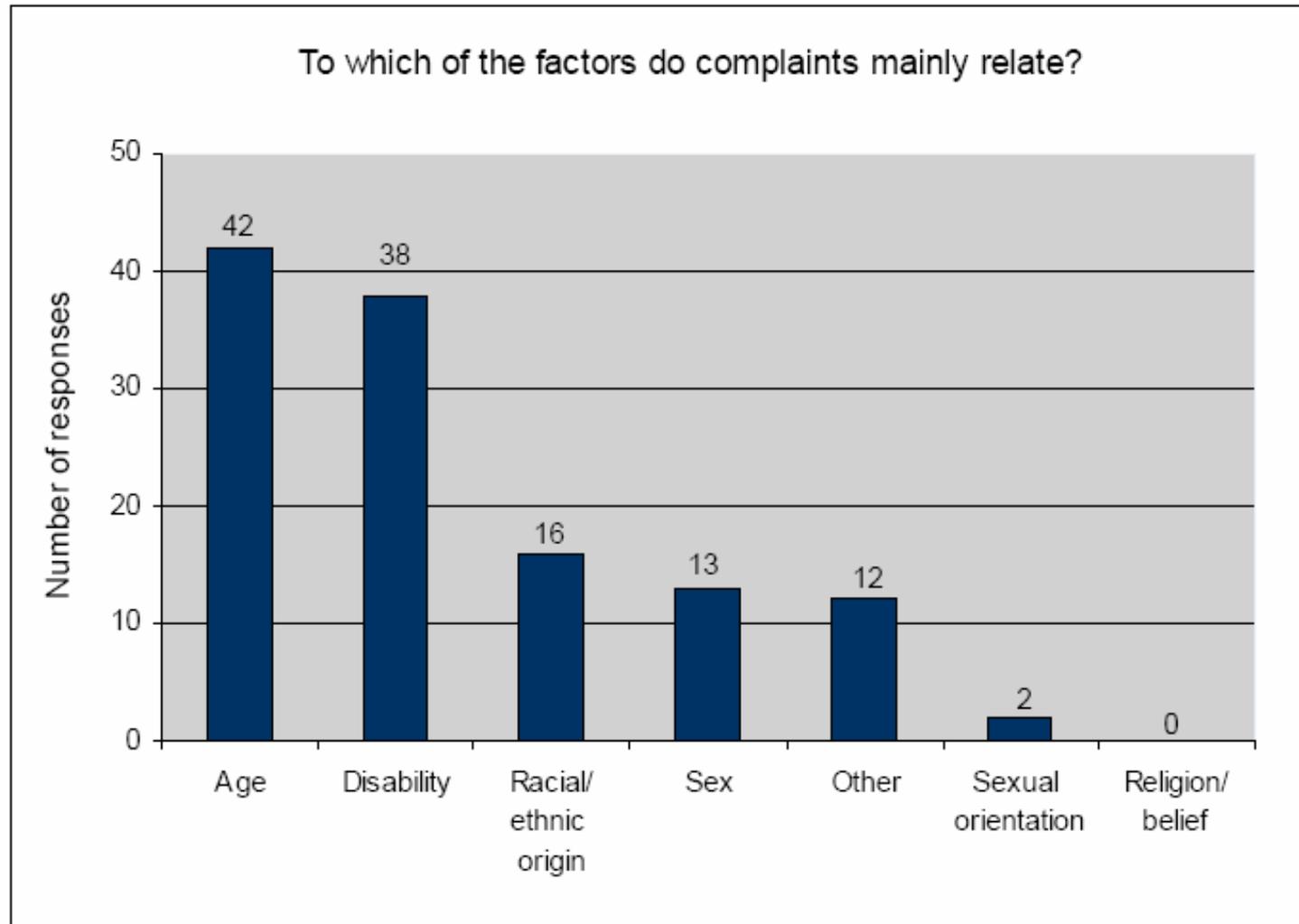
“There is little guidance available for financial services providers on what exactly is meant by the requirement of the Gender Directive that differences in premiums have to be ‘proportionate’. According to services providers, proportionality of differences in premiums and benefits is very difficult to demonstrate because insurers do not use a simple (in the mathematical sense), strictly proportionate approach to underwriting with regard to sex, age and disability, or indeed any other factor used in risk assessment. This complexity is reflected in the difficulty for equality bodies, ombudsmen or courts to decide whether or not differences in premiums/treatment are proportionate, in case provider behaviour is challenged on basis of non-discrimination legislation.”

Source: Civic Consulting, 2010

Use of factors for risk assessment by product (EU)

Product category	Factors		
	Sex	Age	Disability
<i>Insurance products</i>			
Private health insurance	++	++	++
Critical illness insurance	++	++	++
Disability/income protection insurance	++	++	++
Life insurance	++	++	++
Annuity products	++	++	+
Motor insurance	++	++	+
Travel insurance	+	++	+
Accident insurance	+	+	+
Long term care insurance	+	+	+
Loan insurance/Payment protection insurance	+	+	+
Home insurance	0	+	0
Private liability insurance	0	+	0
<i>Banking/Loan products*</i>			
Mortgage loans	0	+	0
Consumer credit**	0	+	0
Credit cards	0	+	0
Deposit account	0	0	0

Complaints





Our own survey

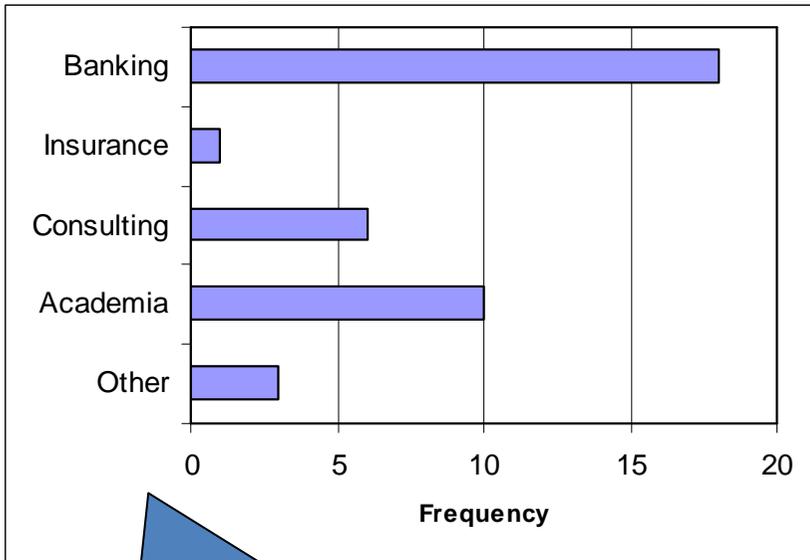


- Conducted at the previous Credit Scoring & Credit Control Conference
- Self-administered questionnaire with mainly closed and some open questions
- 38 responses received

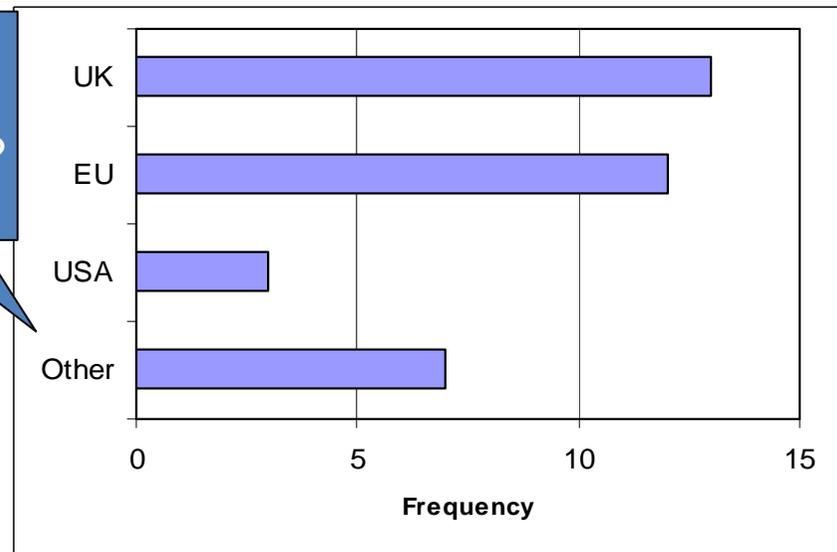
Many thanks to everyone who found time to respond!

And many thanks to Sandra Peddie and Fernando Moreira for their help in distributing the questionnaires !

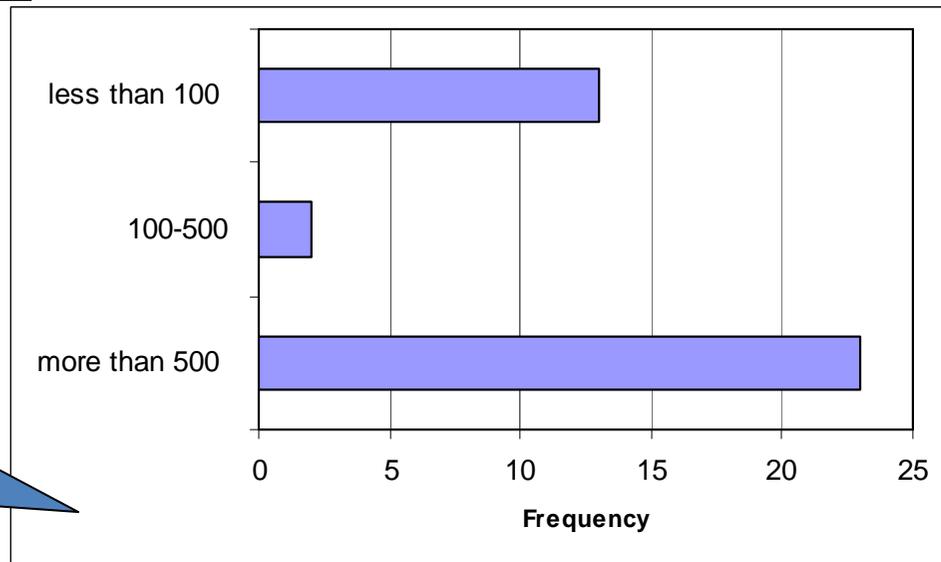
Respondents profile



Are you from ... ?



Do you work in ... ?



How many people work in your organisation?



In your opinion which of the following factors should be legally restricted?



	Should be totally forbidden by Law	Should be partially forbidden by Law	Should be no legal restrictions
Age	0	19	17
Disability	17	11	8
Gender	9	12	15
Religion/ belief	20	7	9
Race/ethnic origin	19	9	8
Sexual orientation	23	5	8



Median rank of importance in design/pricing (1 - not important and 5 - very important)



	Age	Disability	Gender	Race/ Ethnic origin
Health Insurance	5	4	3	1
Life Insurance	5	4	3	1
Accident Insurance	4	3	2	1
Housing Insurance	2	1	1	1
Motor Insurance	4	3	2	1
Travel Insurance	3	3	2	1
Auto loan	3	1	1	1
Personal loan	3	1	1	1
Mortgage	3.5	1	1	1
Credit card	3	1	2	1



Median rank of importance in risk assessment

(1 - not important and 5 - very important)



	Age	Disability	Gender	Race/ Ethnic origin
Health Insurance	5	4	2	1
Life Insurance	5	3.5	2	1
Accident Insurance	3	2	2	1
Housing Insurance	3	1	1	1
Motor Insurance	4	3	3	1
Travel Insurance	4	2.5	1.5	1
Auto loan	3	1	2	1
Personal loan	3	1	2	1
Mortgage	4	1	2	1
Credit card	4	1	2	1

Publication of statistical evidence

Median level of agreement with the following statements (5 – strongly agree)

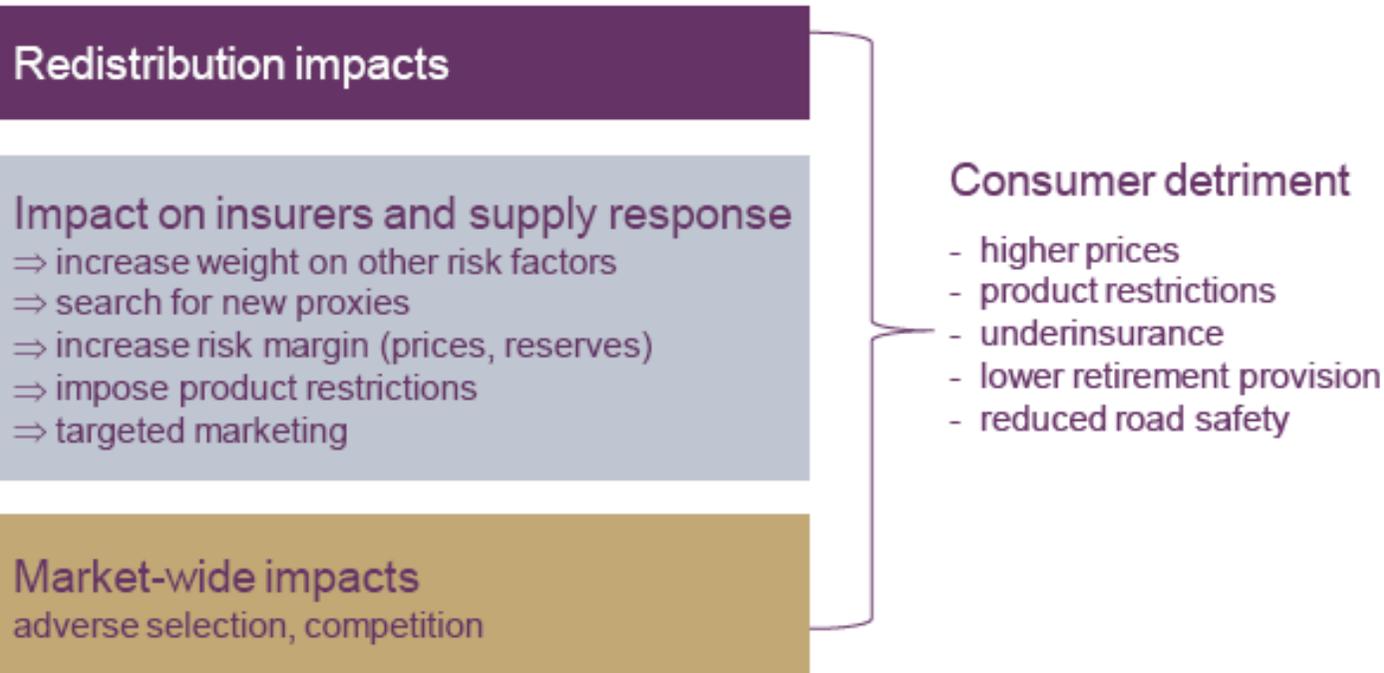
The publication of actuarial data is justified	4
The publication of actuarial data is a proportionate burden	4
The publication is detrimental due to commercial sensitivity	2



Some comments

- “Discriminatory practices are essential in financial markets! We are in the business of discriminating: on lending to those willing and able to repay. We should only discriminate, by and large, on data that people have control over. Other factors, such as age, should only be used as secondary factors and not have a discriminatory influence over decisions.”
- “If discrimination is based on prejudice, forbid it by law. But if discrimination is due to empirical provable factors, allow its application...”
- “Ensure models are supported by statistical evidence; ensure that no single discriminatory factor is used as the sole determinant for accepting/ denying applicant”
- “Allow access to and use of other data, and develop new data sources (e.g. rent payee and utilities). Other data will reduce need for demographic data.”
- “There will always be discrimination because people will wish to work with people like themselves. Only through education can people's views be changed...”
- “Financial markets as they stand are a commercial/capitalist enterprise. To attempt to regulate with a view to being FAIR or JUST is perhaps noble but ultimately flawed. If financial products are necessary rather than optional in order to function in a society then perhaps the society itself needs regulation rather than the financial markets”.

Impact of ban



Source: Oxera (2010),
ABI Research Paper No 24, 2010,
THE USE OF GENDER IN INSURANCE PRICING
Analysing the impact of a potential ban on the use of gender as a rating factor



Impact of gender ban



- In Belgium for motor third party liability insurance unisex rates have been introduced since a new law came into force on 21 December 2007.
- In 2008, claim costs for women were on average 14% lower than for men.
- In 2008 the average claims frequency was 7%, yet for younger drivers:

	Age		
	18	19	20
Male	25.20%	21.50%	20.10%
Female	13.90%	12.50%	11.90%

- “In practice, the gender ban in Belgium resulted in higher premiums and/or less insurance coverage for all non-life insurance products... the introduction of unisex rates for motor insurance in Belgium resulted in 2008 in premium reductions of 3–4% for young men (under 30 years old) and a premium increase of 7–15% for young women (under 30 years old). “

Source: CEA (European insurance and reinsurance federation), ‘The use of gender in insurance pricing’, Research paper, February 2011



Impact of age removal from scorecards



- One-off cost of redesigning existing scorecards: from £50,000 for small lenders to £750,000 for larger ones (excl. costs of changes to strategy, pricing, etc.)
- Increase in bad rate is estimated between 5% and 20%
- A major lender example of removing age:
 - Reduction in Gini from 53.2 to 52.5
 - Estimated Bad rate increase of 0.1% maintaining same Accept rate
 - Estimated reduction in Accept rate of 1.7% maintaining same Bad rate
 - Most affected would be '18-25' and '60+' age groups
 - A three-way age segmentation of portfolio gives 2.9% improvement in Gini.

Source: HM Treasury, 2008, 'Age discrimination in financial services: final report of the Experts' Working Group'



Example of age removal



Store card for Belgium , Germany and the Netherlands

78996 accepted applications from 1998-1999

- Telephone
- Employer's phone
- Residential status
- Marital status
- Occupation (Full-time, part-time, self-employed, etc.)
- Age
- Spouse age
- Time at address
- Time in employment
- Number of dependants
- Industry sector (Manufacturing, banking, catering, etc.)
- Credit insurance
- Card insurance
- Goods code
- Goods price
- Payment date



Predictive Accuracy

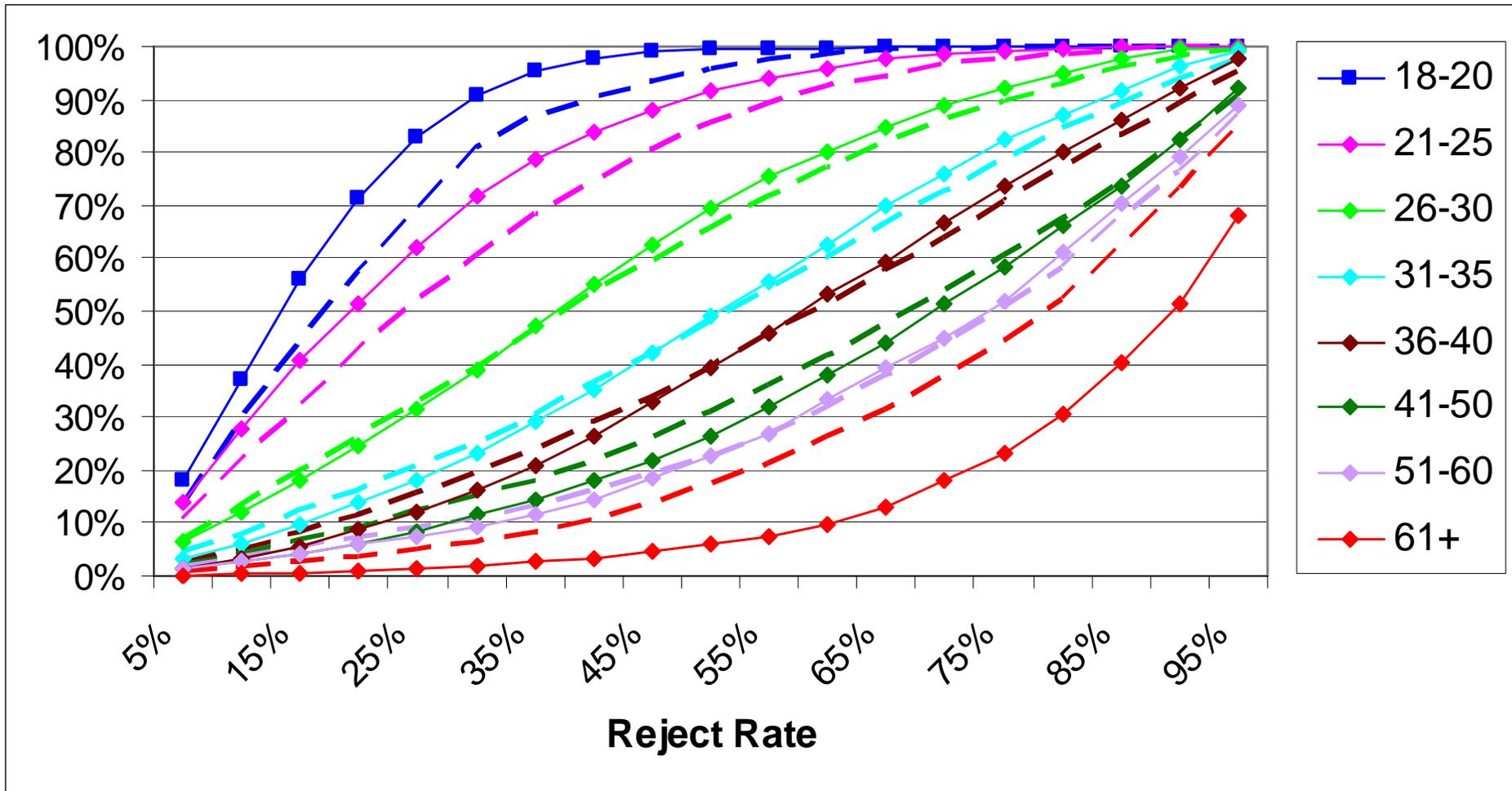


Hold-out sample, 30% of accepted applications

	AUROC	Gini
All variables	0.746	0.491
No Age	0.741	0.482
No Age and Spouse Age	0.739	0.479



% rejected in different age groups, models with and without 'Age'





Conclusions



- “Equal treatment” does not necessarily lead to “equal outcome”, so it would be beneficial if legal provisions could
 - introduce distinction between taste-based and statistical discrimination
 - re-assess the concept of “equal treatment” (“fair treatment”?)
 - establish a balance between “treatment” and “outcome”
- Need to continue working on consensus with civil rights organisations



Further research

- Need for qualitative research around discrimination concepts supported by quantitative analysis
- Need for better understanding of attitudes among consumers
- If you would like to share your views and/or contribute to research (confidentiality and anonymity guaranteed), please get in touch
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- Many thanks!