



EU Gender Directive:

A CMI perspective

Dave Grimshaw

Secretary, Continuous Mortality Investigation

28 January 2008

A CMI perspective: Agenda

- Introduction (What is the CMI?)
- Generic issues arising from the legislation for the CMI
- Data to be published and product-specific issues:
 - Life assurance and annuities
 - Critical illness
 - Income protection
- What happens next?

Introduction: The impact of the EU Equality Directive on the UK

- The "*EU Equality Directive*" includes derogation in respect of Insurance, allowing member state governments to regulate gender differentiation at a local level in line with the Directive's criteria
- The Directive applies to all EU member states; the UK has opted for the derogation in respect of Insurance.

Introduction: Starting point in the Directive

- The use of gender as a factor in the calculation of premiums or benefits for insurance or related financial services products should not result in differences in the premiums or benefits of individuals.
- However, where gender is a determining factor in the assessment of risk based on **relevant and accurate actuarial and statistical data** then proportionate differences in individual premiums or benefits are allowed.
- This is subject to **accurate data relevant to the use of gender as a determining actuarial factor being compiled, published and regularly updated.**
- The Treasury paper sets out their proposed guidance for the publication of this data.

Introduction: HM Treasury paper

- **HMT issued consultation paper in June 2007**
("The publication of data associated with the use of gender in the assessment of insurance risks")
- **HMT issued final paper in November 2007**
("The publication of data associated with the use of gender in the assessment of insurance risks: Government response to consultation")
- **Scope includes:**
 - Life assurance and annuities
 - Critical illness
 - Income protection
 - Motor insurance
 - Private medical insurance
 - Other types of policies and new policies

Introduction: Data publication obligations

- Guidance describes minimum content, form and frequency of data to be published for each main policy type
- Data form:
 - Intelligible to someone who is not an insurance expert
 - Table, graph or chart with appropriate explanations
 - Source of data and period to which it relates
 - Technical terms must be explained
- Data may be published by insurers on an individual or joint basis or **collated by a third party**. Source and accuracy must be attested to.

Introduction: Collective data publication

- Life assurance and annuities)
- Critical illness) **CMI**
- Income protection)
- Motor insurance **ABI**
- Private medical insurance **Nil?**
- Other types of policies & new policies ?

What is the CMI?

- Research organisation of the UK Actuarial Profession
- Traditionally funded by life insurers/reinsurers
- Actuarial profession provides expertise
- Continuous investigations (mortality since 1924)
- Independent
- Confidentiality is key
- Results set benchmarks for the industry

A CMI perspective: Agenda

- Introduction (What is the CMI?)
- Generic issues arising from the legislation for the CMI
- Data to be published and product-specific issues:
 - Life assurance and annuities
 - Critical illness
 - Income protection
- What happens next?

Generic issues arising from the legislation for the CMI

- The need to submit data
- The need to disclose source of data
- The purpose specified
- Appointing a 3rd party data publisher
- Access to data
- Attestation of accuracy
- Updating data

Generic issues arising from the legislation for the CMI

- The need to submit data
- The need to disclose source of data
- The purpose specified
- Appointing a 3rd party data publisher
- Access to data
- Attestation of accuracy
- Updating data

Generic issues: the need to submit data

- Section 3.8 of HMT document states:
“The Regulations will provide that insurers who do not publish this information, or do not participate in a collective publication scheme, will not be able to use gender as an underwriting factor.”
- Proposed regulations do not state this ... but it may be inferred
- May need an “emergency” data collection exercise if this is an issue

Generic issues: attestation of accuracy

- Section 4.8 of HMT document states:
“The ... accuracy of the data must be attested by an authorised officer of the firm providing it, without the need for additional external or independent audit”
- CMI can attest to the accuracy of its calculations and that reasonable efforts have been made to ensure the accuracy of insurers’ data, but it cannot guarantee there are not errors in data submitted
- Current practice is to seek sign-off from insurers that “results appear reasonable”
- May be achievable for future data, but very difficult for past data, e.g. 1999-2002 data, which we were proposing to use

A CMI perspective: Agenda

- Introduction (What is the CMI?)
- Generic issues arising from the legislation for the CMI
- Data to be published and product-specific issues:
 - Life assurance and annuities
 - Critical illness
 - Income protection
- What happens next?

Data to be published:

(1) life assurance and annuities (4.15-4.17)

- Publication may be by way of a table or chart illustrating the ratio of male to female mortality for insured risks in the United Kingdom or an appropriate region. The published data must illustrate recent differences in mortality by gender and by age. It may be based on graduated data using single year age points or raw data by age ranges not exceeding five years up to age 75 and 10 year age ranges thereafter
- The published data may aggregate different forms of annuity and life assurances
- The published data should be reviewed and, if necessary, updated at intervals not exceeding four years

Issues regarding data to be published: (1) life assurance and annuities

- Meaning of “...**recent** differences...” – is 1999-2002 OK?
- “... age ranges not exceeding five years up to age 75 and 10 year age ranges thereafter ...”
 - Experience can be volatile in 5-year bands
 - No maximum age specified – data very sparse above 80
- “... may aggregate different forms of annuity and life assurances ...”
– aggregation reduces volatility, but will products show different gender differentials?
- “... if necessary, updated ...” – who decides if necessary?
- Will consumers understand the inverse relationship between gender differentials in mortality rates and annuity prices?

Specimen data:

(1) life assurance and annuities

Ratio of male mortality to female mortality 1999-2002

Selected age bands

Most CMI life office mortality investigations combined

Age band	Ratio	Age band	Ratio
26-30	220%	56-60	148%
31-35	190%	61-65	160%
36-40	155%	66-70	163%
41-45	130%	71-75	153%
46-50	132%	76-80	152%
51-55	131%	81-85	151%

Specimen data:

(1) life assurance and annuities

Age band	Ratio	Age band	Ratio
21-25	459%	61-65	160%
26-30	220%	66-70	163%
31-35	190%	71-75	153%
36-40	155%	76-80	152%
41-45	130%	81-85	151%
46-50	132%	86-90	136%
51-55	131%	91-95	107%
56-60	148%	96-100	90%

Ratio of male mortality to female mortality 1999-2002; Selected age bands
 Most CMI life office mortality investigations combined

Data to be published:

(2) critical illness (4.18-4.20)

- Publication may be by way of a table or chart illustrating the ratio of male to female **critical illness rates** for insured risks in the United Kingdom or an appropriate region. The published data must illustrate recent differences in **the incidence and cost of critical illness** by gender and by age. It may be based on graduated data using single year age points or raw data by age ranges not exceeding five years up to age 75 and 10 year age ranges thereafter
- The published data may aggregate different forms of **critical illness insurance**
- The published data should be reviewed and, if necessary, updated at intervals not exceeding four years

Issues regarding data to be published:

(2) critical illness

- Meaning of “...incidence **and cost** of critical illness...”?
- “... age ranges not exceeding five years up to age 75 and 10 year age ranges thereafter ...”
 - Experience can be volatile in 5-year bands
 - No maximum age specified – data very sparse above 55
- “... may aggregate different forms of critical illness insurance ...” – aggregation reduces volatility, but will accelerated and stand-alone products show different gender differentials?
- Are data relevant to other CI products – cancer-only, tiered products, etc?

Specimen data: (2) critical illness

Ratio of male to female critical illness claim rates 1999-2002

Selected age bands

Age band	Accelerated Ratio	Stand-Alone Ratio
31-35	105%	85%
36-40	101%	83%
41-45	112%	89%
46-50	121%	75%
51-55	129%	102%
56-60	169%	114%
61-65	191%	829%

Data to be published:

(3) income protection (4.21-4.23)

- Publication may be by way of a table or chart illustrating the ratio of male to female **long term sickness** for insured risks in the United Kingdom or an appropriate region. The published data must illustrate recent differences in **the incidence and cost of long term sickness** by gender and by age. It may be based on graduated data using single year age points or raw data by age ranges not exceeding five years up to age 75 and 10 year age ranges thereafter
- The published data may aggregate different forms of **income protection insurance**
- The published data should be reviewed and, if necessary, updated at intervals not exceeding four years

Issues regarding data to be published:

(3) income protection

- CMI publishes incidence rates and termination rates for IP – need to combine to illustrate differences in “...incidence **and cost** of long term sickness...”?
- “... age ranges not exceeding five years up to age 75 and 10 year age ranges thereafter ...”
 - Experience can be volatile in 5-year bands (low volumes of female data)
 - No maximum age specified – data very sparse above 55
- “... may aggregate different forms of income protection insurance ...”
– aggregation reduces volatility, but experience may show different gender differentials by deferred period, occupation class, etc

Specimen data: (3) income protection

Ratio of male to female income protection claim inception rates 1999-2002; All Occupations; Selected age bands

Age band	Deferred 13 weeks	Deferred 26 weeks
18-24	91%	102%
25-29	78%	119%
30-34	66%	71%
35-39	81%	40%
40-44	53%	47%
45-49	66%	52%
50-54	77%	54%
55-59	105%	59%
60-64	170%	650%

A CMI perspective: Agenda

- Introduction (What is the CMI?)
- Generic issues arising from the legislation for the CMI
- Data to be published and product-specific issues:
 - Life assurance and annuities
 - Critical illness
 - Income protection
- What happens next?



EU Gender Directive:

A CMI perspective

Dave Grimshaw

Secretary, Continuous Mortality Investigation

28 January 2008