



SECTION COLLOQUIUM 2019



THE MODERN ACTUARY - CHALLENGE • INFLUENCE • LEAD
ASTIN • IAAHS • IAALS • IACA • PBSS

2 - 5 April

2019

Cape Town
South Africa

CTICC

www.colloquium2019.org.za

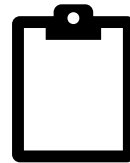
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ACTUARIAL
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Results from the survey:

The evolving role of the healthcare actuary





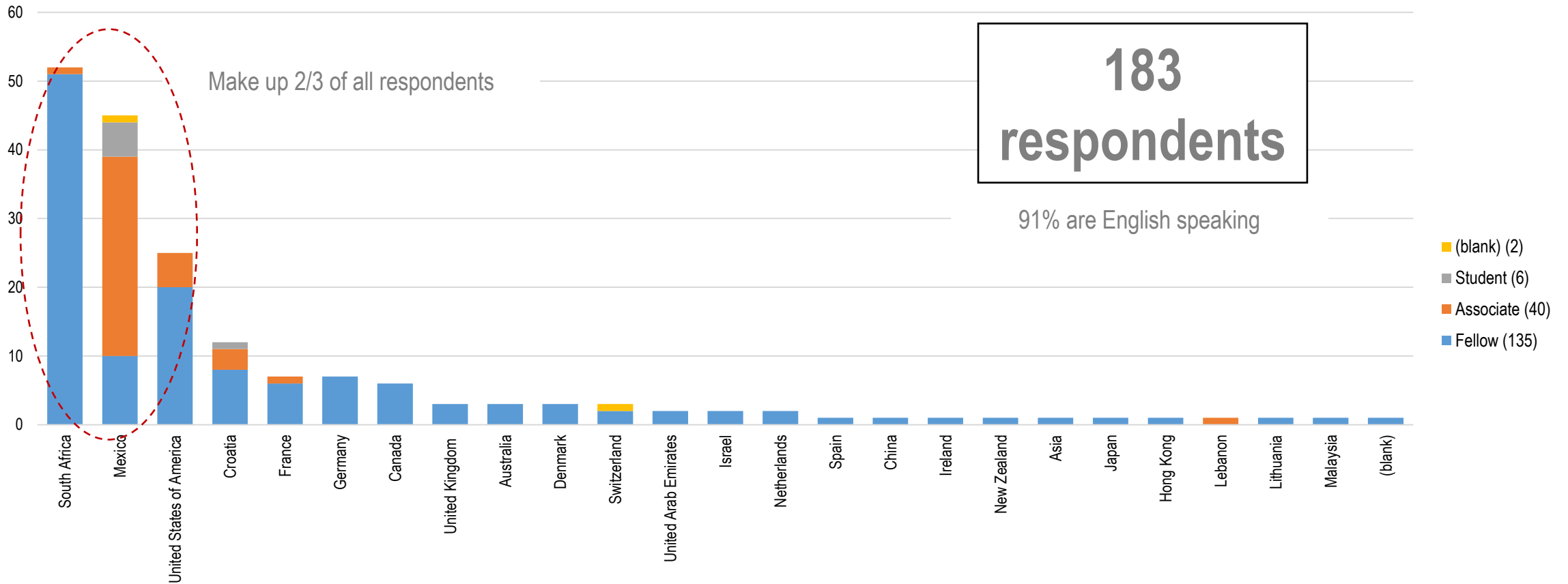
About the Survey

- Aim:
 - to understand the current areas of focus for healthcare actuaries and how this has been evolving
 - to understanding the skill requirements for completing these tasks
 - to highlight any differing insights between countries and industries
- Conducted as a joint project of the IAA Health Committee and the IAA Health Section (IAAHS) between March/April 2019
- Sections:
 1. About you (demographics and experience)
 2. About your work (products and tasks)
 3. Skills for healthcare actuaries
 4. Support for healthcare actuaries (guideline and syllabus requirement)
 5. Role in the IAAHS (call for participation)



Participation

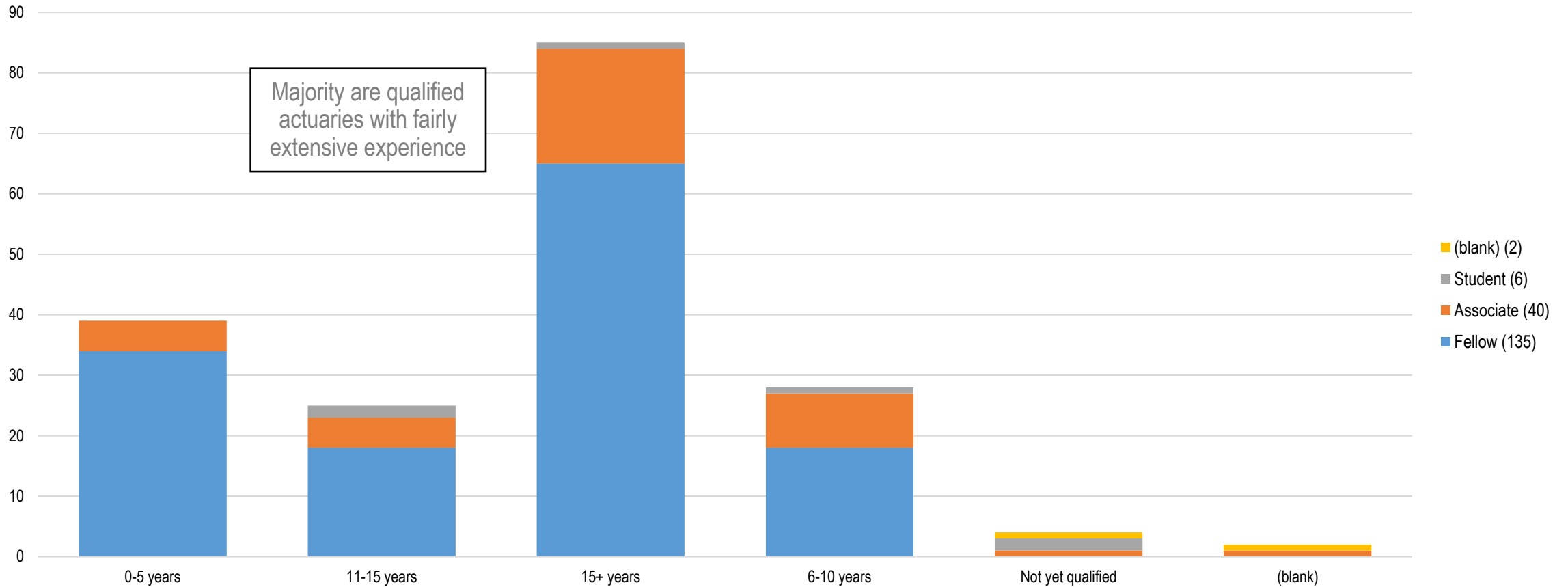
Participants by country and membership type





Participation₂

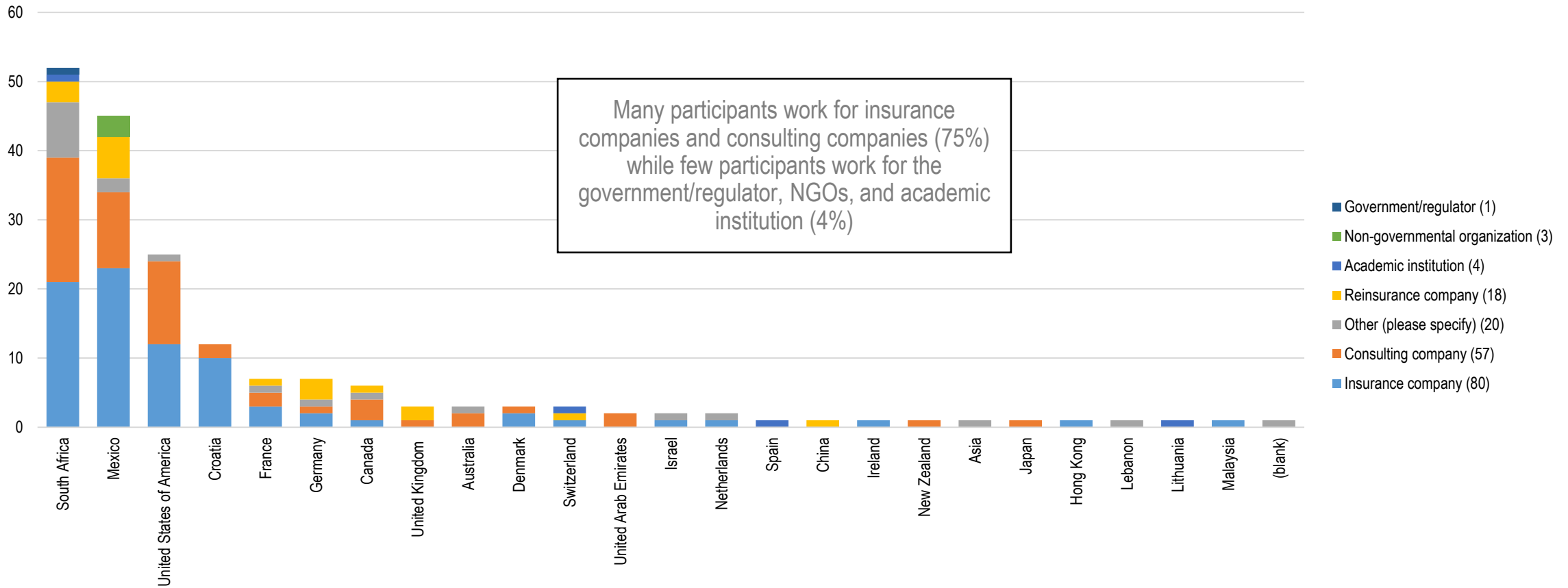
Participants by membership type and experience





Participation₃

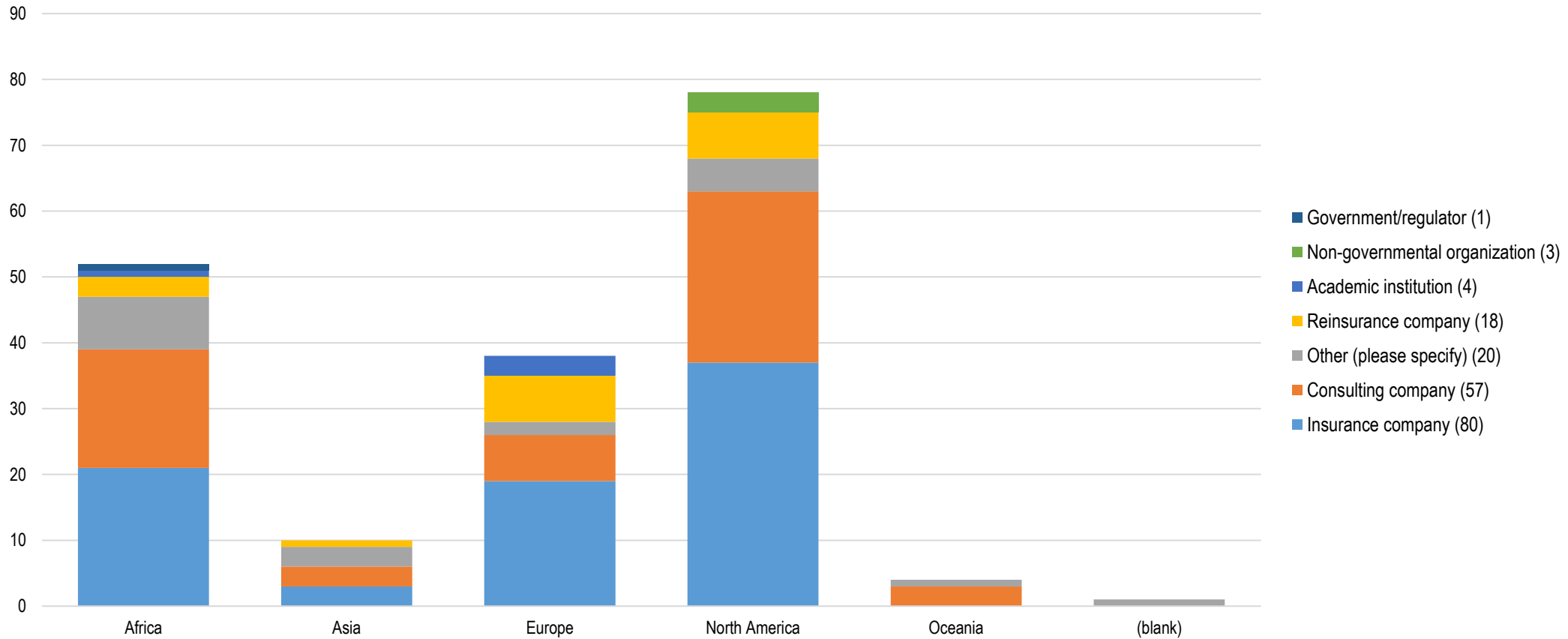
Participants by country and type of employer





Participation₄

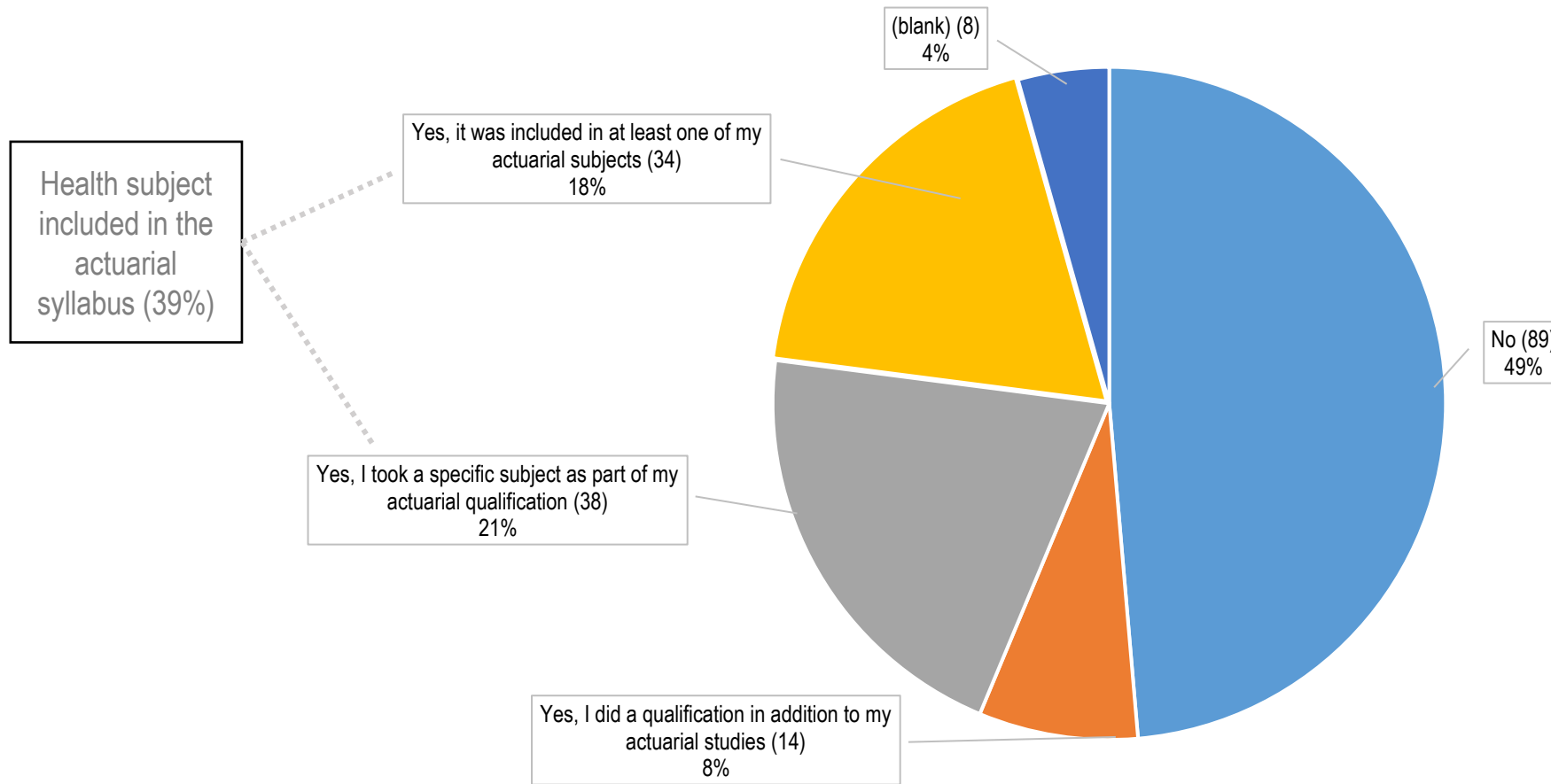
Participants by continent and type of employer





Healthcare qualification¹

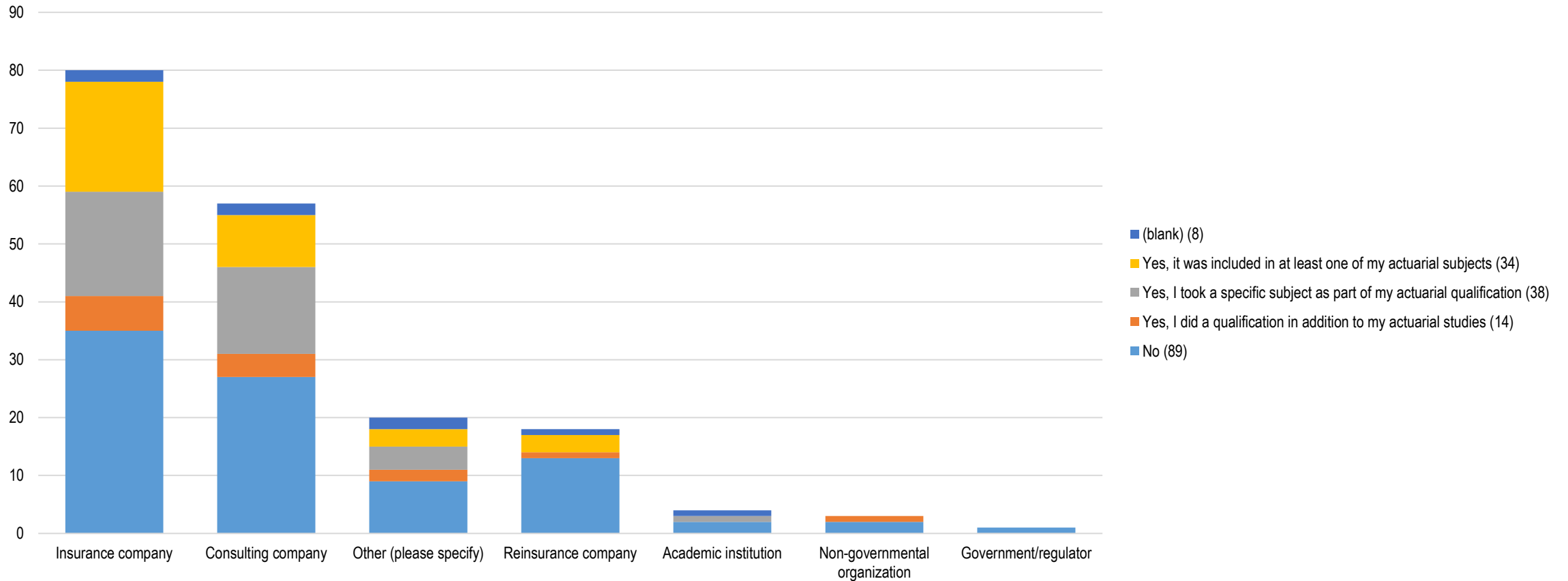
Participants with **health specific** qualification





Healthcare qualification₂

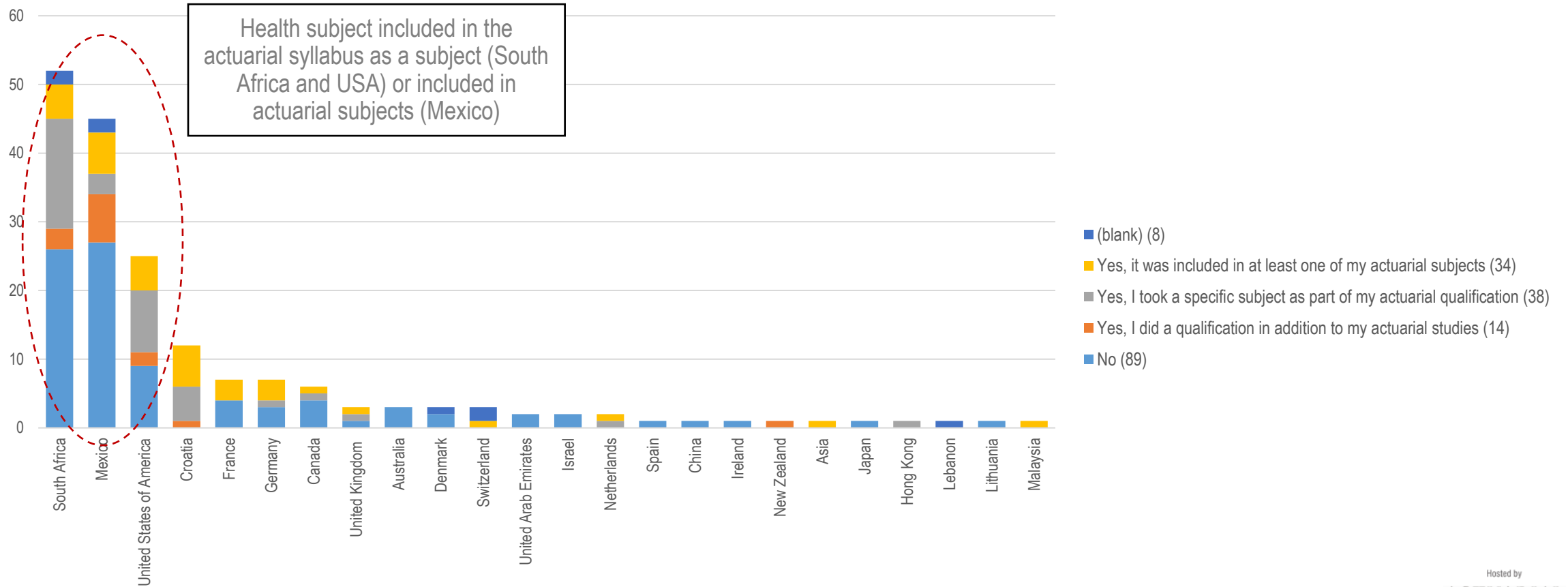
Health specific qualifications by type of employer





Healthcare qualification₃

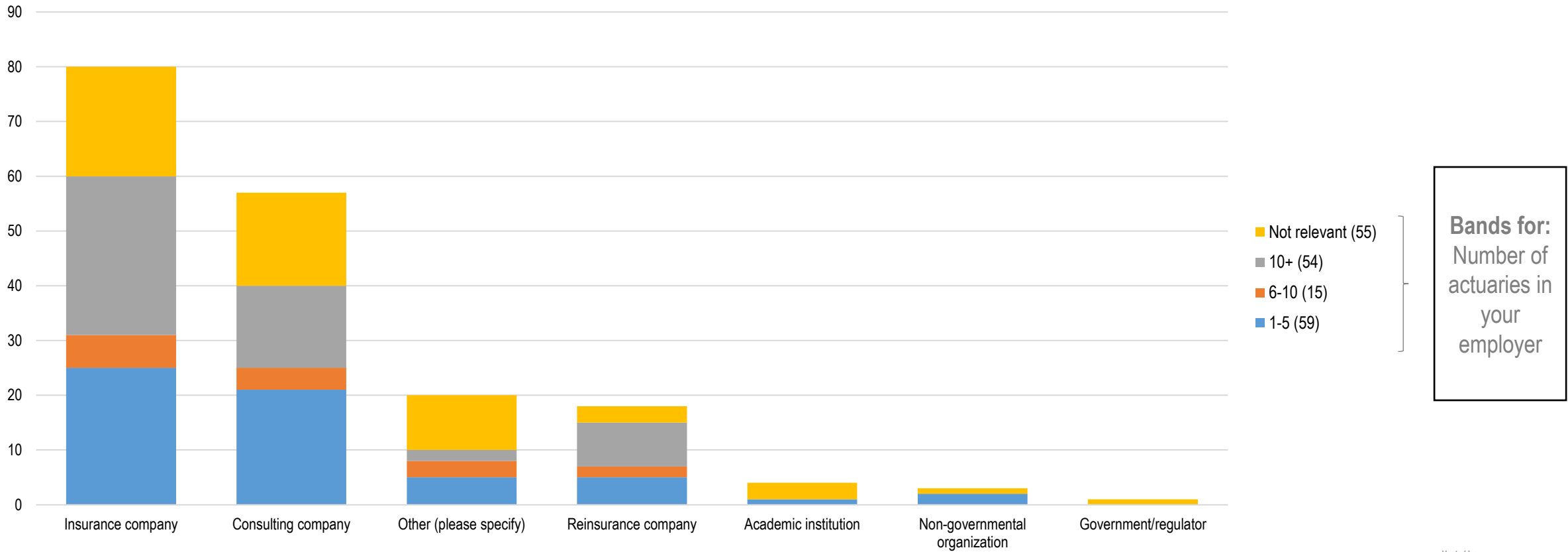
Participants by country and health specific qualifications





Healthcare qualification₄

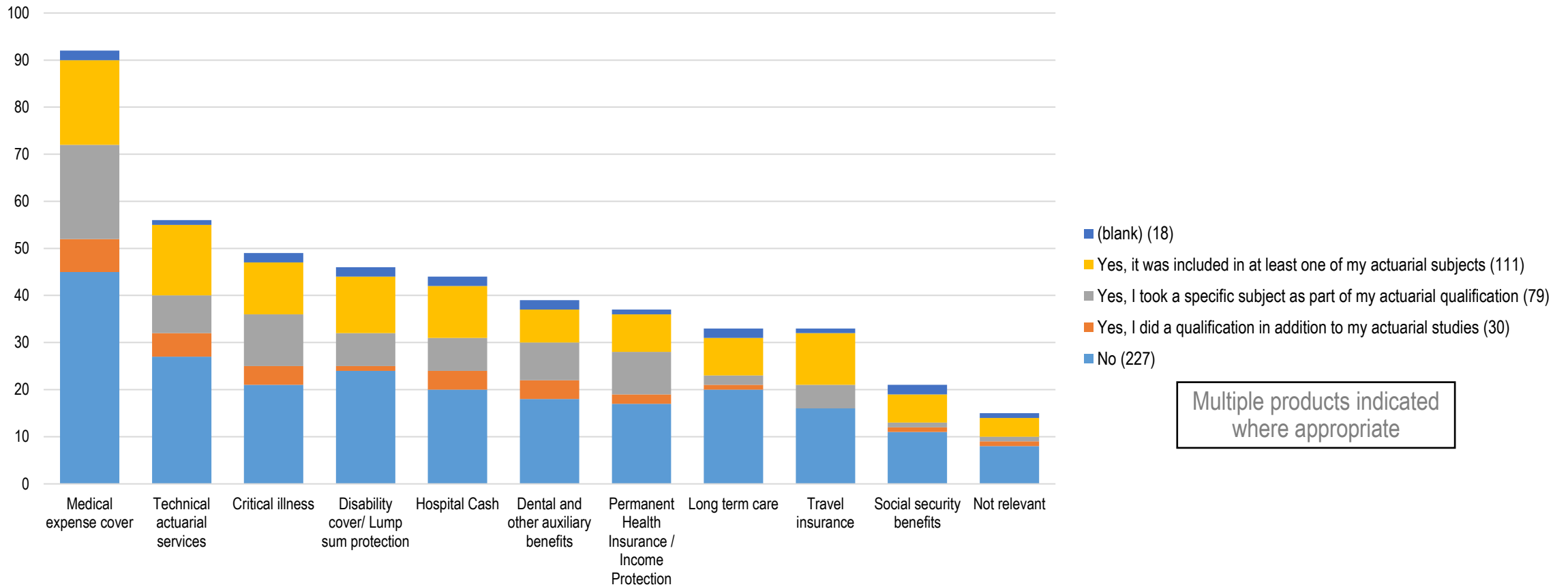
Number of healthcare actuaries employed by type of employer





Health products

Health product worked on by healthcare specific qualification

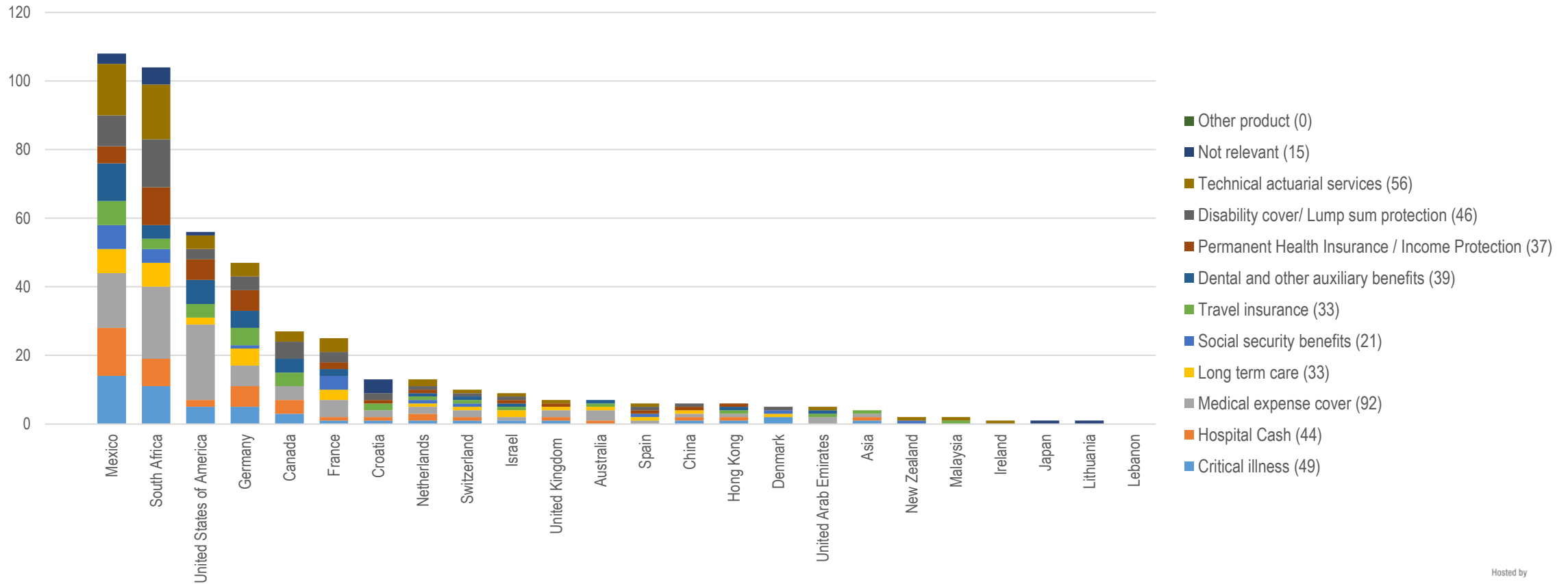


Multiple products indicated where appropriate



Health products₂

Health products by country





Health products₃

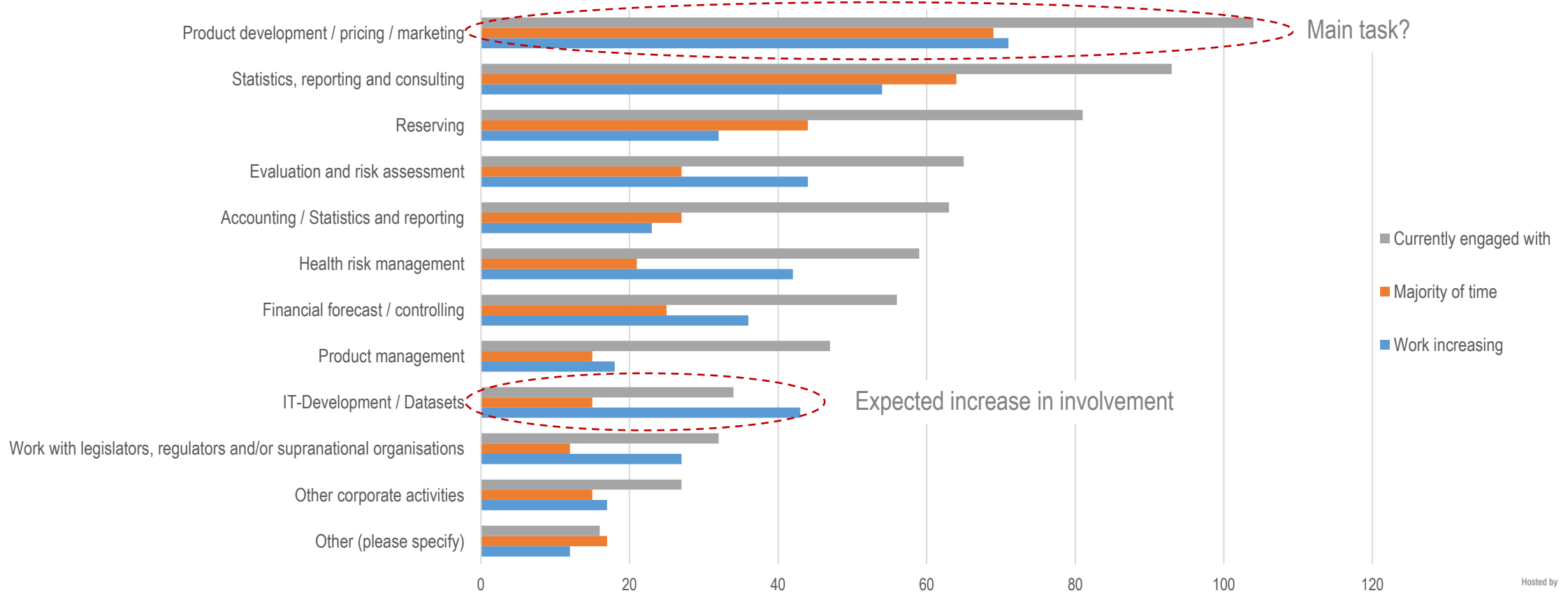
Other health products mentioned :

- Life insurance
- Workmens compensation
- Public Research data
- Life Quality at Work, Prevention schemes including IoT
- Expatriats
- Data Analytics in health benefits data
- Malpractice, consult to hmo management
- General insurance products
- Retirement benefits
- Risk management
- Reserves and for another kind of products (life or damage)
- National health system policy issues and funding
- Manual small incision cataract surgery
- Non life / general insurance
- Medical Schemes
- Voluntary health insurance
- Government benefit packages
- Overall affordability of total cost, provider and health system management
- Alternative provider payments
- Broader financial modeling
- Pharmacy Benefits
- Self-insured employer plan support: Stop-loss, plan change impact, etc.
- Credit Life & Disability
- Health insurance for small group customers (2-50 subscribers)
- Reimbursement health products



Tasks₁

Tasks relevant to health actuaries





Tasks₂

Top three tasks where work is
INCREASING the *most* :

1. Product development/ pricing/ marketing
2. Statistics, reporting and consulting
3. Evaluation and risk assessment

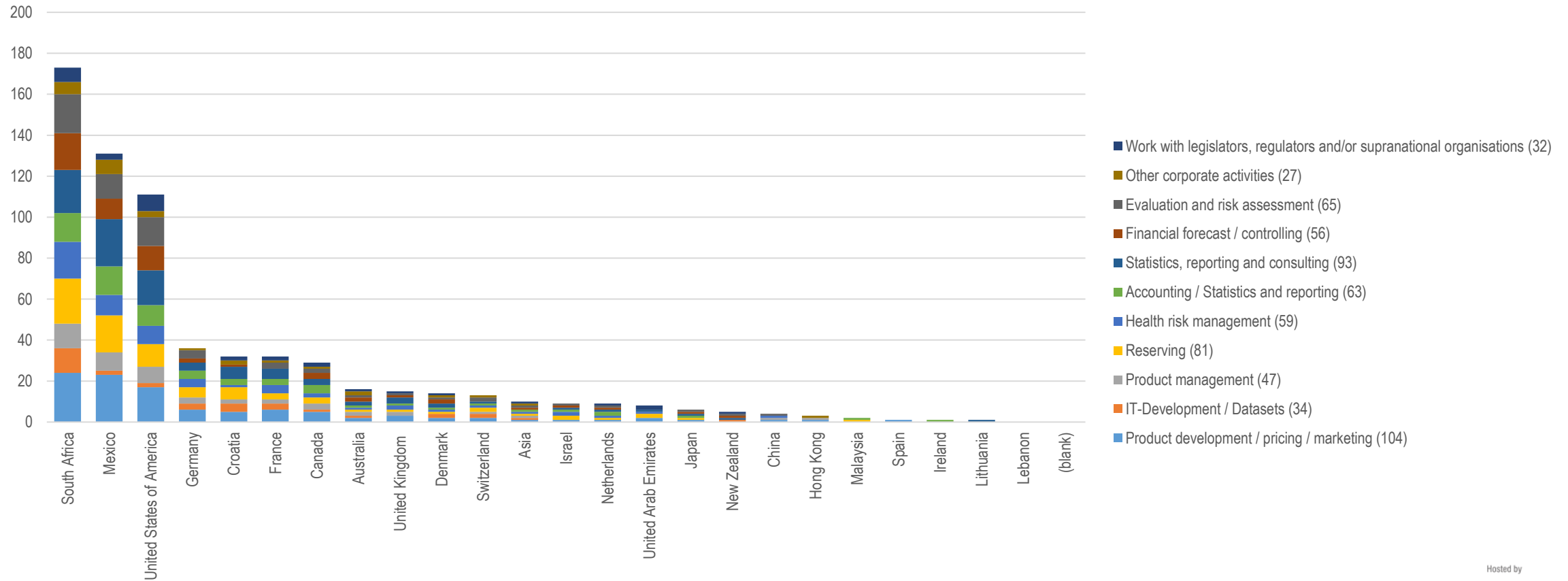
Bottom three tasks where work is
INCREASING the *least* :

1. Accounting/ statistics and reporting
2. Product management
3. Other corporate activities



Tasks₃

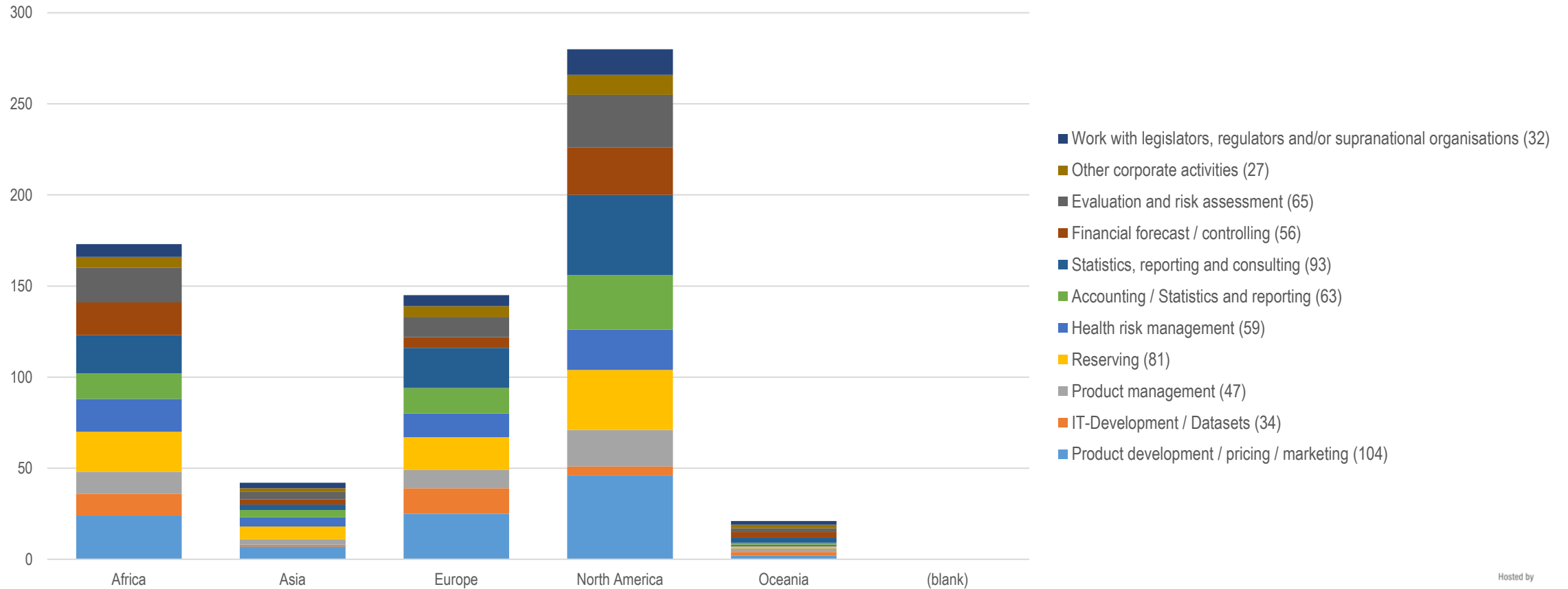
Tasks currently engaged in varied by country





Tasks

Tasks currently engaged in varied by **continent**





Tasks⁵

Other tasks mentioned :

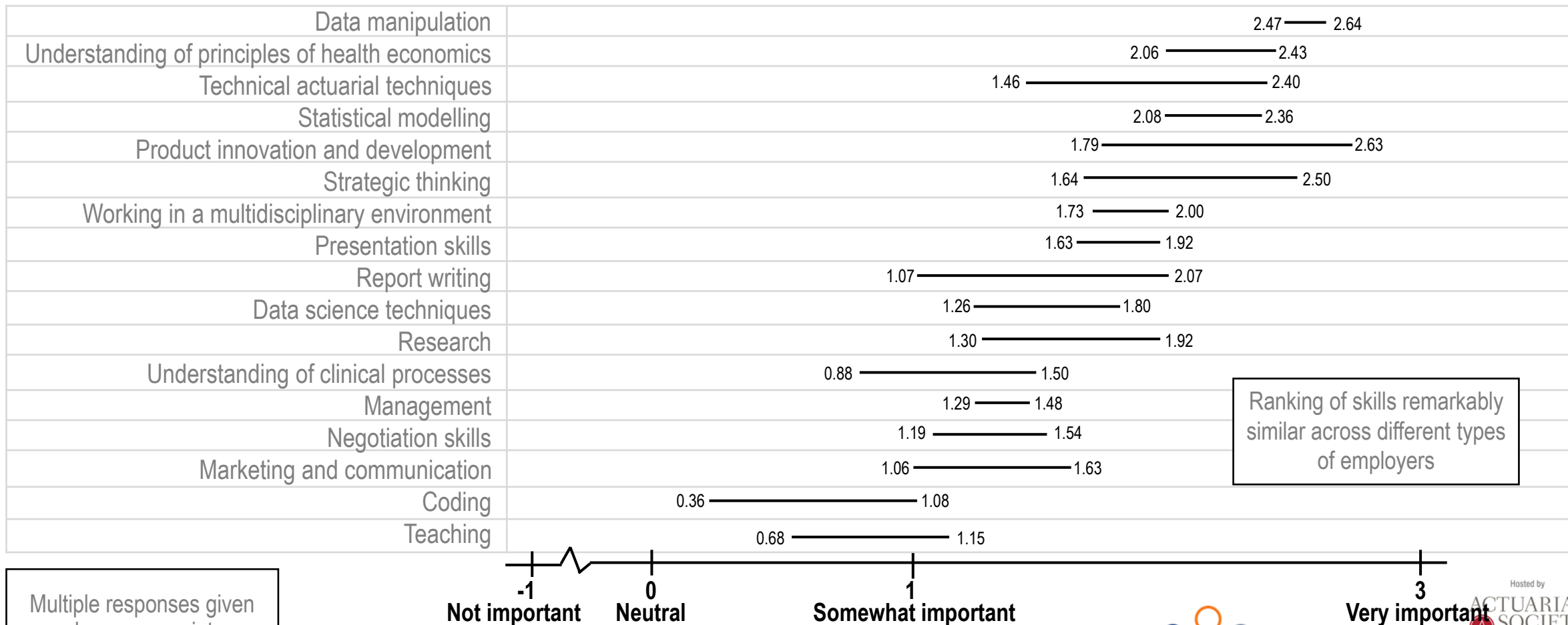
- Academic research
- Data analytics
- Health policy
- Litigation support
- Managed care
- Pensions and benefits
- Provider profiling
- Research
- Socio-economic forecasting tools
- Teaching
- Technical research and development

A number of respondents indicated that they expected work to increase in **data analytics** and **data science**, and in **supporting research**



Skills considered most relevant

Range of average score per skill



Ranking of skills remarkably similar across different types of employers

Multiple responses given where appropriate



Skills considered most relevant₂

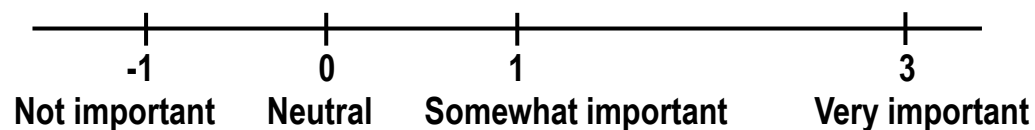
	ALL EMPLOYERS	INSURANCE	CONSULTING	REINSURANCE	OTHER
TOP 3	<p>Data manipulation</p> <p>Understanding of principles of health economics</p> <p>Technical actuarial techniques</p>	<p>Data manipulation</p> <p>Technical actuarial techniques</p> <p>Product innovation and development</p>	<p>Data manipulation</p> <p>Understanding of principles of health economics</p> <p>Statistical modelling</p>	<p>Product innovation and development</p> <p>Data manipulation</p> <p>Statistical modelling</p>	<p>Data manipulation</p> <p>Strategic thinking</p> <p>Understanding of principles of health economics</p>
BOTTOM 3	<p>Marketing and communication</p> <p>Coding</p> <p>Teaching</p>	<p>Marketing and communication</p> <p>Coding</p> <p>Teaching</p>	<p>Marketing and communication</p> <p>Coding</p> <p>Teaching</p>	<p>Teaching</p> <p>Understanding of clinical processes</p> <p>Coding</p>	<p>Data science techniques</p> <p>Teaching</p> <p>Coding</p>

Overall it seems that a **collaborative, interdisciplinary** approach to healthcare challenges is acknowledged

Support for HC actuaries

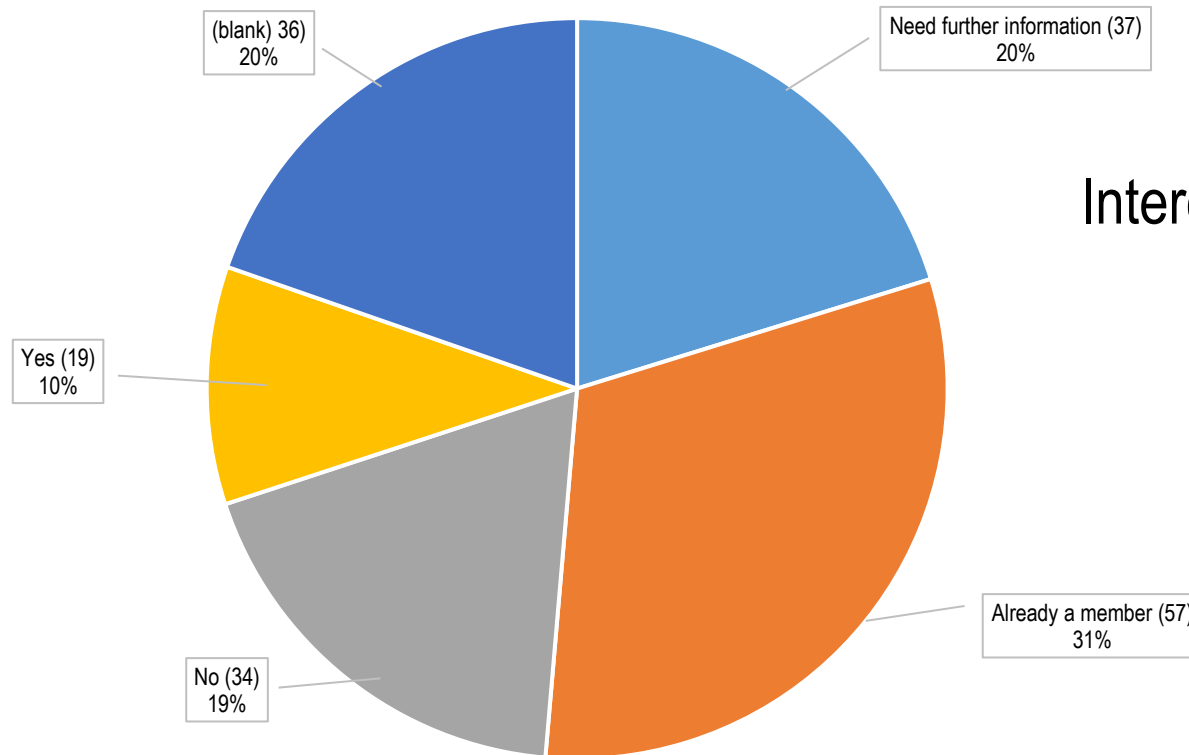
Average score for support requirements by employer type

	Specific health subject in syllabus	Guidance	Seminars and conferences	Webinars	Regulatory guidelines
Insurance	1.94	1.77	1.57	1.29	2.00
Consulting	1.98	1.49	1.67	1.70	1.69
Reinsurance	1.80	1.20	1.75	1.63	0.67
Other	1.71	1.23	1.21	1.23	1.57
All	1.88	1.25	-0.57	0.20	1.35





IAAHS volunteers₁



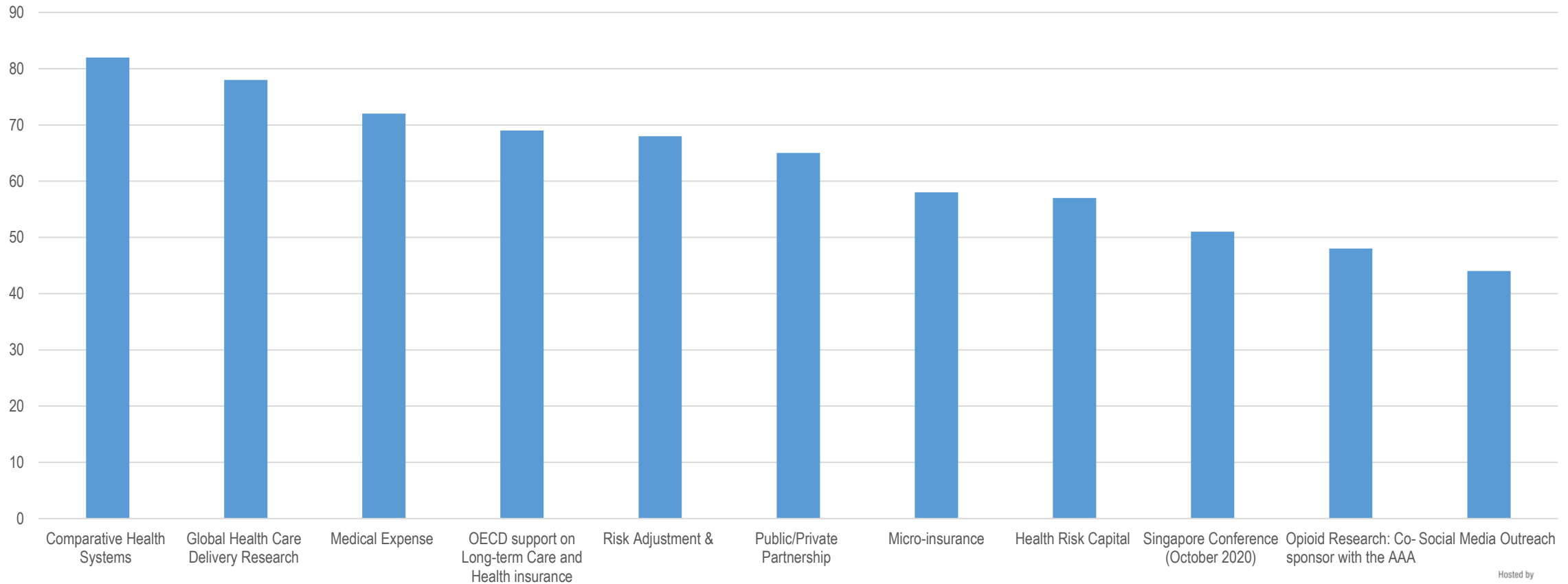
Interested in joining the IAAHS ?

- Need further information (37)
- Already a member (57)
- No (34)
- Yes (19)
- (blank) 36



IAAHS volunteers₂

IAAHS projects and their interest





Conclusions





QUESTIONS?

Thank you!