My experience:
from academia to the actuarial profession

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Outline

- My career path – how I got here
- What do actuaries do?
- Mercer – the company I work for
- Resources

My career path

- Academia:
  - Undergraduate degree in physics
    University of Parma, Italy, 1993-1999
  - PhD in physics
    Louisiana State University, USA, 1999-2003
  - Postdoc in numerical relativity
    University of Southampton, England, 2003-2005
  - Temporary lecturer, School of Mathematics
    University of Southampton, England, 2005-2006

3

My career path

- Actuarial profession:
  - Trainee actuary at Mercer Glasgow, Scotland, since Sep 2006

Why change career?

- Typical career in academia:
  - PhD (3-6 years), postdoc (2-4 x 2 years), lecturer/professor (with a bit of luck!)
  - Very long career path (first permanent position might be at age 35 or later)
  - Career peaks very late (it can take 15-20 years from the first permanent position to become a professor in the UK)

5

Why change career?

- Is the academic career worth it?
  - Main advantage:
    - you might end up doing what you love
  - Disadvantages:
    - lack of stability until later in life
    - little or no choice in location
    - likelihood of success may be limited
    - opportunity cost

6

What do actuaries do?

- Evaluating likelihood and financial impact of future events (assess risk and estimate cost of that risk).

  – Insurance (e.g. design and pricing of policies, calculation of reserves)

  – Pensions (e.g. level of pension contributions required to produce a certain retirement income)

- Skills: mathematics, economics, finance, probability and statistics, and business awareness.

- Ability to communicate complex concepts. Also involved in financial reporting.

How do you become an actuary?

- You must pass a series of exams set by professional body (Institute/Faculty of Actuaries in UK, Society of Actuaries in the US) and gain work experience (at least 3 years)

  - approx 5000 hours of study, pass rate below 50%

  - support from employer, pay rises/promotions for exam passes

  - high demand, well paid, rated one of the best jobs in America

8

MERCER

MARSH   MERCER   KROLL
GUY CARPENTER   OLIVER WYMAN

- Consultancy firm, part of Marsh & McLennan Companies
  - global leader for trusted HR and related financial advice, products and services
  - one of the largest of its kind (13,000 employees in 40 countries) advising substantial portion of Global Fortune 500 companies
- My area of work: retirement practice
  - help clients design and manage retirement benefits
  - offer advice to companies and trustees
  - every day job: calculation of value of benefits, calculation of accounting figures, answering member technical queries, keeping up-to-date with legislation, etc.
- Major challenge: work/life/study balance

9

Conclusion: some advice

- Think about what is really important to you, taking probability of success into account.

- Be in charge of your own future. Find out about opportunities available to you.

10

Resources

- www.soa.org
- www.dwsimpson.com/salary.html
- www.beanactuary.com/about/whatis.cfm
- www.beanactuary.com/about/best_job.cfm
- www.prospects.ac.uk/downloads/occprofiles/profile_pdfs/I1_Actuary,_consultancy.pdf
- www.mercer.com