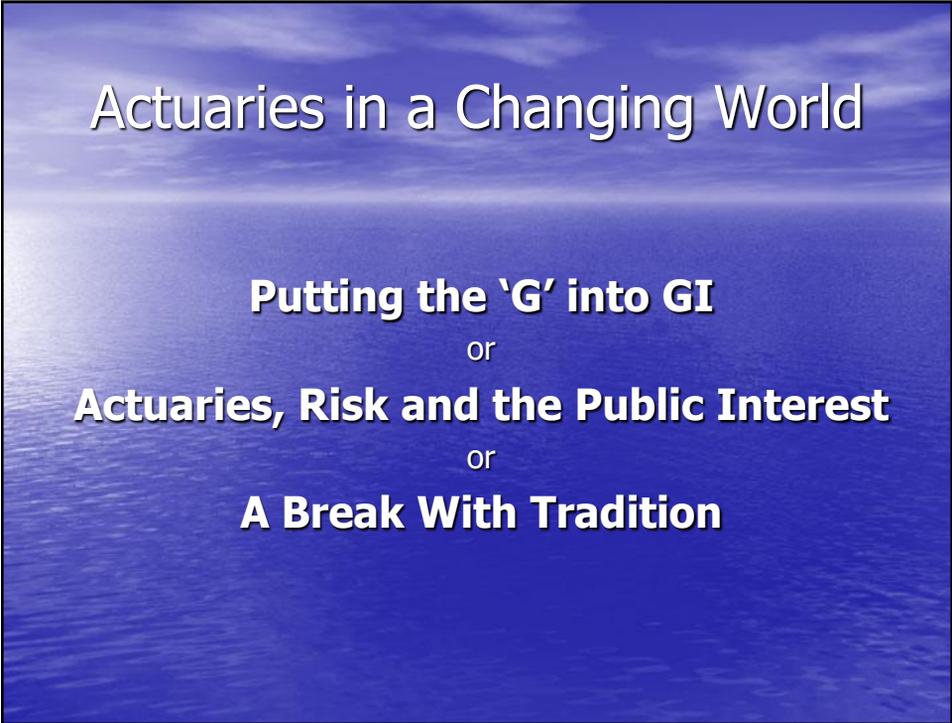


ACTUARIES IN A CHANGING
WORLD

John Gordon



Actuaries in a Changing World

Putting the 'G' into GI

or

Actuaries, Risk and the Public Interest

or

A Break With Tradition

Actuaries in a Changing World

Roots: the Downside



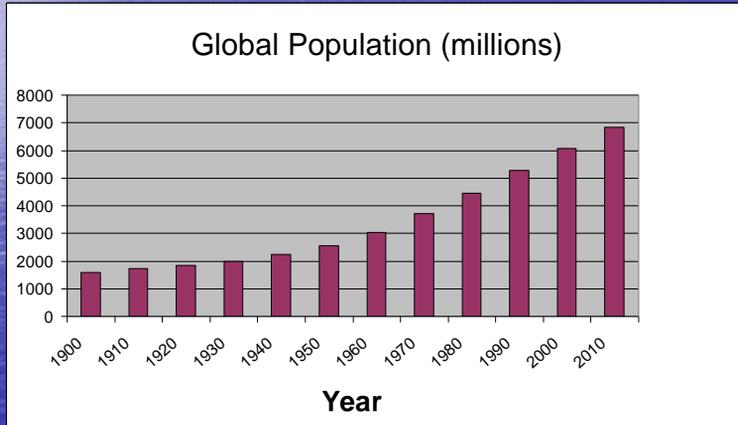
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Evolution in Action

- 1) Past Lessons
- 2) Present Challenges
- 3) Future Opportunities

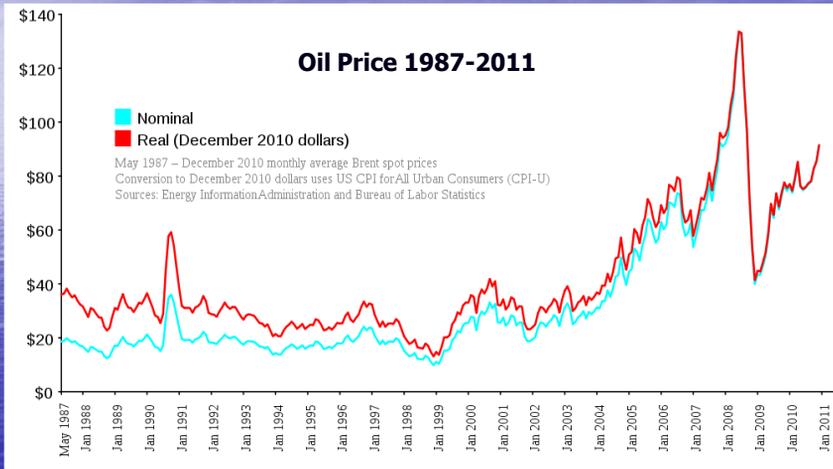
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Is the Past a Reliable Guide to the Future?



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Is the Past a Reliable Guide to the Future?



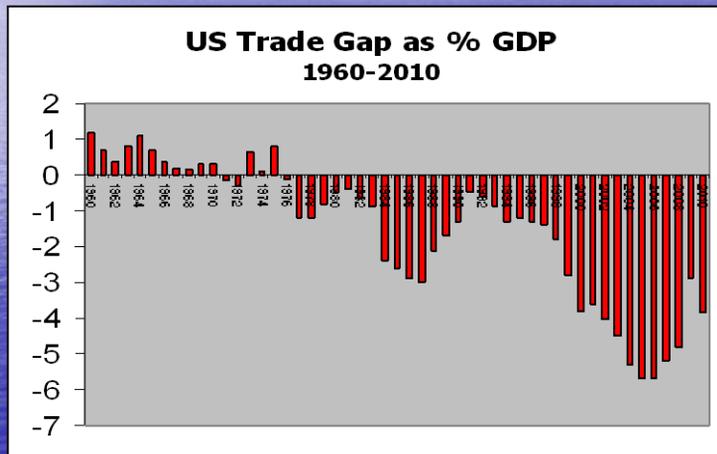
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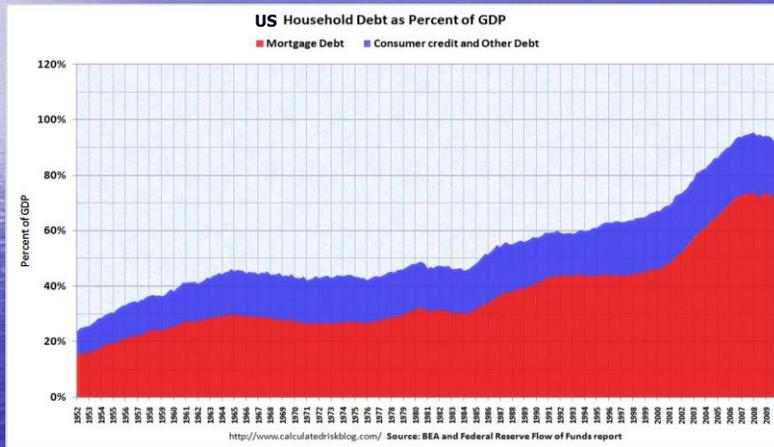
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The Big Risks

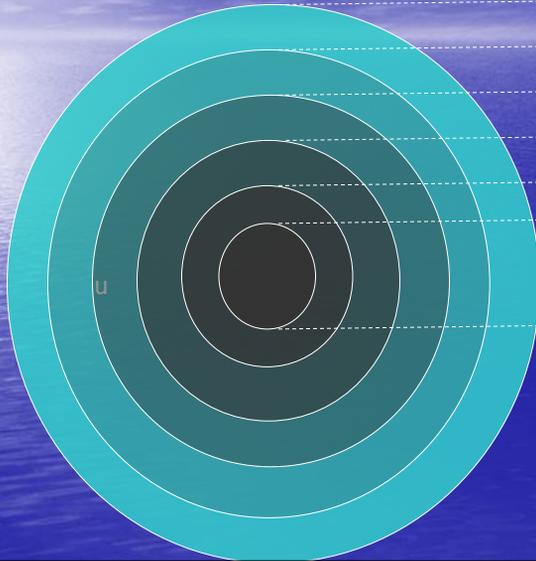
- Peak oil
- Global warming
- Geopolitical tensions
- Regional instabilities
- Terrorist threat
- Social unrest
- Global pandemic
- Resource shortages
- Tunguska II
- Krakatoa II
- Carrington II

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...and Risks a Little Closer to Home

- Freakonomics
- Rising Commodity prices
- Currency volatility
- Banking reform (or lack thereof)
- Trade imbalances
- National debt
- Consumer debt
- Stagnant housing market
- Failing financial system
- Failing economic doctrine

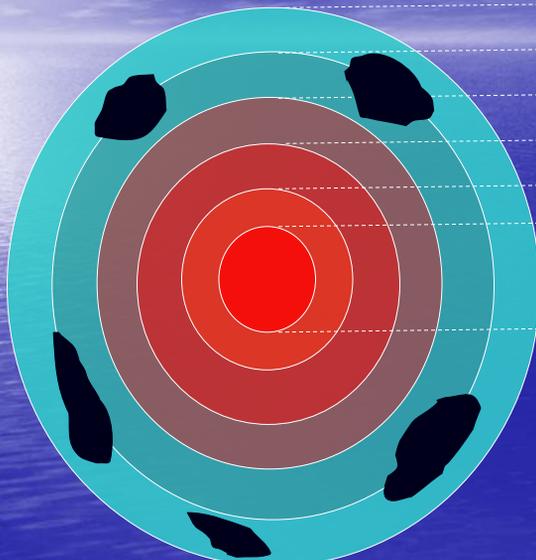
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- Global
- National
- Industry
- Corporate
- Team
- Individual

...but where does the Profession fit into this?

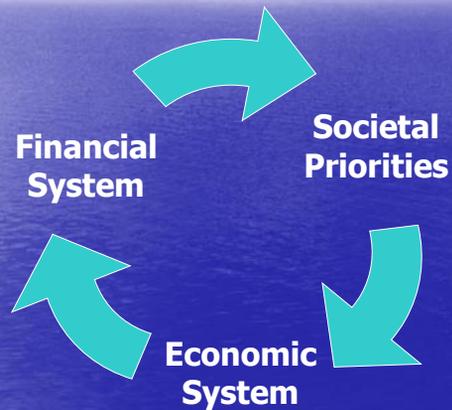
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- Global
- National
- Industry
- Corporate
- Team
- Individual

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An Unvirtuous Circle



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A Dysfunctional Society?

- Continuing focus on economic growth as prime measure of societal success
- Despite mounting evidence that this is a) not sustainable and b) not making us happy
- Short-termism is rife
- Growing 'reality gap'
- Culture of instant gratification
- Obsession with material possessions
- Increasingly fragmented
- Increasingly disconnected
- Increasingly disillusioned
- Increasingly polarised

=> We urgently need a new social contract built around a more balanced set of social priorities

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Is our Financial System Fit For Purpose?

- Financial markets should be a servant of the people, not their master
- An increasing proportion of FS activity is 'socially useless'
- Some of it is quite damaging to global financial security
- Markets are increasingly dominated by short term sentiment, and by short term trading activity
- Increasing range and complexity of financial products has made risks difficult to quantify (even for actuaries)
- This and the effects of globalisation are making financial markets increasingly unstable
- Countries, currencies and commodities can be held to ransom
- Small events beget big consequences

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Is our Economic System Fit For Purpose?

- Too much investment is for short term gain
- Too much focus on profit
- Companies do not factor in the true costs of their activities
- Governments are not making them
- Benefits of globalisation are banked
- But the costs and threats are not being recognised
- Does population growth+economic growth = sustainable future?

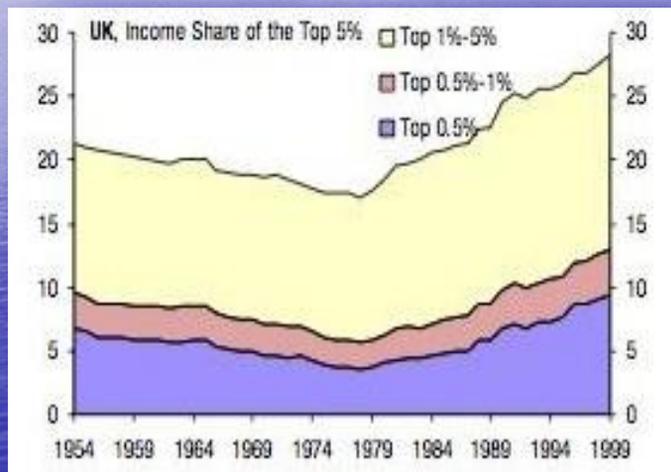
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The Growth Delusion

- Where has growth been coming from?
- The source, sustainability and long term cost of growth matter
- Growth through productive innovation is laudable
- But much of the growth we see is illusory
- And much of it is of questionable social value
- Too much of the value of global equities is based on the exploitation of finite resources
- Too much of any benefit has been going to too few people

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The Earnings Gap



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Actuaries, Risk and the Public Interest

What We Say

US:

SOA mission is to *"enhance the ability of actuaries to provide expert advice and relevant solutions for financial, business, and societal problems involving uncertain future events"*.

The SOA *"places serving the public ahead of serving its members"*.

UK:

"The Actuarial Profession has an obligation to serve the public interest. Collectively it seeks to do so by informed contribution to debate on matters of public interest and by influencing those with power to protect and enhance the public interest"

"The Profession is passionate about identifying matters of public concern where our input and involvement can be of benefit to society".

Actuaries in a Changing World

Actuaries, Risk and the Public Interest

What We Say

"Actuaries are experts in risk management. They are problem solvers and strategic thinkers with a deep understanding of financial systems"

- **Institute of Actuaries Website**

"Our vision is for actuaries to be the leading Professionals in the measurement and management of risk"

- **Society of Actuaries Website**

"The world is going to place its greatest trust in those whose training, experience and moral backbone will serve not only their clients and employers, but also the broader public interest. These are times when the world needs actuaries, even if the world does not yet know it"

- **Faculty President, October 2008**

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Actuaries, Risk and the Public Interest

Who Are Your Public?

- Customers of the company that employs you?
- Customers of all financial institutions?
- All citizens of your own country?
- Present *and* future generations?
- In our increasingly globalised world, what about the citizens of other countries?

Actuaries in a Changing World

Actuaries, Risk and the Public Interest

Who Are Your Public?

- Customers of the company that employs you? **(100%)**
- Customers of all financial institutions? **(91%)**
- All citizens of your own country? **(86%)**
- Present *and* future generations? **(73%)**
- In our increasingly globalised world, what about the citizens of other countries? **(50%)**

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Actuaries, Risk and the Public Interest

What Interests Should Actuaries Represent?

- Regulation of Insurers?
- Affordability of public sector pensions?
- Regulation of banks, hedge funds etc?
- Sustainability of the economic growth model?
- Balance between short term commercial interests and long term public interest?
- Wider societal risks (global warming, energy policy etc)?
- Banking policy (Tobin tax, retail/investment slit etc)?
- Domestic economic policy?
- International economic policy?

Actuaries in a Changing World

Actuaries, Risk and the Public Interest

What Interests Should Actuaries Represent?

- Regulation of Insurers? **(100%)**
- Affordability of public sector pensions? **(91%)**
- Regulation of banks, hedge funds etc? **(60%)**
- Sustainability of the economic growth model? **(64%)**
- Balance between short term commercial interests and long term public interest? **(82%)**
- Wider societal risks (global warming, energy policy etc)? **(50%)**
- Banking policy (Tobin tax, retail/investment slit etc)? **(61%)**
- Domestic economic policy? **(68%)**
- International economic policy? **(50%)**

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Actuaries, Risk and the Public Interest

What do we mean by Risk Management?

- Risk identification
- Risk analysis
- Risk monitoring
- Risk reporting
- Risk quantification
- Risk mitigation
- Risk avoidance
- Risk transfer
- Solvency II?

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The Human Factor

Four human failings consistently feature in the development of crises:

- Tribal Loyalty
- Greed
- Short-termism
- Herd instinct

...and two other fundamental effects compound their impact:

- Confirmation bias
- The Narrative fallacy

A Professional qualification is no cure for the human condition

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The Human Factor

"Inaction will be advocated in the present even though it means deep trouble in the future...for the hope of an easy life causes those who know things are going quite wrong to say that things are fundamentally sound"

J.K. Galbraith
The Great Crash 1929

"The dust appears to be settling..."

Chairman, Global Financial Crisis Group, 2009

"Too many people are being paid to do the wrong things from society's perspective"

Professor Garciano, LSE. 2009

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The Trials of Professional Life

- Seven years hard
- We are the experts
- Traditions and a reputation to defend
- Not easy to admit mistakes
- Not easy to admit limitations in our training

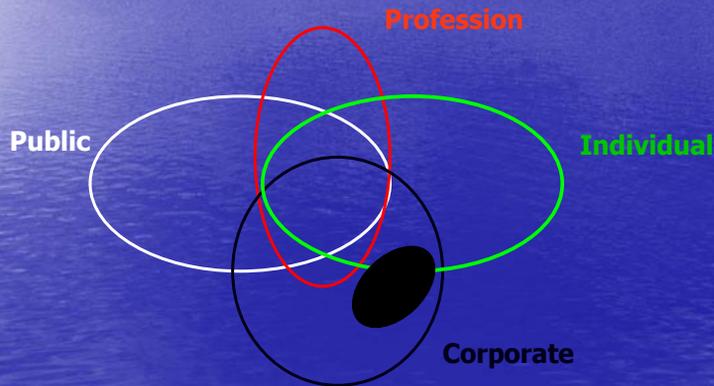
=>Difficult to lead calls for change

=>Difficult to learn from past failings

=>Difficult to confront conflicts of interest

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Conflicts of Interest - an alternative view



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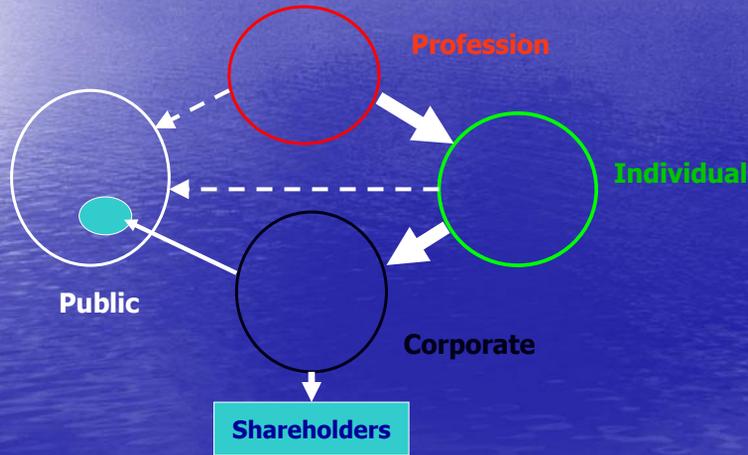
Big is Beautiful?



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Conflicts of Interest

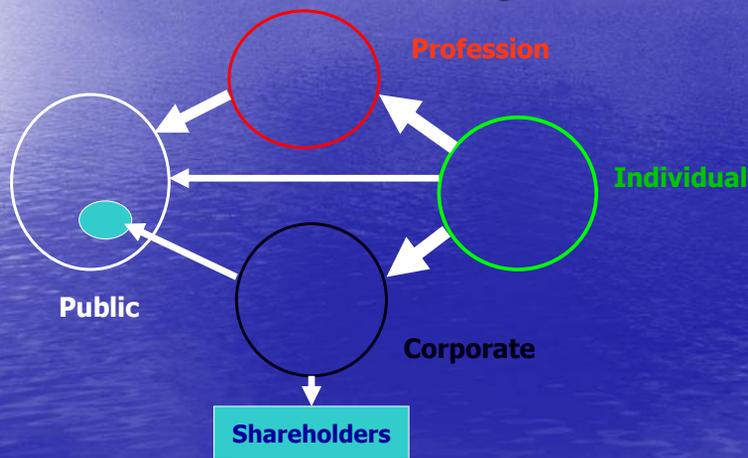
What's Happening in Practice



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Actuaries and the Public Interest

What Needs to Change - I



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Actuaries and the Public Interest

What Needs to Change - II

- Profession needs to confront its own conflicts of interest and clarify what it stands for
- More proactive use of and engagement with journalists/the media
- More co-operation across geographic boundaries
- Increased emphasis on public interest role in training and CPD
- Profession needs to distance itself from failing paradigms
- Greater investment of skillset in public sector

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Opportunities For Actuaries

1. Economic reform
2. Financial reform
3. Social reform
4. Public Sector reform
5. Regulatory reform
6. Resource management
7. Transport policy
8. Carbon costing
9. 'Globanomics'

- **All** of the above are matters of public interest!
- **All** of the above are about risk management!

Actuaries in a Changing World

Opportunities For Actuaries

- We are smart people
- We have sound problem-solving skills
- We have a formidable risk analysis toolkit
- We are mandated to take a long term view
- We are mandated to look after the public interest
- **It is time we started using more of our intellectual capital in ways that show people what we are capable of**

Change is upon us. Are we going to help lead it, or are we instead going to find ourselves dragged along in its wake?

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Further reading

- An Academic Response to Basel II (*Paul Embrechts et al, 2001*)
- The Black Swan (*Nassim Taleb, 2007*)
- The Coming First World Debt Crisis (*Anne Pettifor, 2006*)
- Prosperity Without Growth (*Tim Jackson, 2009*)
- Common Cause: The Case for Working with our Common Values (*Tom Crompton, 2010*)
- The Lost and the Left Behind (*Terry Glavin, 2007*)

Actuaries in a Changing World

On the Role of
the **Actuary** in a
Changing World

