Actuaries as Financial Engineers: A Strategic Analysis

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Overview

Part 1) Looking Back: Historical evolution of the profession
- Some themes I won't look at
- Jurisdiction, Bureaucratization and Internationalisation
- A couple of puzzles.
- Periods of permissiveness and rigor in standards of governance
- The expansion of actuarial jurisdiction into a 'wider field'.

Part 2) Looking Forward: Strategic Implications
- A simple and positive message

Some Themes I Will Not Focus On

1) Syllabus / Examinations
2) Categories of Membership
3) Communication
4) Public relations
5) Legislation
6) Statistics (and statisticians)

These issues are important …

… but I would like to emphasize the role played by the financial aspect of actuarial techniques in the profession's ability to exploit 'wider fields'.

We usually think of technical actuarial practice and the strategic place of the profession as unrelated.

Classic Themes Relating to the Strategic Position of the Actuarial Profession

1) Jurisdiction
- The work that actuaries do
- Its relationship to the work of other professions
- The aim is to increase the profession's jurisdiction

2) Bureaucratization
- The workplaces within which actuarial work is conducted
- Is the work conducted in corporations (insurance companies) in a professional service firms (consultancies)?
- A question of independence

3) Internationalization
- Where in the globe actuarial work is done
- From where will the future important actuarial theories emanate?

Three Claims

1) A focus on the financial aspect of actuarial practice is key to understanding the scope of the actuarial profession's jurisdiction.

2) Expansion of the actuarial profession's jurisdiction was in the past driven by increased discretion in the financial aspect of actuarial work.

3) Increased discretion was driven by broad changes in the degree to which there was a focus on governance within the financial markets.

In order to appreciate this there is a need to examine a couple of puzzles regarding the actuarial profession and the nature of actuarial work.

Puzzle 1: Under What Conditions is the Actuarial Profession's Jurisdiction 'Limited'?

The actuarial profession is a dominant profession. Like lawyers and doctors it has unimpeded control over a jurisdiction.

However, in contrast with other dominant professions which are aggressively expansionist, the actuarial profession sometimes accepts a limited jurisdiction.

The limited nature of actuarial work reflects, broadly, limitation of the actuarial expertise to expertise in the application of statistics to problems of life expectancy, classically within insurance companies.

Why does this happen when, ostensibly, only subordinated professions, such as nurses, would accept a limited jurisdiction?

Puzzle 2: Why did the bureaucratization of the actuarial profession develop in reverse to the accounting profession?

Initially, accountants worked in professional partnerships. The trend over the past sixty years, until recently, has been for accountants to work in corporations.

Actuaries first worked in corporations (as insurance company actuaries). The trend over the past sixty years, until recently, has been for actuaries to work in professional partnerships.

Why did the bureaucratization of the actuarial profession evolve in an opposite manner from the accounting profession?

One might expect that they would develop similarly.

Eras of Permissive and Rigorous Governance

	1920 - 1939	1945 - 1970	1970 - 1990	1990-2005	2005 - 2013
Governance	Strict	Permissive	Stricter	Stricter	Strict Again
Actuarial Workplace	Bureaucracies (insurance company actuaries)	Professional Partnerships (consulting actuaries)	Professional Partnerships (consulting actuaries)	Professional Partnerships (consulting actuaries)	Bureaucracies (insurance company actuaries)
Actuarial Jurisdiction	Limited	Expansive	Consolidation	Static	Static / Shrinking
Technical Actuarial Practice	No Financial Discretion	A Great Deal of Financial Discretion	Less Financial Discretion than Previously	Less Financial Discretion than Previously	No / Very Little Financial Discretion

Limited Actuarial Discretion During Periods of Strict Governance

Actuarial expertise initially involved application of modelling and statistics within insurance companies.

However, this raises a question about independence. How, after all, can a profession that is subject to corporate influence exercise independence?

During periods in which standards of governance are strict, and this type of concern salient, the actuarial profession outsources the financial aspect of the work it conducts to another profession.

In the 1930s actuaries did not have discretion over the financial assumptions. When valuing pension funds, they utilized techniques developed by accountants. Investment management was conducted by other occupations.

Today, similarly, actuaries and accountants share a common framework for conducting valuations and a range of occupations exist concerned with statistical modelling of risk.

Expansion of the Profession's Jurisdiction Post-war

In the 1950s and 1960s the context for corporate governance was permissive. In such an environment concerns regarding independent practice are reduced.

Consequently, the financial aspect of actuarial work is internalized. There is increased scope for discretion in the conduct of the financial aspect of actuarial work.

The consequence was the expansion of the actuarial jurisdiction into a wider field, namely, consulting work as a means of advising occupational pension funds, facilitating actuarial influence over investment management

Actuaries are financial engineers in that the actuarial and engineering professions stand in an analogous position to the accounting profession, but that actuaries conduct work that is financial in nature.

Implications: A Simple and Positive Message

The actuarial profession has been here before. Its context in the 1930s was similar to its context today. Growth in the profession in the mid-twentieth century was associated with increased discretion.

In order to think strategically about actuarial work one might usefully consider how technical change could develop and from where the relevant change might emanate.

Of course, the uncertainties around the shape and nature of that evolution are large. It also may not be financial discretion that increases.

Perhaps techniques would emanate from high growth international countries, which have undergone similar processes of loosening up to those that occurred in the UK in the mid-twentieth century.