

The Actuarial Profession
making financial sense of the future

Life Taxation workshop
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Life office tax overview

19 September 2012

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Introduction

- Why worry about tax?
- A simplistic tax model
- How important is it to manage the I - E position?
- What tax formula should I use in my profit-testing model?
- Some complications
- Some practical investigations

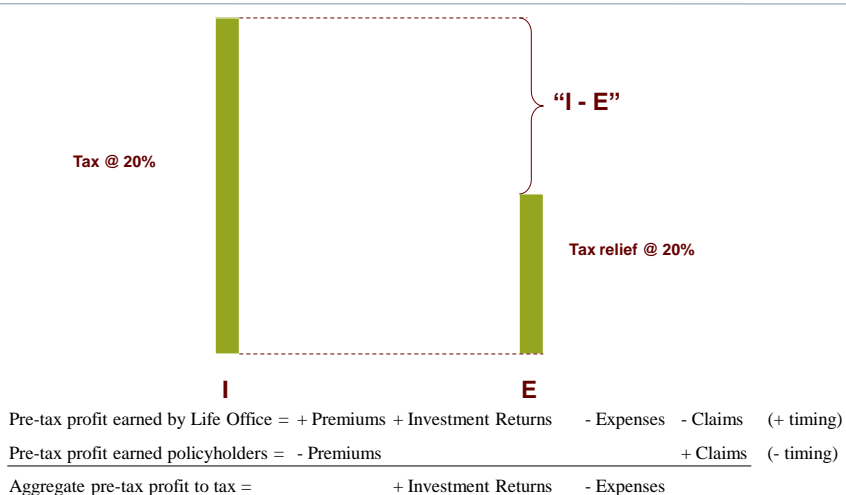
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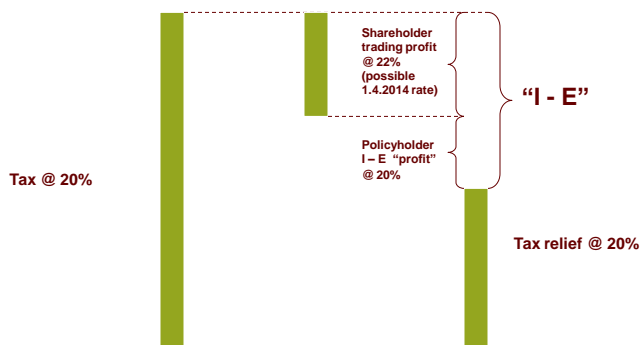
Why worry about tax?

- Tax returns for HMRC (Her Majesty's Revenue & Customs)
- Product design
- Profit reporting (Pillar 1, EV, IFRS, ...)
- Project appraisals
- One of the few areas (outside product pricing) where the difference between a good and a bad job is worth £ms

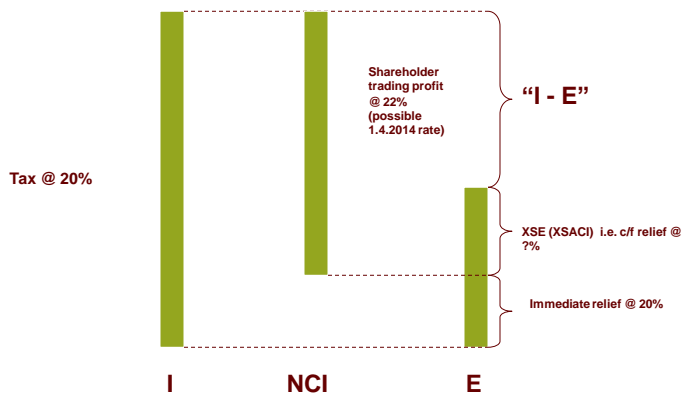
Simplistic tax model: Mutual life insurer



Simplistic tax model: Proprietary life insurer Net (or Excess I) situation



Simplistic tax model: Proprietary life insurer Gross (or Excess E) situation



How important is it to manage the I - E position?

- I – E management used to be very important
 - When XSE could generate tax relief of (28% - 20%) or higher
 - When I from GRU business leaked into, and profits from GRU business affected, the I – E computation
 - When BLAGAB new business was a mix of XSE and XSI
- None of this is the case anymore (from 1.1.2013)
 - XSE tax relief will (probably) be (22% - 20%) by 1.4.2014
 - GRU business has no effect on I - E
 - New protection business is all classed as GRU
- XSE may now just be a relatively minor form of taxable loss

What tax formula should I use in my profit-testing model?

- Most reserving / profit-testing models (Prophet, Moses, ...) make a reasonable but simplistic tax assumption
 - E.g. 22% pillar 1 profits for Pensions business written in a proprietary company
- But ...
 - Overall company tax bill is not the same as the sum of the tax bills from each of the company's lines of business (e.g. usage of losses, some lines XSI, some XSE)
 - And tax bills from 1.1.2013 will be based on trading profits (UK accounts), not pillar 1 profits

Complications: I

- Most investment returns flow immediately into I
- ... but equity gains only appear when realised (and you get indexation relief then)
- CGT reserves on indexed unrealised equity gains (unit prices, asset share calculations)
- E.g. unit price = $(MV - 20\% \times IUCG \times v^{-t}) / \text{Number of units}$
- Should we give credit for losses?

Complications: Taxable losses & E

- Not always allowed to count taxable losses for valuation purposes
- Valuation should be cautious if usage isn't certain:
 - For traditional EV, possibly write down asset value to allow for probability asset won't be used as quickly / at all
 - After a 1-in-200 1-year ICA stress test, it may take a long time / forever to use all the losses
- Apportionment of E by line of business is on a commercial basis

A practical investigation

	Tax bill, £m
Simple expected tax bill ($19.5\% \times (I - E) + 2.5\% \times \text{BLAGAB trading profits} + 22\% \times \text{GRU trading profits}$)	(20)
Apportionment rules for I mean some I from GRU business leaks into I - E calculation (this shouldn't happen post 1.1.2013)	(15)
Poor new business volumes this year (deferred E reduces)	20
Poor new business volumes this year (XSE reduces)	10
New business strain creates trading profits losses (unrelieved this year)	(1)
<u>Some GRU losses from prior years used in this year's tax computation</u>	<u>5</u>
Tax bill calculated by business plan tax model	(1)

When office is Excess I: $\text{tax} = 20\% \times (I - E) + (22\% - 20\%) / (1 - 20\%) \times \max(0, \text{pre-tax profit} - 20\% (I - E))$

A little bit of rearrangement gives $\text{tax} = (20\% - (2\% / 80\%) \times 20\%) \times (I - E) + (2\% / 80\%) \times \text{pre-tax profit}$

... or $\text{tax} = 19.5\% \times (I - E) + 2.5\% \times \text{pre-tax profit}$

Questions?

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