The Economic Aspects of Life Insurance Backdating

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Backdating of Life Insurance

- For these purposes, only reviewed when used to “save” age
- Example: Person age 36 and 2 months
  - April 15 April 16 June 15

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    Backdated Birthdate Application

    Policy Date Age 36 Date

Backdating of Life Insurance

- Restricted by jurisdiction

- Additional limitations set by both regulators and companies

- Of interest to all involved parties

Backdating of Life Insurance

- Incentive for agent
- Incentive for company
- When is it advantageous for the consumer?

Backdating of Life Insurance

- For a consumer, the expected NPV (including the effect of the chargeback) for backdating a policy must be positive

- Key affecters are expected persistency, mortality, and interest rates

Backdating of Life Insurance

- Persistency of backdated policies tends, as expected, to be better than non-backdated policies

Policy Year	1	2	3	4	5
Ratio of Lapse Rates (Backdated : Non-Backdated)	70%	76%	78%	80%	82%

Backdating of Life Insurance

- Despite the obvious effect on product pricing, backdating is not explicitly accounted for in pricing processes at most U.S. life insurance companies

- ALB companies tend to experience considerably less backdating than ANB companies

- Experience also varies by AOI

Backdating of Life Insurance

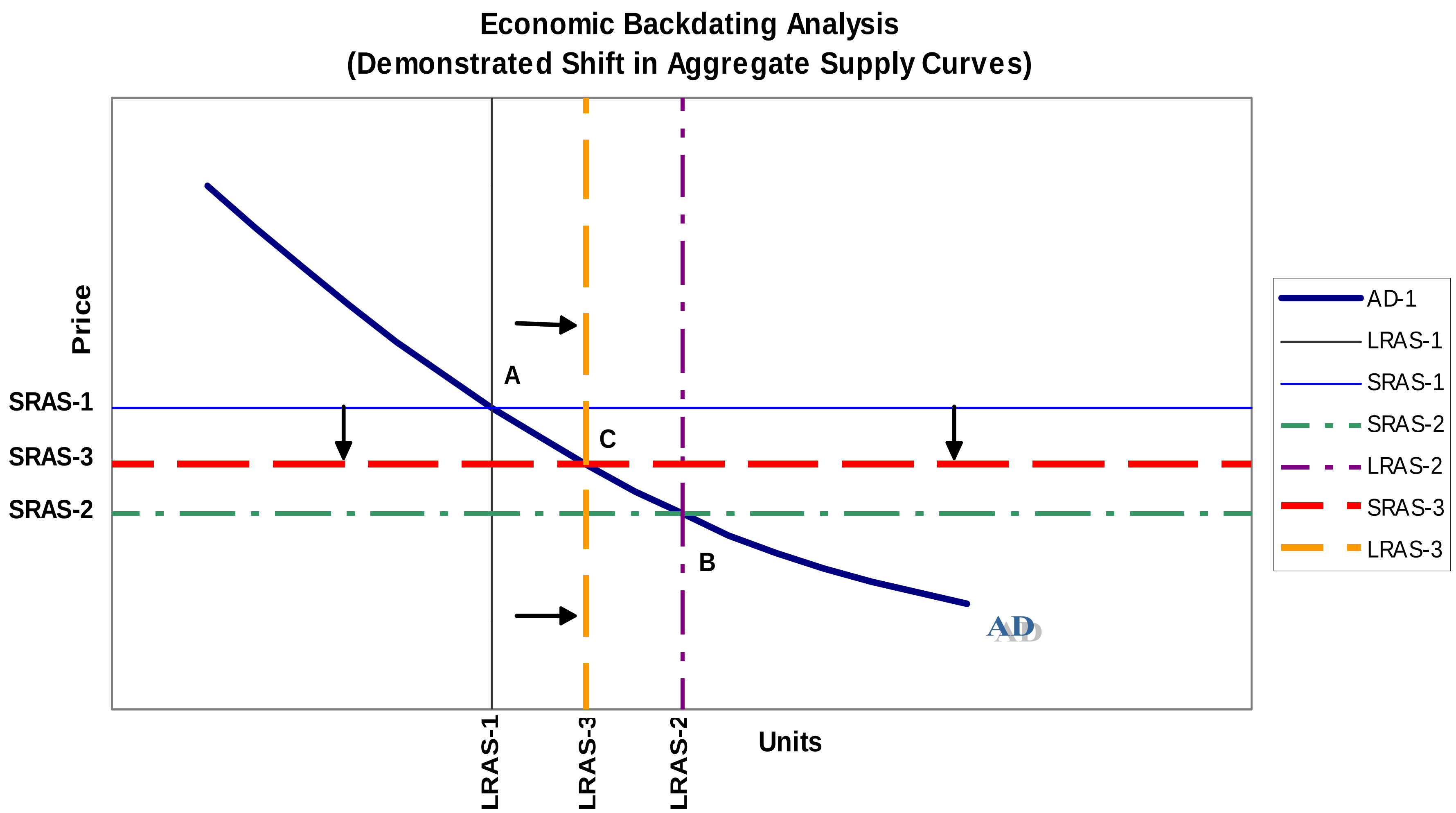
- Price discrimination inherent from the prohibition of backdating is due to the charging consumers with equal expected marginal costs different prices for an equivalent product

- Thus, life insurance with annual mortality pricing represents third-degree price discrimination

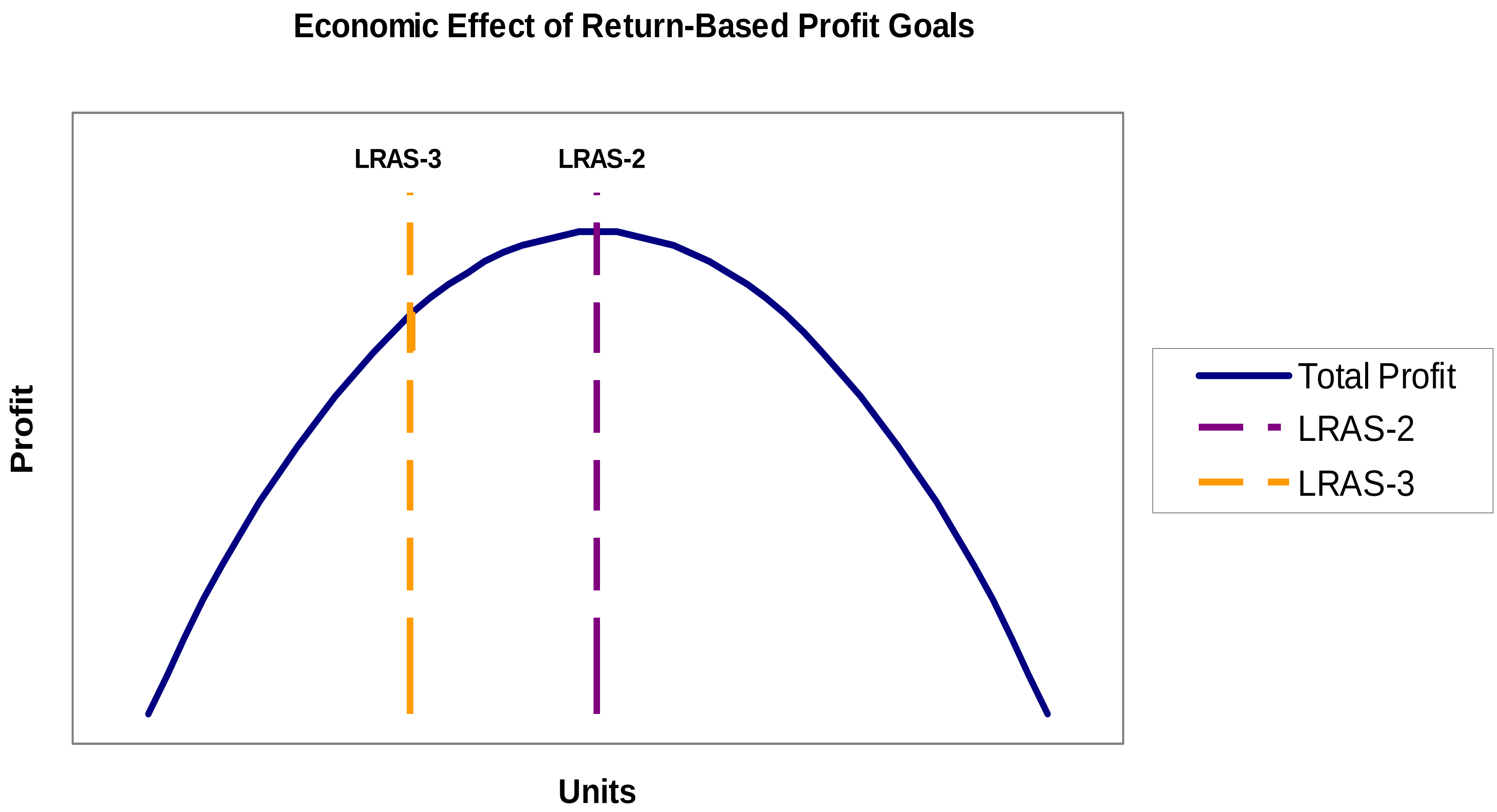
Backdating of Life Insurance

- Additional issues come out of the supply-side response to backdating:
  - » Profit-maximization is NOT the primary focus of most pricing processes
  - » Focus on return-based pricing methods is given additional advocacy from the use of percentile analysis for assessing solvency
  - » Resulting profit levels will be substandard

Backdating of Life Insurance



Backdating of Life Insurance



Backdating of Life Insurance

- Given the emphasis on return-based pricing, supply side responses can be expected to deal with returns falling below targets

- Much of this occurs due to failures within the industry to properly account for backdating in product pricing

Backdating of Life Insurance

- Some supply-side responses include:
  - » Raising minimum policy size requirements
  - » Price increases via lowering benefits from non-guaranteed elements
  - » Subsidizing in force policies with new business production
  - » More accurate UW classification through more detailed and UW and more UW classes

Backdating of Life Insurance

- Conclusions:
  - Backdating exists as a market response to the inherent price discrimination of discrete, annual pricing for life insurance policies
  - Technological limitations that previously held companies to discrete, annual pricing have been largely removed
  - Over time, backdating should give way to pricing life insurance in shorter increments of mortality