



Society of Actuaries in Ireland

**Impact of Community rating:
Private Health Insurance in Australia**

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Agenda

- Background
- Pricing in practice
- Conclusions
- Main risks



Background

Actuarial Techniques 101 - Pricing



$$\text{Price} = E(\text{Benefits}) + E(\text{Expenses}) + E(\text{Profit}) \\ - E(\text{Investment revenue})$$

Generally the price is primarily driven by expected benefits

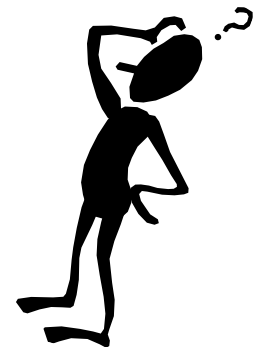
Background

Determinants of health

- Age
- Smoking status
- Alcohol consumption
- Diet
- Physical Activity
- Body weight
- Blood pressure
- Cholesterol
- Income and wealth
- Genetics
- Access to Health Services

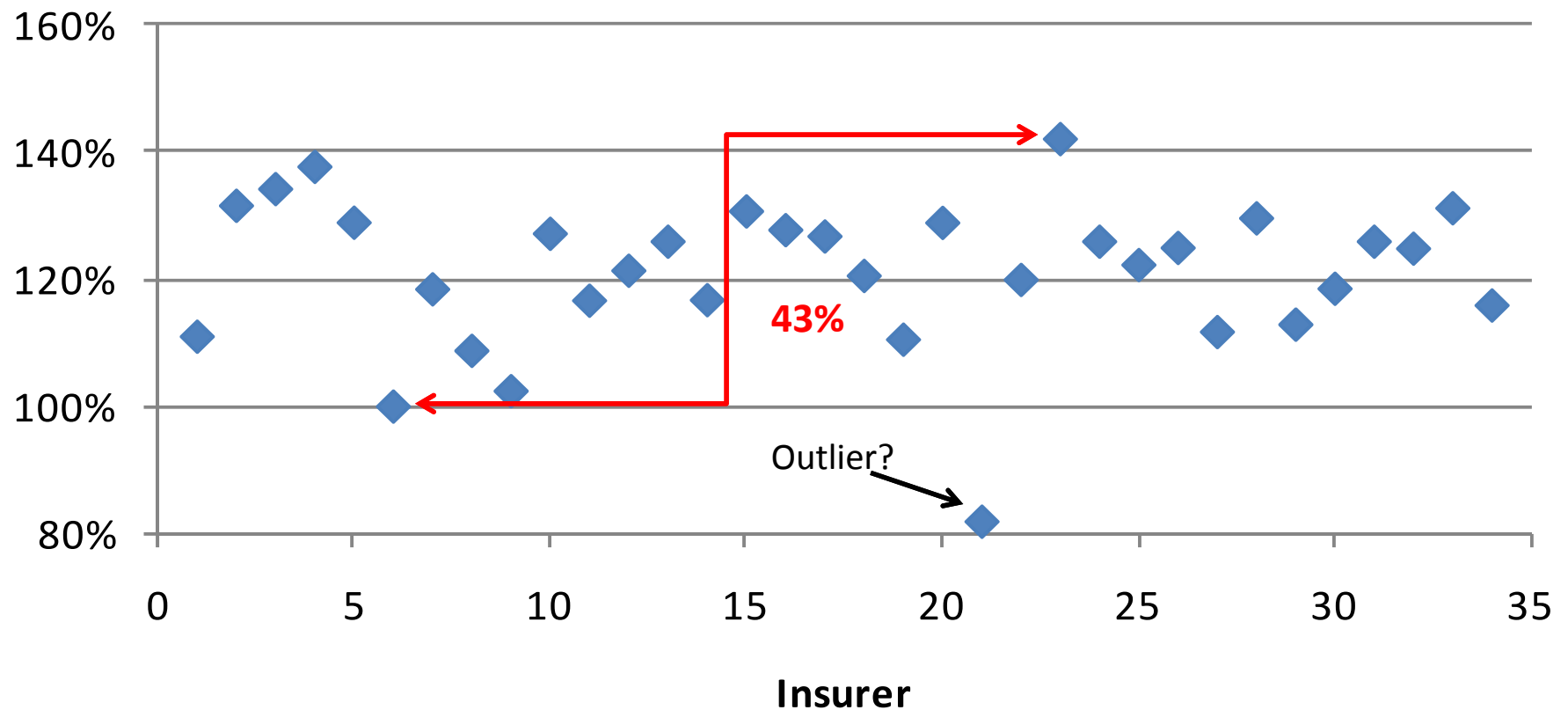
Factors that can be used in a community rated environment

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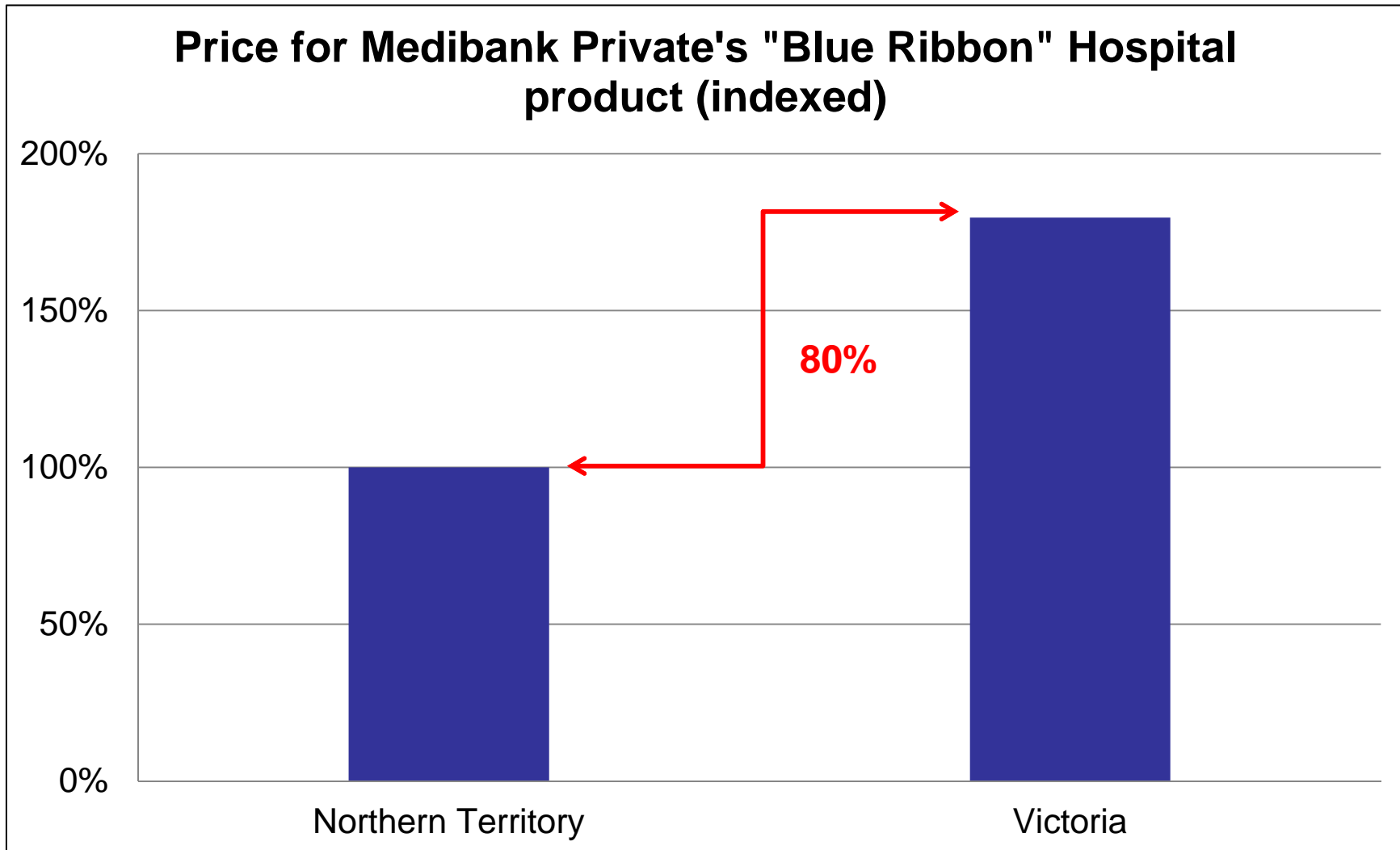
Pricing in practice

Premiums for Top hospital cover no excess family NSW from each insurer (indexed)



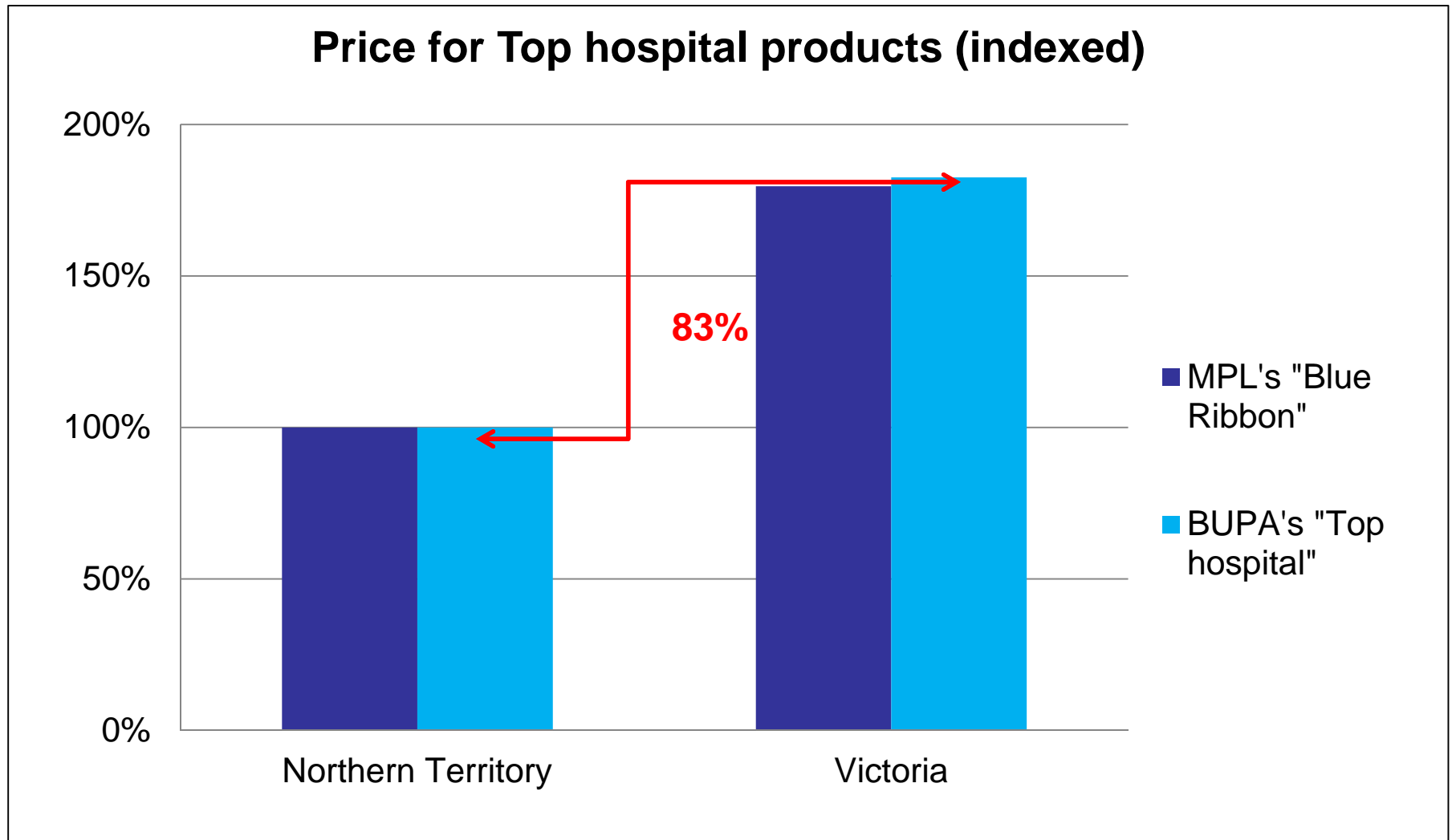
Source: Private Health Insurance Ombudsman (2011)

Pricing in practice



Source: Private Health Insurance Ombudsman

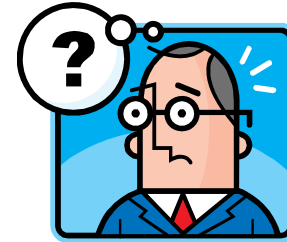
Pricing in practice



Source: Private Health Insurance Ombudsman

Pricing in practice

Why the differences?



If the products are priced at a target loss ratio or given return on capital, then the difference is that the persons covered incur lower benefits.

In this example, the *main* difference is that the those covered in the Northern Territory are significantly younger than those in Victoria.

Conclusions

The losses on a product are impacted by the persons covered

Insurers can offer identical products at very different prices

Low risk persons (younger/healthier) are often specifically targeted



Main Risk 1 – Membership profile

Prices includes an implicit (or explicit) assumption regarding the risk profile of persons covered, e.g. age, gender, region, etc.

Up to the insurer to have a business model that will realise this assumption.

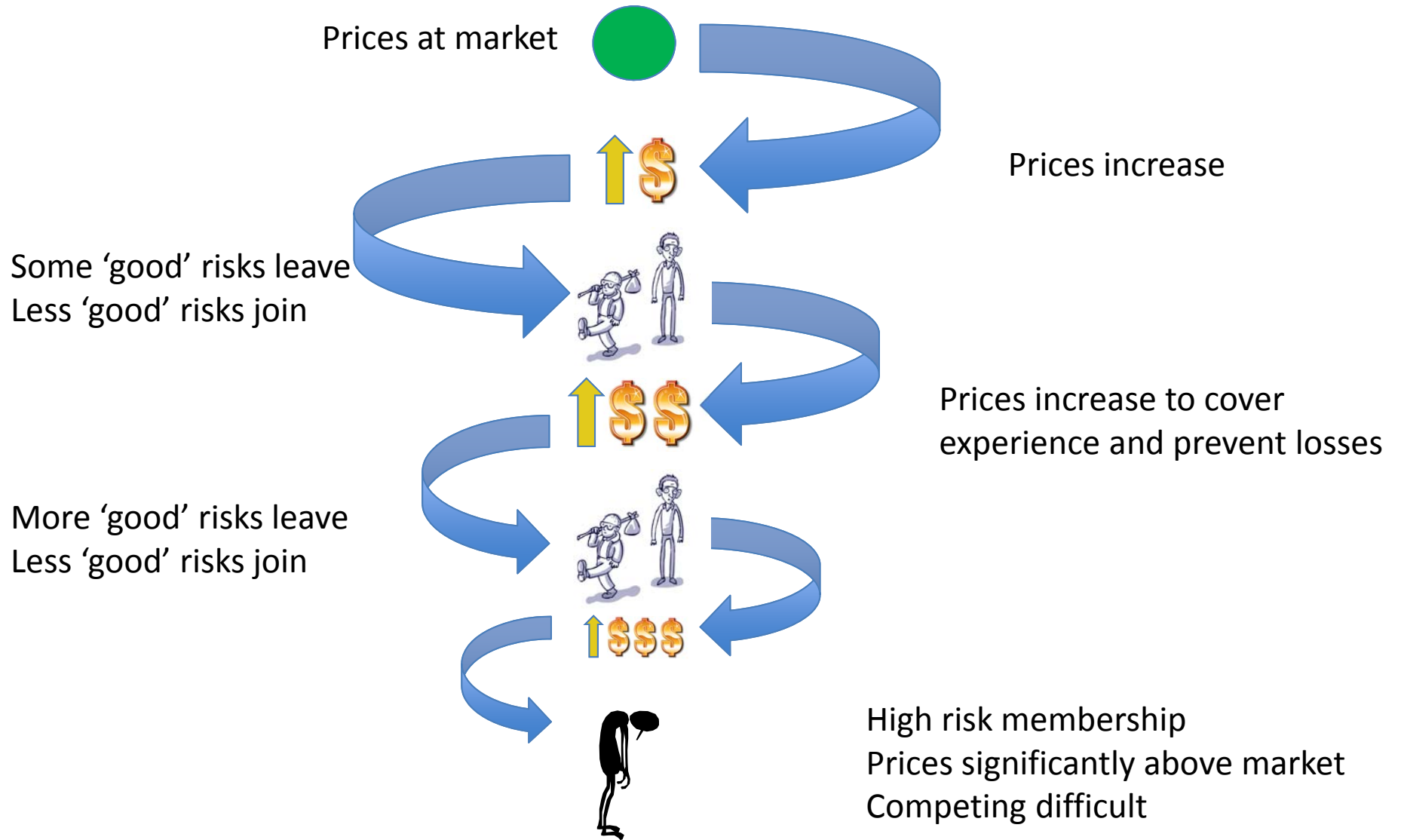
Important to monitor experience and have a plan should the assumption not be met

Main Risk 2 – Adverse selection

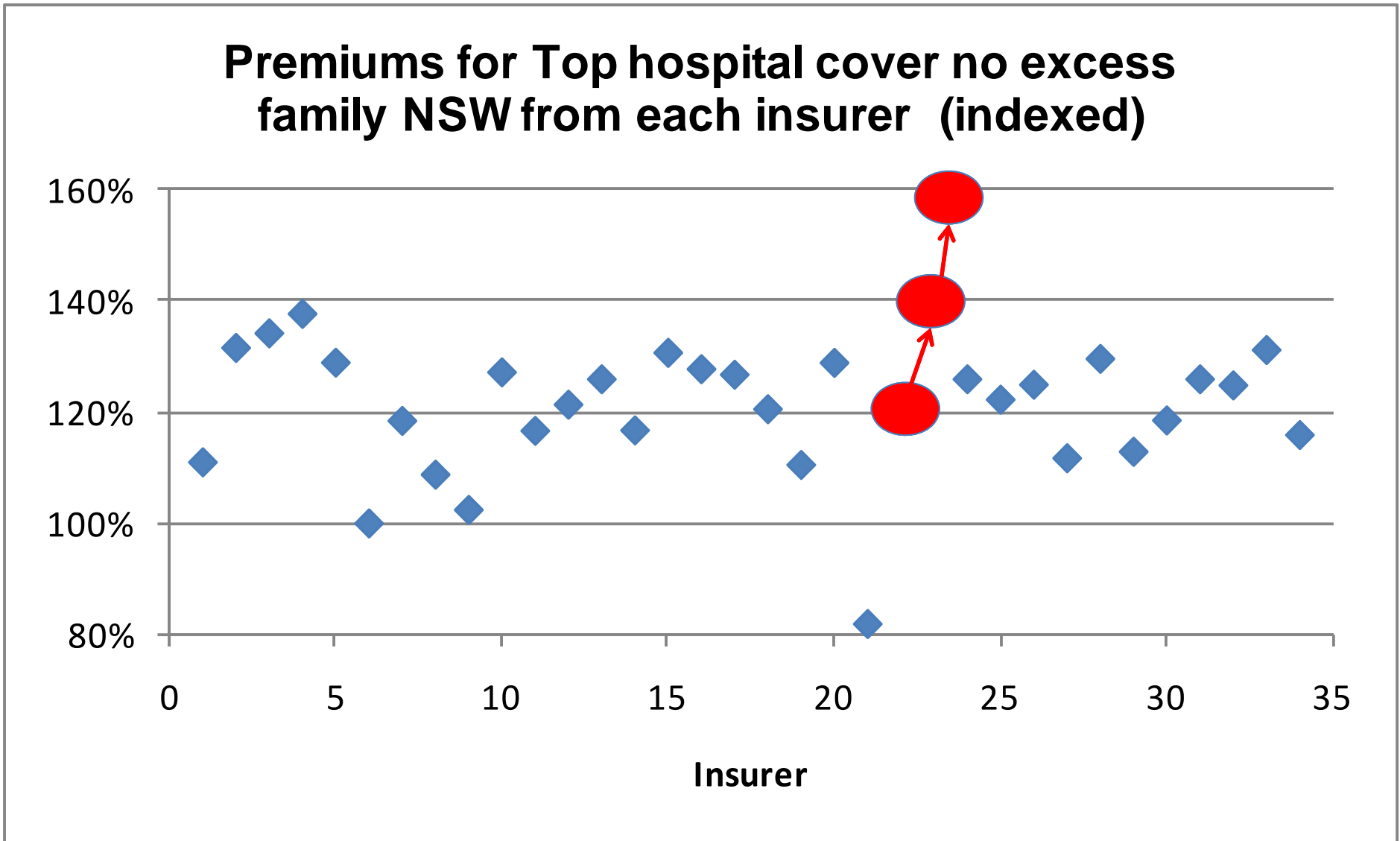
Heavily exposed to adverse selection. Good risks may be the first to leave

Be mindful of a death spiral – essentially adverse selection compromising a product's ability to compete in the market.

Death Spiral



Death Spiral



Source: Private Health Insurance Ombudsman (2011)

Further information

Niemann K, 2011, *What is the appropriate price for a community rated product: A case study of private health insurance in Australia*, Biennial Convention 2011, The Institute of Actuaries of Australia

Thank you

