Insurance Market Incentives and constraints and complementary public policies

... a policy practitioners’ perspective

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First

... response to some burning issues raised yesterday
Australia Road Toll leading to 1978 $f(n)$ population

- **Introduction**
- **Traffic Lights (1930)**
- **Mandatory Fitting Seatbelts (1969)**
- **Wearing Seatbelts (1973)**

Australian Road Fatalities

- Fatalities (LHS)
- Rate per 100,000 population (RHS)

- 0 5 10 15 20 25 30 35
- 0 500 1000 1500 2000 2500 3000 3500 4000
Statutory Insurance - Product

CTP

Workers’ Compensation

- Common Law
- No-Fault
- Blended (No-Fault, restricted Common Law)

1. NSW has No-Fault Benefits for Catastrophic Care
2. Limits on Statutory Benefits for Income Replacement
Statutory Insurance - Delivery

CTP

Workers’ Compensation

- Private
- Public Monopoly

Claims and Policy Administration Outsourced
## Road death rates by State/Territory

<table>
<thead>
<tr>
<th></th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>SA</th>
<th>WA</th>
<th>Tas</th>
<th>NT</th>
<th>ACT</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Per capita</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>5.54</td>
<td>5.77</td>
<td>7.66</td>
<td>6.18</td>
<td>9.66</td>
<td>8.03</td>
<td>34.10</td>
<td>4.07</td>
<td>6.80</td>
</tr>
<tr>
<td><strong>Per vehicle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>0.85</td>
<td>0.77</td>
<td>1.03</td>
<td>0.84</td>
<td>1.20</td>
<td>1.02</td>
<td>6.10</td>
<td>0.58</td>
<td>0.95</td>
</tr>
<tr>
<td>2003</td>
<td>1.37</td>
<td>0.94</td>
<td>1.21</td>
<td>1.46</td>
<td>1.25</td>
<td>1.21</td>
<td>5.08</td>
<td>0.52</td>
<td>1.23</td>
</tr>
</tbody>
</table>

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*a Annual deaths per 100,000 population: 2008 at June 30 (preliminary data); 2003 at June 30 (revised data) taken from ABS catalogue 3201.0

*b Annual deaths per 10,000 registered motor vehicles at 31 March taken from ABS catalogue 9309.0.
Rudimentary Scheme Assessment: Road Trauma

Road Deaths per 100,000 people 2008

- Northern Territory: 34.10
- USA: 12.25
- Greece: 14.09
- Poland: 14.12
- Lithuania: 14.65
- Sweden: 4.40
- Germany: 6.46
- Ireland: 6.33
- Spain: 6.56
- Australia: 6.71
- France: 6.84
- Luxembourg: 7.00
- Denmark: 7.20
- Portugal: 7.76
- Austria: 8.13
- Italy: 8.16
- Belgium: 8.58
- Hungary: 9.96
- Cyprus: 10.25
- Slovakia: 10.53
- USA: 12.25
- Romania: 13.72
- Greece: 14.09
- Poland: 14.12
- Lithuania: 14.65
- Northern Territory: 34.10
History of CTP Scheme Premium Rates (% AWE)

Proportion of AWE

Years:
- 1995/96
- 1996/97
- 1997/98
- 1998/99
- 1999/00
- 2000/01
- 2001/02
- 2002/03
- 2003/04
- 2004/05
- 2005/06

States:
- NSW
- VIC
- QLD
- SA
- WA
- TAS
- NT
- ACT
- NZ
Explaining Difference Between NSW and Victorian CTP Premiums

Average Premium per vehicle Dec Qtr 1999
(Illustrative, not to scale)

- **NSW**
  - Higher Profit
  - Higher Legal & Other Costs
  - Higher G.D. Payment
  - Higher Eco Loss Payment
  - Exclude At-Fault Claims
  - Higher accident rates
  - Payment minor claims <$450
  - Lower Admin Costs
  - Lower Program Costs

- **Vic**
  - Higher Acquisition & Reinsurance
  - Lower Admin Costs
  - Lower Program Costs

(Numbers in the image are illustrative and not to scale.)
Purpose

• Present a policy practitioners’ perspective
• Framework to help structure informed debate
• Seed discussion co-operative/ collaborative opportunities to align efforts to improve road safety outcomes

Qualifications

• Basic policy practitioner’s “tool-kit”
  – Not a dissertation, some over-simplification
  – suggestions to improve paper welcome
• Metaphors used to stimulate thinking
• Valid comparisons between systems can be made, but with caution due to statutory differences and variations in local practice. Raw comparisons can be “more misleading than informative, however, comparisons at the broadest aggregate level may be meaningful” (Hunt 1998)
Characteristics of Insurance

**Risk Management**
- Control the risk... likelihood/consequences
- Avoid the risk
- Retain the risk
- **Transfer (or redistribute) the risk**
  ... whole or part

**Features of Insurance**
- Risk Transfer - legally enforceable
- Consideration – generally, premium related to risk/benefits
- Risk pool created if many parties
- Distribution of benefits from the pool
Insurance: Spectrum of Adequacy Objectives

- **General Insurance**
  - Premiums largely determined on an actuarial basis
  - Redistributive amongst insurees
  - Standard model for competitive insurance market

- **Statutory Insurance (CTP/Comp)**

- **Medicare**
  - Public tax-transfer system
  - Benefits related to needs
  - Social assistance/welfare

**Individual Adequacy**
- Premiums largely determined on an actuarial basis
- Redistributive amongst insurees
- Standard model for competitive insurance market

**Social Adequacy**
Public Monopolies may integrate societal objectives

Statutory Insurance Schemes

Private Underwriting

- Typical Objectives
  - Profit Maximisation
  - Subsidiary Objectives that are aligned to profit maximisation (e.g., injury prevention)

Public Underwriting

- Typical Objectives
  - Long term [financial] viability
  - Injury prevention and trauma reduction
  - Fair and equitable benefits
  - Speedy, sustainable and cost effective rehabilitation
  - Affordable premiums
Community Rating in CTP Insurance, Australia

With Compulsion (with inability to contract out), it is possible to redistribute the premium pool in means other than risk to achieve social objectives, eg

- Rural discounts (Victoria, SA)
- Pensioner discounts (Vic, NT)
- Flat premium by vehicle class irrespective of age/risk (Vic, Tas, NT, WA, NZ)
- Subsided rate for certain vehicle classes such as MCycles (Vic, Qld, WA, Tas, NT)

Community rating difficult to attain in a competitively underwritten markets in absence of strong regulation to control market practices.

![Risk Relativity: By Age of Registered Owner](chart)

![Risk Relativity: By Geographic Zone](chart)
## Varied Nature of Australian Insurance Schemes

<table>
<thead>
<tr>
<th>Segment / Characteristic</th>
<th>General (Motor) Insurance</th>
<th>Auto Liability (CTP) Insurance</th>
<th>Workers’ Compensation Insurance</th>
<th>Public Liability Insurance</th>
<th>Private Health and Disability Insurance</th>
<th>Social Health Insurance</th>
<th>Unemployment Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequacy Objective</td>
<td>Individual</td>
<td>Hybrid</td>
<td>Hybrid</td>
<td>Individual</td>
<td>Individual</td>
<td>Social</td>
<td>Social</td>
</tr>
<tr>
<td>Funding</td>
<td>Fully Funded</td>
<td>Fully Funded</td>
<td>Fully Funded</td>
<td>Fully Funded</td>
<td>Fully Funded</td>
<td>PAYG</td>
<td>PAYG</td>
</tr>
<tr>
<td>Community Rating</td>
<td>No</td>
<td>Partial</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Underwriting</td>
<td>Private</td>
<td>Blend</td>
<td>Blend</td>
<td>Private</td>
<td>Private</td>
<td>Public</td>
<td>Public</td>
</tr>
<tr>
<td>Typical Exposure</td>
<td>Short Tail</td>
<td>Long Tail</td>
<td>Long Tail</td>
<td>Med-Long Tail</td>
<td>Short Tail</td>
<td>Long Tail</td>
<td>Long Tail</td>
</tr>
<tr>
<td>Beneficiary Party</td>
<td>First</td>
<td>Third + First</td>
<td>Third + First</td>
<td>Third</td>
<td>First</td>
<td>First</td>
<td>First</td>
</tr>
<tr>
<td>Claim Order</td>
<td>First Resort</td>
<td>First Resort</td>
<td>First Resort</td>
<td>First Resort</td>
<td>First Resort</td>
<td>Last Resort Means Tested</td>
<td>Last Resort Means Tested</td>
</tr>
<tr>
<td>Participation</td>
<td>Discretionary</td>
<td>Compulsory</td>
<td>Compulsory</td>
<td>Discretionary</td>
<td>Discretionary</td>
<td>Universal</td>
<td>Universal</td>
</tr>
</tbody>
</table>
CTP Insurance Evolution

**Historical Epoch**
- Dramatic growth in injury rates, associated with vehicle population growth and increased travel speed
- Injurers ability to fully compensate injured third parties limited in cases of catastrophic injuries

**Motives for Compulsion**
- Third party externality (aspects of judgment proof argument)
Judgment Proof problem
... potential policy responses:

<table>
<thead>
<tr>
<th>Policy Response</th>
<th>Injurer’s excessive engagement in risky activity &amp; dulling of incentives to take adequate care</th>
<th>Inadequate compensation by injurers (to victims)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandate purchase liability [third party] insurance</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Prohibition to purchase liability [third party] insurance</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Minimum level of assets to engage in a [risky] activity</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Extension of liability to parties related to the injurer (e.g. employer liability, vicarious liability, joint &amp; several action)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Safety Regulation</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Civil and Criminal penalties</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Prohibition of risky activities</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Victims mandated to obtain [first party] insurance</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Adapted from Shavell, 1986
Other Issues confronting regulators

MORAL HAZARD
- Insured has an economic incentive to cause the situation he is insured against, an incentive that is not present when he is not insured

ADVERSE SELECTION
- Information asymmetry between the insured and insurer
- Cross subsidisation may weaken or be in conflict with price signalling incentives

MARKET IMPERFECTIONS
- Missing markets
- Lack of economies leading to high transactional costs

CONSUMER IGNORANCE AND IRRATIONALITY
- Reasons why persons do not purchase insurance, or undertake risky activities
Other Issues confronting regulators

COMPETITIVE DYNAMICS
- Benefit shareholders in the short-term as a key priority
- Incentive to maintain/encourage information asymmetries

BASIS OF DETERMINING BENEFITS AND COSTS?

Insurance system = Income/Capacity + Health/Medical + Pain Suffering + Legal/Admin
+ Societal = Health/medical & Unemployment (not funded by insurer)
+ Lost Opportunity = Loss of productivity and contribution to society by injured & carers
+ Internalisation = Internalised grief of injured & carers (non-economic)
+/- Other Offsets = Contribution of insurance sector to economy (employment/taxes)?
in theory, schemes are free to adapt and respond to needs specific to the jurisdiction, and this provides the opportunity to act as “policy laboratories” that over time jurisdictions may identify and gravitate to policies that demonstrate success (Osborne 1988) and learn from policy failures in other jurisdictions (Jewett 2001).

A key challenge under “competitive federalism” is to minimize the risk of destructive competition and coordination failure.

To this extent, Australia has developed extensive and varied array of intergovernmental cooperative arrangements including:

- mutual recognition regimes
- harmonisation of regulation
- adoption of national standards
- integrated inter-jurisdictional frameworks to develop and oversee the implementation of various reform measures
- promotion of benchmarking
Ideas to open discussion

Cooperative/Collaborative efforts among stakeholders to improve Road Safety Outcomes

- clear accountabilities within the road safety system
- integrated cooperative frameworks to implementation of reform measures
- improve the accessibility of information to the public to make informed [safety] choices
- public education where ignorance or irrationality of risk assessment may be present
- pooling of scheme data to assist with risk identification, policy development, public education and informed consumer choice
- benchmarking activities/projects
- coordination of micro-activities among road safety stakeholders to amplify impact of initiatives

embracing new technologies....
If it helps, I can email you these publications

**No-Fault v. Common Law**

Overview of Australian Compulsory Third Party (CTP) Insurance Schemes & 75 Years of Debate No-Fault v. Common Law Compensation for the Victims of Motor Vehicle Accidents

**A PERSPECTIVE ON BENCHMARKING THEORY**

**PART A**

BENCHMARKING TERMINOLOGY, APPLICATION AND KEY ISSUES: REVIEW OF MANAGEMENT LITERATURE

**PART B**

NEW ANALYTIC FRAMEWORKS FOR CATEGORIZING BENCHMARKING TYPES & BENEFITS, LIMITATIONS, BARRIERS AND CRITICAL SUCCESS FACTORS