

Assessing the impacts of the Road Safety Remuneration System in Australia – a RIA case study

Rex Deighton-Smith

ROUNDTABLE ON ASSESSING REGULATORY CHANGES IN THE TRANSPORT SECTOR
STOCKHOLM, 6 OCTOBER 2016

Origins of the system

- ▶ National Transport Commission commissioned a 2008 paper (Quinlan & Wright) which argued that:
 - ▶ There was a “severe crisis” in the Australian road freight industry
 - ▶ “there has been no significant shift in the annual number of fatalities resulting from crashes involving articulated trucks between the early 1990s and 2007 despite an overall decline in the annual road toll.”
 - ▶ “...more detailed investigation into the causes of heavy crashes (sic) is required (!) but available evidence indicates economic and reward pressures are associated with a spectrum of unsafe work practices and adverse OHS outcomes that warrant concern and action.”
 - ▶ “The Review **recommends that a national scheme for setting mandatory safe rates covering both employee and owner/drivers be established in the heavy vehicle industry.**”
- ▶ The then Government responded by publishing a Discussion Paper in 2010 which proposed legislation to enable minimum remuneration rates to be set

The legislation & its review

- ▶ The Road Safety Remuneration Act commenced on 1 July 2012
 - ▶ It established a quasi-judicial tribunal, with price-setting powers:
 - ▶ Power to set minimum freight rates for independent contractors; and
 - ▶ Power to set wages/conditions for employees – thus duplicating the existing industrial award system
 - ▶ It was also empowered to set other “safety-related” rules
- ▶ A new government was elected in late 2013, with a strong red tape reduction commitment & a specific commitment to review the RSRA
 - ▶ I was appointed by the Minister to conduct the review in November 2013 and reported in April 2014

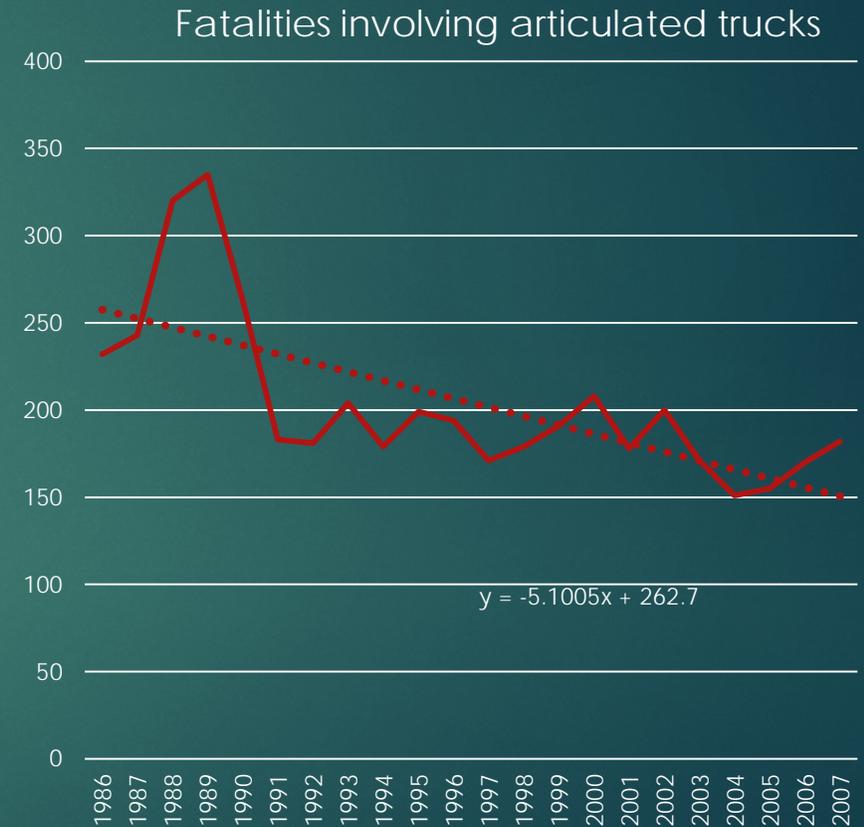
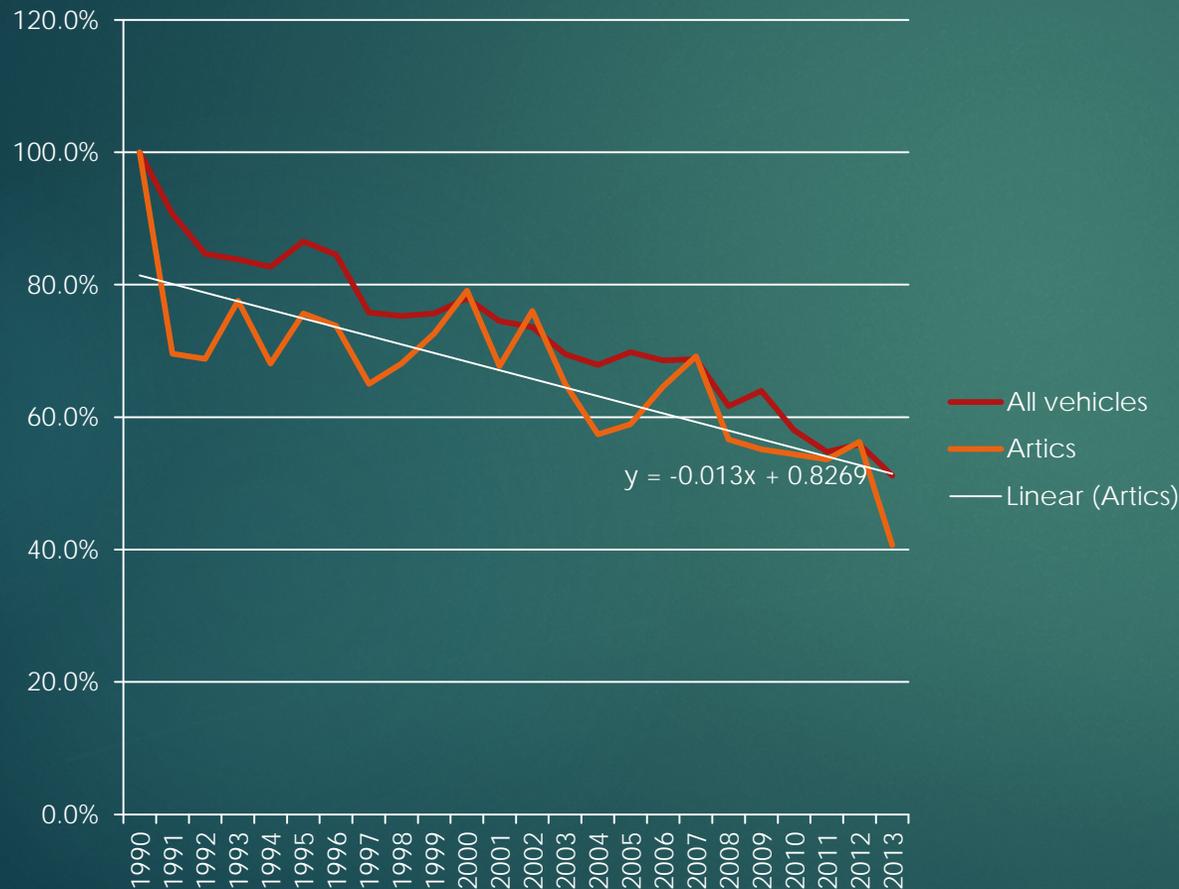
RIA and the review

- ▶ RIA is a tool to promote “evidence-based policy-making” and thus maximise welfare
- ▶ The OECD argues it should be used in reviewing existing, as well as proposed, regulation
- ▶ As a RIA specialist, my review inevitably followed the key RIA principles
 - ▶ I will today highlight how they were able to be applied in practice.
- ▶ The key RIA elements are:
 - ▶ Clearly identify the nature and extent of the problem
 - ▶ As a corollary, specify the policy objective carefully
 - ▶ Identify alternative means of achieving the objectives
 - ▶ Assess the benefits and costs of each
 - ▶ Transparently identify the preferred option & why it is preferred

Nature and extent of the problem

- ▶ Was there a “severe crisis” in the industry?
- ▶ Had fatalities involving articulated trucks remained constant for more than 15 years, despite improving general road safety, as claimed?
- ▶ Answering these questions meant analysing fatality and accident data in both time-series and cross-sectional terms
- ▶ A snapshot of fatalities data involving articulated trucks shows:
 - ▶ 181 fatalities in 1992; and
 - ▶ 182 fatalities in 2007.
- ▶ Which may underpin Quinlan’s contention
- ▶ But a long-term graph reveals a very different picture

Fatalities involving articulated trucks (Australia)



Note: The data available to Quinlan

Time series data

- ▶ The % reduction in total fatalities involving articulated trucks since 1990 was essentially identical to that for all road vehicles (sensitive to start/endpoint)
- ▶ Expressed in terms of fatality *rates* (i.e fatalities per 100m vehicle km), the improvement for articulated trucks was clearly better: In 24 years, the rate was reduced by:
 - ▶ 70% for all vehicles; and
 - ▶ 76% for articulated trucks.
- ▶ Data on rigid truck fatalities, accident rates, tell a similar story.

Cross-section data

- ▶ But how did Australia compare internationally?
- ▶ The ITF's 2011 *Moving Freight with Better Trucks* report showed good performance by international standards & some relative improvement over time
- ▶ Table: Fatalities/100m vehicle km
- ▶ Aust. Ranks # 3 of 9 countries in 2005
- ▶ Key shortcoming identified as relative lack of divided & limited access roads in Aust. (Haworth (2002)).

Year	2001	2002	2003	2004	2005	2006	2007
Australia	NA	2.31	1.59	1.68	1.50	1.51	1.43
Belgium	2.19	1.88	1.54	1.61	1.67	1.41	1.49
Canada	1.76	1.94	1.92	1.63	1.64	NA	NA
Denmark	NA	3.27	2.56	2.8	3.42	NA	NA
France	NA	2.43	1.92	1.79	1.86	NA	NA
Great Britain	1.92	1.73	1.70	1.44	1.52	1.33	1.34
South Africa	NA	NA	10.29	9.95	9.12	9.08	8.44
United States	1.32	1.22	1.24	1.26	1.27	1.21	1.15
Switzerland	1.13	0.88	0.84	0.93	0.81	0.56	0.58

Remuneration and safety

- ▶ The data showed that the **extent** of the problem was not as claimed prior to the Act being passed
 - ▶ no “severe crisis” was evident; and
 - ▶ Steady improvement shows existing policy approaches adopted are effective
- ▶ But what of the **nature** of the problem? Is low remuneration a significant contributor to accidents/fatalities? If so, can it be addressed at proportionate cost?
- ▶ The review sought to answer this question by:
 - ▶ Reviewing the research literature on remuneration/safety links;
 - ▶ Researching international practice – Is remuneration being addressed as a safety issue
 - ▶ Researching driver remuneration levels in Australia

Research literature

10

- ▶ Many different relationships assessed
 - ▶ (driver income vs accidents, company profit vs accidents, employment status vs accidents, driver income vs “unsafe behaviours”, payment method vs unsafe behaviours, etc).
- ▶ Review focus was on driver income vs accident rate because:
 - ▶ Evidence directly linking remuneration with outcomes (i.e. accidents, rather than “unsafe behaviours”) is clearly stronger; and
 - ▶ Driver income was the focus of the RSRA
- ▶ Very few relevant studies were found, results differed widely
 - ▶ Belzer (2002): strong pay vs accident rate relationship
 - ▶ Rodrigues (2006) (same data set): – a U shaped function linking pay/accidents
 - ▶ Nafukho (2007): A weak pay vs accident rate relationship

Other factors

- ▶ Specific nature of any linkages open to question (USFMCSA (2007))
 - ▶ (e.g. does a given cohort drive more safely if better paid, or are companies that pay more simply able to recruit better drivers?)
- ▶ Conclusion: The paucity of studies & widely differing conclusions imply:
 - ▶ A weak evidence base;
 - ▶ Uncertainty as to the appropriate policy conclusion (esp. "U shaped curve")
- ▶ The historical record also casts doubt on any linkage
 - ▶ Deregulation of US trucking in early 1980s led to concerns that remuneration levels would fall and would lead to poorer safety outcomes
 - ▶ The former occurred, but the latter did not

Are Australian truckers badly paid?

12

- ▶ The RSRA can only hope to yield benefits if this is so, but:
- ▶ Evidence for this proposition is largely anecdotal (one 1993 study commonly cited)
- ▶ Review of official (macro-level) data found:
 - ▶ Average truck driver income approx. equal to average (economy wide) earnings
 - ▶ This *relative* pay rate was is higher than in US or UK
 - ▶ The “award” system applying to employee drivers guarantees relatively high wages
- ▶ Census data shows 20% + of independent contractors have below award incomes
- ▶ But others have much higher incomes: Widely varying income levels suggests business skills of individuals were a key factor, rather than market failures

Precedent for the RSRA?

- ▶ Could the actual performance of a system of price or remuneration-setting for safety purposes be directly observed?
- ▶ No international examples were found
- ▶ One Australian state (New South Wales) has adopted a similar approach over several decades:
 - ▶ Data analysis showed no difference in safety performance (NSW vs Australia)
 - ▶ NSW regulator was unable to point to evidence of effectiveness

Benefits and costs of the RSRA

14

- ▶ Lack of evidence that significant benefits can be expected:
 - ▶ No evidence of superior performance in NSW
 - ▶ Price regulation for safety purposes not used in any other jurisdictions
 - ▶ Prior deregulation & price falls did not yield poorer safety performance (US, Europe)
 - ▶ (Very) limited support for general proposition in research lit., with variable conclusions
- ▶ Indicators that costs were likely to be substantial
 - ▶ Complexity of industry underlines the difficulty of achieving “efficient” price regulation
 - ▶ Widely varying guideline rates (Victoria vs WA vs TWU) illustrate this issue
 - ▶ Potential for major economic distortions from regulated prices set at inefficient levels
 - ▶ Lack of support among purported beneficiaries (i.e independent contractors)
 - ▶ Substantial overlap with role of the national HV regulator (via “remuneration related” conditions)

Alternative policy options

15

- ▶ ITF reports demonstrate a high level of convergence in policy responses to HV safety issues
 - ▶ Key initiatives relate to fatigue & speed, truck design (e.g. heavier vehicles, under-run protection, axle steering), infrastructure (e.g. road improvements, separation of HVs from other traffic) and improved driver training/licensing.
- ▶ Australian reform process has been consistent with the consensus, entailing:
 - ▶ Improved speeding enforcement, higher capacity trucks, better management of fatigue, chain of responsibility, speed limiting devices, creation of a national regulator & uniform law
- ▶ A program of further reform, consistent with this conceptual approach is being pursued by the new national HV regulator
 - ▶ [Includes further refinement of CoR, national HV law & regulator, enabling heavier vehicles nationally, vehicle telematics, vehicle design regs., new fatigue initiatives]

Benefits and costs of the alternatives

16

- ▶ Data shows these alternative policy approaches have had substantial benefits;
 - ▶ Greatly reduced fatalities, injuries and accident rates;
 - ▶ Indirect indicators (% of drivers reporting speeding, driving fatigued) also much improved
- ▶ Previous RIA have predicted modest costs for most interventions
 - ▶ High level of acceptance within industry suggests this has been so
- ▶ Suggests a strong benefit/cost outcome.
- ▶ Continuation of the current reform path is thus likely also to yield a strong benefit/cost outcome

Comparative analysis of options

17

- ▶ The strong performance in improving safety in recent years implies continuing with the logic of the current suite of policies should yield further significant benefits
- ▶ It also suggests there is a weak case for a strong intervention like price regulation, which is rarely used, potentially highly economically distorting (i.e. costly) & has uncertain benefits
- ▶ To the extent remuneration is considered an issue, the “light-handed” approach of Vic/WA entails much lower direct & indirect costs and has broad support
 - ▶ In principle, adopting a more intrusive approach before evaluating these is poor policy

Review conclusions

- ▶ That the price setting power of the RSRT should be repealed
- ▶ That, if continued intervention was needed, the “light handed” models adopted in WA/Victoria should be supplanted by a national approach
- ▶ Alternatively, if the current price setting powers are to be retained they should:
 - ▶ Only to apply to contractor drivers
 - ▶ Be exercised subject to an MoU with the national HV regulator, to avoid duplication/inconsistency.

The political economy of the RSRA

19

- ▶ The RSRA was ultimately abolished – but two years had passed since delivery of my report & a further (statutory) review had had to be commissioned – reaching similar conclusions
- ▶ Reviews were cited as partial rationales for repeal – but political factors were ultimately dominant
 - ▶ Initial release of 2 reports, plus Discussion Paper with all options canvassed, for further 1 month consultation
 - ▶ Abandoned after 1 week
 - ▶ A first RSRO setting prices for independent contractors was about to come into effect (after 3 years!)
 - ▶ Contracts were being terminated (due to non-compliance of pre-existing rates) and predicted shifts to larger fleets were underway
 - ▶ Major protests occurred, court injunctions to stay the RSRO were sought unsuccessfully
- ▶ These factors swung the political balance in favour of repeal, which occurred within a few weeks of the release of the Discussion Paper

The role of RIA in the adoption of the RSRA

- ▶ A RIA had been published prior to the adoption of the RSRA & found a negative NPV outcome.
- ▶ Clearly, however, it must be judged to have had limited impact.
- ▶ This was due to serious deficiencies in the process

Lack of integration with the policy process

- ▶ Best practice requires RIA to be integrated with the policy process and commence early. This did not occur.
- ▶ The policy direction was largely decided by 2010
 - ▶ NTC had accepted Quinlan's advice, convinced govt, "Directions Paper" released
- ▶ RIA was not published until late 2011

The role of RIA in the adoption of the RSRA

Lack of technical quality in the RIA

- ▶ The 2011 RIS was deficient in several respects:
 - ▶ It acknowledged the limited evidence of the existence of the problem
 - ▶ but failed to discuss the implications of this for policy
 - ▶ No policy context provided (safety data, other reforms) to enable assessment of its extent
 - ▶ Options analysis far too narrow: limited to three variants of the rate-setting concept

The role of RIA

Lack of technical quality in the RIA

- ▶ Focus was on a highly speculative BCA, which *assumed* benefits would arise
 - ▶ This used an assumption of “efficient remuneration” for contractor drivers
 - ▶ Yet the ultimate argument for the RSRA (“valid economic grounds”) was based on contrary assumption of “inefficient remuneration”
- ▶ Thus, the BCA was essentially unconnected to the RIA conclusion
 - ▶ The BCA also focused on transfers, cf. economic costs & benefits
- ▶ The **RIA quality control systems clearly failed**, as the RIA was assessed as being adequate
 - ▶ Stakeholders were less able to engage effectively as a result of the poor RIA

Lessons for the use of RIA

- ▶ In this case, data limitations meant a complete BCA could not be developed
 - ▶ But my report – which is essentially an *ex ante* analysis - shows the use of a RIA framework nonetheless provides potentially valuable inputs to policy-making
 - ▶ A better RIA, conducted within a better policy process, would potentially have been highly influential
- ▶ My prior experience of the NTC was that they had previously used RIA approaches from the beginning of policy processes
 - ▶ That they did not in this case arguably underlines the difficulty of embedding the cultural change needed to make RIA a core part of policy-making

Lessons for the use of RIA

- ▶ Political factors were at play from an early stage
 - ▶ Better RIA makes politically driven choices harder to make
 - ▶ Thus, it was particularly important that the RIA be of high quality if the policy decisions were to be evidence-based

*"RIA's most important contribution to the quality of decisions is not the precision of the calculations used, but the action of analysing -- questioning, understanding real-world impacts, and exploring assumptions. Significant cultural changes are required to make such analysis genuinely part of increasingly complex decision-making environments."
(OECD (2002))*