

WESTERN AUSTRALIAN SEPTEMBER 2009 SUBMISSION

DISCOUNTING

Key Points

- Western Australia considers that discounting is warranted where this improves equalisation.
- Discounting is not warranted on the basis of uncertainty (i.e. in the absence of any other information).
 - Discounting in these circumstances introduces statistical bias.
- The Commission should explain what it means by “conservatism” and why it considers that this is preferable to best estimates of HFE.

DISCOUNTING TO IMPROVE EQUALISATION

Western Australia agrees that discounting a disability factor is appropriate where the Commission has data of some kind (which may include its personal experience) to indicate that this would improve fiscal equalisation.

DISCOUNTING FOR UNCERTAINTY

Western Australia does not consider that discounting should be applied to deal with cases where there is uncertainty about the factor but no information to suggest what the modification should be.

The Commission is typically proposing to discount expense disability factors that are positive for Western Australia.

- This includes discounting the location factors (both interstate and intrastate), service delivery scale, capital stock factors and police socio-demographic factors (i.e. the 50% discount for “community policing”¹).

¹ While the Commission does not describe this as a discount, Western Australia considers this to be in substance a discount, as it does not appear to be based on quantitative or anecdotal data. The Commission has stated that a proportion of police services is “provided for the population as a whole”, but this is consistent with the crime indicator used for crime-related policing, where all persons aged 10 and above have a weight. As noted by our Police Department in the past, proactive and reactive policing are two sides of the same coin, so that the needs essentially reflect the same socio-demographic drivers. Hence community policing is, as noted by the Commission, provided to the population as a whole, but the intensity of that policing reflects the socio-demographic drivers.

- The aggregate impact of these discounts on Western Australia's grant share is a reduction of around \$90 million in 2007-08 terms.

The Commission's draft report has cited "data uncertainty" as a reason for discounting factors.

However, in the absence of any other information to suggest what the correct factors should be, the undiscounted factors represent the best available information, and hence maximum likelihood estimates.

- Uncertainty, in the absence of any other information, means that the "true" disability factor for any State could be smaller, but it could equally be larger.

In these circumstances, discounting introduces a statistical bias. In effect, discounting assumes that, for each State, the factor is more likely to be smaller than larger.

Accordingly, discounting should not be used where there is uncertainty, but no other information.

DISCOUNTING FOR CONSERVATISM

The Commission has occasionally indicated that it aims to be conservative.

However, the Commission has not explained:

- what it means by conservatism (for example, does it refer to individual category assessments being closer to EPC or to the aggregate outcome being closer to EPC); and
- why a conservative estimate should be preferable to the best estimate of HFE (i.e. the unbiased estimate given by undiscounted factors).

We note that conservatism has not been covered by any of the "pillars".