

# Commonwealth Grants Commission 2015 Methodology Review

Tasmanian Government Supplementary Submission on  
Mining Revenue in Response to the Draft Report on State  
Revenue Sharing Relativities 2015 Review

September 2014



Tasmania  
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## Mining Revenue

### Adjustment for profitability for Tasmania

Tasmania reiterates its previously stated concerns that the use of value of production data to calculate the mining revenue base ignores a fundamental issue in that it does not account for differences across States in the cost of production and the profitability of mining activity.

A mine's value of production is not an accurate reflection of its capacity to pay royalties. Value of production is determined by commodity prices in the (usually international) market which do not alone necessarily reflect relative differences in the cost of extraction between mineral types, nor relative differences in the profitability of any particular region or for any particular mining operation.

While an assessment based on value of production data tends to reflect what most States do currently in imposing royalties (with the exceptions of the Northern Territory and Tasmania to a more limited extent), it does not adequately recognise interstate differences in underlying extraction cost structures relative to a profitability based measure. In Tasmania's case, the use of value of production data means that the high costs and low profitability of Tasmania's mines is not effectively recognised in the commission's assessment, resulting in an overstating of Tasmania's revenue raising capacity.

The importance of different costs on a mine's capacity to pay royalties is demonstrated by the various royalty rates charged for different types of minerals. Most states tax value of production, but by setting different rates for different minerals (and in some cases, setting different rates for different mines), state governments are attempting to account for different extraction costs, and therefore different profitability and capacity to pay royalties. These state differences in the cost and profitability of mining activity mean that two states could have the same value of mining production, but different revenue raising capacities. As an example, mining iron ore in Tasmania is approximately 60 per cent<sup>1</sup> more costly than it is in the major mines in Western Australia. This higher cost structure means that when the current iron ore price dips below a certain point, the Tasmanian operations will become marginal whilst Western Australian mines will remain profitable, all be it at a lesser level.

The majority of Tasmania's mining activity takes place at aging mines, which incur high costs of production and low profitability as they move toward the end of their life cycle. Some key issues experienced by Tasmanian mines are discussed in Box 1.

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<sup>1</sup> MRT analysis of publicly available information

**Box 1: Issues affecting the cost of production and profitability of Tasmanian mines****Depth of mines**

Tasmania's major mines are generally long established operations that are mining at depth and in highly fractured structures. This adds significantly to the cost of mining production. Recent examples of the difficult and dangerous mining conditions have been highlighted at Beaconsfield in the States' North and the Mt Lyell copper mine on the West Coast. Both are long established mines that are not currently viable due to the significant cost of mining safely and economically.

As the depth of some of Tasmania's significant mines increases, they are encountering lower grade zones meaning they extract lower amounts of product per vertical metre and thus experience higher extraction costs. The Henty Gold Mine has recently announced that it will cease operation towards the end of 2015 due to lower grades decreasing the viability of the operation.

**Location of mines**

The difficult terrain of Tasmania's West Coast impacts on the overall costs of developing appropriate infrastructure for mining operations and adds significantly to the cost of delivering the minerals for sale. The State is also at a disadvantage due to the distance from markets for many of its mines, exacerbated by diseconomies of scale.

**High cost of exploration**

Initial costs associated with mineral exploration in Tasmania are often higher than in other States due to the difficulty gaining access, particularly in the higher mineralised areas of Tasmania's West Coast. The rugged terrain and the need to explore using diamond drilling rigs due to access constraints and water table issues adds significantly to the cost of exploration. The exploration costs associated with some of Tasmania's older operational mines are also high with drill holes of up to 2km depth, each costing upward of \$0.5 million.

**Higher ENGO activity**

Higher level of environmental non-government organisation activity in Tasmania impacts negatively on the costs of production. In particular, appeals against approvals by both State and Commonwealth Governments add significantly to the time taken for operations to commence production.

The issues discussed in Box 1 greatly affect Tasmania's capacity to apply average royalty rates to its mining operations. The use of value of production data means that these cost disabilities are not effectively recognised in the commission's assessment, resulting in an overstating of Tasmania's revenue raising capacity. Tasmania recognises that lack of data inhibits the commission from implementing a profit-based assessment, and accepts that value of production data provide a reliable source of data suitable for the commission's needs. However, we consider that Tasmania's circumstances warrant the application of a jurisdiction-specific adjustment.

Evidence for lower profitability in Tasmanian mining can be seen by comparing gross operating surplus for mining in Tasmania with other states. Table I compares the ratio between gross operating surplus with value of production for each state.

**Table 1 – Ratio of gross operating surplus\* to value of production, mining**

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australia
2002-03	0.39	0.85	0.46	0.49	0.54	0.13	0.60	0.52
2003-04	0.35	0.78	0.47	0.53	0.53	0.14	0.60	0.51
2004-05	0.41	1.02	0.53	0.57	0.55	0.15	0.38	0.55
2005-06	0.44	0.98	0.58	0.61	0.62	0.16	0.40	0.59
2006-07	0.47	1.17	0.58	0.79	0.61	0.14	0.33	0.60
2007-08	0.47	0.89	0.58	0.66	0.59	0.11	0.43	0.58
2008-09	0.46	1.10	0.59	0.65	0.63	0.12	0.46	0.60
2009-10	0.47	1.08	0.51	0.56	0.58	0.11	0.41	0.56
2010-11	0.54	0.89	0.54	0.65	0.66	0.13	0.45	0.61
2011-12	0.49	1.15	0.48	0.52	0.61	0.12	0.39	0.56
<b>Average</b>	<b>0.45</b>	<b>0.99</b>	<b>0.53</b>	<b>0.60</b>	<b>0.59</b>	<b>0.13</b>	<b>0.44</b>	<b>0.57</b>

\*Gross operating surplus also includes gross mixed income

Source: ABS: *State Accounts (5220.0); Mining Operations, Australia (8415.0)*.

The ratio for Tasmania suggests much lower profitability (i.e. high extraction costs) in Tasmanian mining than for any other State.

Table 2 below converts the ratios in Table 1 to relative factors.

**Table 2 – Ratios in Table 1 relative to the Australian average**

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australia
2002-03	0.74	1.63	0.88	0.94	1.03	0.24	1.14	1.00
2003-04	0.69	1.54	0.93	1.04	1.04	0.27	1.18	1.00
2004-05	0.75	1.86	0.96	1.05	1.01	0.27	0.70	1.00
2005-06	0.74	1.65	0.98	1.02	1.05	0.28	0.67	1.00
2006-07	0.78	1.97	0.96	1.33	1.01	0.24	0.55	1.00
2007-08	0.81	1.54	1.01	1.14	1.02	0.20	0.75	1.00
2008-09	0.77	1.85	1.00	1.08	1.05	0.20	0.77	1.00
2009-10	0.84	1.93	0.92	1.00	1.05	0.20	0.74	1.00
2010-11	0.88	1.45	0.88	1.06	1.07	0.21	0.73	1.00
2011-12	0.86	2.04	0.86	0.92	1.09	0.22	0.70	1.00
<b>Average</b>	<b>0.79</b>	<b>1.75</b>	<b>0.94</b>	<b>1.06</b>	<b>1.04</b>	<b>0.23</b>	<b>0.79</b>	<b>1.00</b>

As shown in Table 2, over a ten year period from 2002–03 to 2011–12, Tasmania's ratio is consistently around a quarter of the national average – far lower than any other State.

It should be noted that in undertaking this analysis Tasmania recognises the limitations of using gross operating surplus for this purpose, namely that:

- it is not an exact measure of profit in that it does not include holding gains/losses – however, as the ABS bases the gross operating surplus estimates in the National Accounts on company gross operating profit data, Tasmania considers it reasonable to use GOS as broad indicator of profitability in this scenario;
- it is not a direct indicator of interstate differences in production costs – however, in the absence of a more targeted data set, Tasmania considers it reasonable to use it as a broad indicator in this context;

- there is volatility in state GOS estimates at an industry level – however, the long term (10 year) average somewhat alleviates this issue; and
- there may be incomparability between GOS estimates (which are industry based and include offshore production) and value of production statistics (which are commodity based).

Despite these limitations, Tasmania contends that, at the very least, the GOS of each state's mining industry broadly indicates the *relative* levels of profitability between states. Further, Tasmania considers that the ratio of GOS to value of production provides sufficient evidence that Tasmania experiences a mine profitability disability that is not being captured by the assessment.

The low profitability of Tasmania's mines is further evidenced by qualitative analysis by Mineral Resources Tasmania. Because of the nature of Tasmania's royalties system – a hybrid system where royalties are paid on both net sales and profit – MRT collects information on the profitability of each mine. Where a mining operation is running at zero profit, or at a loss, the mining operation pays only the net sales component of the royalty (a royalty rate of 1.9 per cent of net sales). Tasmania's royalty revenues are therefore impacted heavily by the profitability of the major mines.

MRT analysed royalty returns for 2013–14 from the seven major mines operating in Tasmania. They found that of these mines, only two were paying at or near the maximum royalty rate (5.35 per cent). Three of the major mines were recording losses and therefore paying minimum ad valorem royalty rate of 1.9 per cent. The production from these three mines made up 18 per cent of total gross sales value for Tasmania.

MRT also recently undertook an analysis of royalty revenues against what would have been paid had our major mines been situated in other states. This analysis found that Tasmania is collecting below the national average royalty revenue for our major mines, primarily because they are much less profitable. This analysis is obviously highly sensitive, however MRT could seek authority to make data available to the commission on a confidential basis if requested.

Tasmania notes that, in the 2004 Review, the commission concluded:

that there was a conceptual case that the observed value of production overstated the revenue raising capacity of Tasmania because of the age and low profitability of many mines... [and] an adjustment to Tasmania's revenue base was justified for all years.

Tasmania contends that the issues of age and low profitability recognised in the 2004 Review are still highly evident in Tasmania's mining sector, and that the conceptual case for an adjustment to Tasmania's revenue raising capacity can be demonstrated. In the 2004 Review, a 35 per cent discount was applied to Tasmania's revenue base for value-based minerals for the first four years included in the assessment (1998–99 to 2001–02), with a 70 per cent discount in the 2002–03 year.

We request that the commission make a state-specific adjustment to Tasmania's revenue base to reflect its reduced capacity to raise mining revenue. We consider that the 18 per cent of total mining production assessed with little or no profit royalty provides a conservative indication of the proportion of total mining production on which Tasmania is not able to apply Australian average

tax rates. We would consider such an estimate to be conservative because it would be based on the production of the least profitable mines only.

Tasmania is flexible on how the commission might apply such an adjustment within the assessment. Further evidence and annual data updates can be made available to support the application of an adjustment if required.