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Dec 20, 2006

Public Support for Science and Innovation
Productivity Commission
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Re: Feedback on the draft Productivity Commission Research Report on Public Support for Science and Innovation

Dear Commissioners

Following up my participation in the recent Round Table I wish to provide the following additional feedback.

1. I support and commend your overall conclusion that public investment in science and innovation generates very good returns to Australia (albeit difficult to quantitate accurately). However, this does seem somewhat incongruous with your conclusion that Australia has it about right in terms of the funding commitment to research and development. Given the low, and falling percentage of ARC and NHMRC grants funded, as well as the teaching burdens and deteriorating infrastructure in our universities, I would argue strongly that Australia would benefit considerably from enhanced total funding to public sector research.
2. The report questions whether rural research corporations justify the current level of public subsidy. It argues that there is a double subsidy through matching of levies plus in kind contributions from public sector agencies where the research is undertaken. I believe that this proposition fails to take account of the potential market failure and the spillover benefits that these funds address. The agricultural industries are characterised by a large number of small enterprises that cannot individually support funding of basic research. In the absence of substantial leverage, farmers simply would not support R&D at all, and if the subsidies were scaled back, there would be considerable pressure to focus the R&D on 'farmgate' issues.

The key point is that the public sector subsidy allows the Rural R&D Corporations to justify funding of basic research that benefits the long term future of the entire industry sector – individual farmers cannot capture the full benefit of such research. For example, R&D that leads to a value-added dairy product does not necessarily increase the price farmers can charge for their milk, but it could lead to an increased viability for the industry sector as a whole.

3. The report is very focussed on public support for R&D, with limited consideration of the benefits of broader support of innovation. This leads to a conclusion that in my view is spurious. That is, the report concludes there is not a case for public support of later stage innovation in the industry sector. There are many cases where commercialisation fails because of gaps other than R&D funding. For example, the immaturity and limited capacity of our venture capital industry is a severe impediment to the growth of innovative, science-based SMEs in Australia. Public support of venture capital funds through the Innovation Investment Fund has been a key factor in the recent expansion of this industry in Australia, with considerable spillover benefits to Australia.

4. The report argues for replacement of the general 125% R&D tax concession with a 175% concession restricted to incremental R&D. While in principle this appears an attractive way to focus the concession on spillover benefits, it would have negative consequences for the following reasons. Firstly, I am aware from my prior position on the IR&D Board that industry primarily wants stability in government programs so that companies can plan confidently. Programs such as the R&D tax concession are considered the flagship Government program, so any downgrading has the potential to seriously undermine industry confidence. Remember the consequences of reducing the concession from 150% to 125% - it has taken years to bring BERD back to the same level.

Secondly, a program that rewards only incremental R&D fails to benefit companies that are already maintaining a very high level of R&D. It is in Australia's interests to help these companies maintain such high levels of innovation. Removal of a general tax concession could run the risk that such companies will decrease their level of R&D or even choose to relocate overseas.

5. The report recommends restricting Commercial Ready grants to early stage R&D, as well as the reversion to loans for later stage commercial development. As indicated under point (3) above, this seems to reflect a philosophical view that non-R&D innovation does not generate spillover benefits that justify public support. In fact, innovative commercial projects carry very high levels of risk even in the later stages of development. Drug development is a classic example. Most products fail in clinical trials – so failure to support this expensive and high-risk stage through Commercial Ready grants would severely limit the extent of drug development that is carried out in Australia.
6. Finally, the report is silent on the role of State Government support for R&D, yet the States provide nearly 20% of the total government support. It is important to determine if State Government investment is well directed and leveraged. In particular, it would be useful to analyse the level of national benefits that arise from State support for R&D.

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