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Review of the R&D Tax Incentive

The University of Sydney is pleased to provide the **attached** brief feedback on the report of the Review of R&D Tax Incentive, released for consultation by the Minister for Industry, Innovation and Science in September 2016.

The outcomes of this review are vital to Australia's future prosperity as we strive to strengthen the economy through the creation of new industries and jobs in sectors where we can compete successfully in the global knowledge economy.

We look forward to continuing to work with the Australian government, business and other publicly funded research organisations to grow Australian R&D, boost levels of collaboration and innovation, and maximise the economic and social returns that flow to the community from the substantial investment the government makes each year to support business R&D undertaken in Australia.

Should you wish to discuss any aspect of our submission further, in the first instance please do not hesitate to contact Mr Tim Payne, Director, Higher Education Policy and Projects in my office: tim.payne@sydney.edu.au, 02 9351 4750.

Yours sincerely

(Signature removed)

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Attachment University of Sydney Submission to the Review of the R&D Tax Incentive

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Response to the Review of the R&D Tax Incentive report released in September 2016

Summary

1. The policy intent and directions are strongly supported

The University of Sydney strongly supports the policy objective of maximising the economic and social returns that flow to Australia from its R&D Tax Incentive program. We agree with the government and the review panel that considerable scope remains to further improve the scheme's effectiveness in stimulating R&D activity that would not otherwise occur in Australia. The key policy challenge is to ensure our overall approach to business R&D fuels additional private investment in Australia, rather than simply substitute for R&D activity that would have occurred anyway. This is not a new challenge, nor one that is unique to Australia. Nations around the word are grappling with the same issues as they strive for competitiveness and prosperity in the global knowledge economy, and there is much recent analysis about which approaches are most effective.[1]

2. The outcomes of the review are vital due to our current mix of support for business R&D

At a cost of around $3 billion annually (and growing rapidly) the R&D Tax Incentive represents the single largest component of the approximately $10 billion the Australian government currently invests each year to support Australian science, research and innovation. Ensuring that the R&D tax incentive regime is performing well is arguably more important to Australia than for competitor countries, as our program currently accounts for some 85 per cent of the total support for business R&D provided by the Australian government.
This places Australia at the far end of the spectrum in terms of the degree to which indirect measures (tax incentives) as opposed direct strategies (for example competitive grant schemes) are used to support business R&D. Notably, many competitor countries that are well known for their stronger overall performance in the innovation stakes – for example the United States, Sweden, Israel, Germany and Finland – rely much more on direct measures to stimulate business R&D, and in some cases do not use tax incentives at all.[2]

3. The Business R&D incentive program would benefit from some rebalancing

The review report itself notes that Australia, the Netherlands and Canada are unusual in the OECD in having tax measures as their principal form of support for business R&D.[3] This suggests that, in responding to the review, it may be timely for the government to consider whether we have the right overall balance between indirect and direct support measures. While both approaches have their strengths and weaknesses, we note that in its last detailed cost/benefit analysis of different approaches the Productivity Commission found that while there are risks inherent in direct approaches, levels of 'additionality' can be high for well-targeted and administered schemes.[4] More recently, the OECD has concluded that:

> *…direct support measures – contracts, grants and awards for mission-oriented R&D – may be more effective in stimulating R&D than previously thought, particularly for young firms that lack the upfront funds to start an innovation project... More broadly, a well-designed and transparent system of direct support measures can be complementary to the use of R&D tax incentives as it may help direct public funding to projects with high social returns.*[5]

One of the most persistent innovation challenges Australia faces is maximising the benefits of our outstanding basic research, due to the difficulties our researchers and firms face in commercialising their research. The government has recently moved to address this key area of market failure in our health and medical research sector through the establishment of the $250 million Biomedical Translation Fund (BTF) under the National Innovation and Science Agenda.[6] However, the lack of funding to commercialise research is not limited to biomedical R&D.

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[1] See for example, Deloitte, *Global Survey of R&D Tax Incentives*, October 2015; OECD Directorate for Science, Technology and Industry, *Maximising the benefits of R&D tax incentives for innovation*, Oct 2013; Appel S. *et al*. *R&D Tax Incentives: Evidence on design, incidence and impacts*, OECD Science, Technology and Industry Policy Papers, No.32. OECD Publishing, Paris, 2016
[2] https://www.oecd.org/sti/rd-tax-incentive-indicators.htm
[3] Ferris W., Finkel A., and Fraser J., *Review of the R&D Tax Incentive Report*, Sept 2016, p.2
[4] Productivity Commission, *Public Support for Science and Innovation*, Canberra, 2007, p.108.
[5] OECD Directorate for Science, Technology and Industry, *Maximising the benefits of R&D tax incentives for innovation*, Oct 2013
[6] http://www.innovation.gov.au/page/biomedical-translation-fund

We therefore recommend that the government consider establishing a 'National Innovation Fund', potentially modelled on the BTF, but targeted to support start-ups in other fields with strong commercialisation potential. The Group of Eight universities are well advanced in planning the establishment of an initial $200 million early-stage commercialisation fund. We see great potential for the government to partner with universities and private sector fund managers to leverage their respective investments to significantly boost Australia's performance in commercialising its R&D.

4. Increased incentives are needed to boost collaboration and innovation

As this current review and related recent policy processes have documented, Australia performs poorly compared to international benchmarks of innovation and collaboration between private and public research organisations (including universities). Globally, levels of R&D collaboration between these sectors is considered critical for delivering economic outcomes from R&D, and many competitor countries have implemented targeted measures to encourage this type of cross-fertilisation of people, ideas and expertise.

The reasons for Australia's relatively poor performance against these measures are complex, as the report acknowledges, and may reflect the structural realities of our economy.[7] There are also sometimes significant cultural and behavioural differences at play between the sectors, while instability and inconsistency in government policy (including between jurisdictions and their agencies) and funding signals (for example prioritising academic research quality and certain measures of research quality to the exclusion of its broader impact on society) may have had unintended consequences over time.

A range of recent reforms to Australian government policy and funding for innovation and university research have started to realign incentives to encourage universities to increase their levels of engagement with business and other end-users of research. We are strongly supportive of these measures. However, our assessment is that the challenge of substantially increasing levels of business/university R&D collaboration in Australia will be achieved much more rapidly if the financial incentives available to business also serve to change business' mindset when considering if and where to invest its R&D dollar. We therefore strongly support the report's Recommendation 2 – to introduce a 20 per cent collaboration premium for the non-refundable tax offset for R&D undertaken in collaboration with publicly funded research organisations.

5. Review the report's recommendations against leading internal practice and evidence

We have provided specific feedback in relation to the report's six recommendations in the **attached** table. In doing so, we have considered the recommendations individually against the following international best practice principles for design and implementation of R&D tax incentives released recently by the OECD. In summary, the OECD's analysis suggests that:

1. The overall effectiveness of R&D tax incentive regimes depends upon the broader regulatory environment, in particular the broad taxation regime, and its stability and predictability over time. Stable and predictable incentives are likely to have a stronger impact on R&D investment.
2. Using fiscal incentives with the sole purpose of attracting potentially mobile R&D by Multinational National Enterprises (MNEs) is likely to have only limited effects, and can lead to a dangerous "race to the bottom" among countries.
3. Policy should balance indirect support for business R&D (tax incentives) with the use of direct support measures (competitive grants) to foster innovation where the market is less likely to deliver it on its own. It should also assess how well different innovation support instruments work together.
4. Income-based incentives should be treated with caution, given the lack of evidence of their effectiveness and the risk that they will disproportionately benefit established, large firms, MNEs and innovations susceptible to protection by patents.
5. Business R&D tax incentives should be designed to ensure that young, innovative firms, without cross-border tax planning opportunities and profit-generating capacity are not disadvantaged.
6. Small or young firms react more strongly to R&D tax incentives than large firms, and are less likely to shift their profits abroad to avoid taxes.
7. Incentives should include carry forward provisions, cash refunds or reductions in social security and payroll taxes, so that they also benefit small and young firms and projects involving basic research.
8. Governments should ensure that R&D tax incentive policies provide value for money, through effective evaluation, including of the impacts of any reforms.[8]

[7] Op. cit., p.13
[8] Appel S. *et al*. *R&D Tax Incentives: Evidence on design, incidence and impacts*, OECD Science, Technology and Industry Policy Papers, No.32. OECD Publishing, Paris, 2016

Review recommendation	University of Sydney comments
Recommendation 1 Retain the current definition of eligible activities and expenses under the law, but develop new guidance, including plain English summaries, case studies and public rulings, to give greater clarity to the scope of eligible activities and expenses.	**Supported.**
Recommendation 2 Introduce a collaboration premium of up to 20 per cent for the non-refundable tax offset to provide additional support for the collaborative element of R&D expenditures undertaken with publicly-funded research organisations. The premium would also apply to the cost of employing new STEM PhD or equivalent graduates in their first three years of employment. If an R&D intensity threshold is introduced (see Recommendation 4), companies falling below the threshold should still be able to access both elements of the collaboration premium.	**Strongly supported with one recommended modification.** • We note that the European Commission (2014) identified that best practice for targeted R&D incentive system is to include an incentive for collaboration with publicly funded research agencies, and that countries including France, Italy and Japan have moved in this direction with their business R&D tax measures. (Report p.32) • We further note the findings of the Department of Education and Training's recent review of research policy and funding arrangements (Watt Review) about the highly positive impact that collaboration with publicly funded research organisations has on business productivity growth, and the various reforms arising from the Watt Review and elements of the National Innovation and Science Agenda designed to incentivise universities to increase their collaboration with business and industry. (Report p.31) • We recommend, however, that the government does not restrict the employee cost component of the proposal to graduates with PhDs in the STEM disciplines. So long as the graduates are employed by business in genuine research or research management roles, the costs of employing PhD or equivalent graduates from all disciplines for the first three years should attract the premium. Graduates with research degrees from disciplines beyond STEM have much to offer business R&D, and should not be excluded from this proposed policy reform. Here we note that, for the purposes of its R&D incentive scheme, France allows double counting of the employment costs of PhDs regardless of their discipline. (Report p.32)
Recommendation 3 Introduce a cap in the order of $2 million on the annual cash refund payable under the R&D Tax Incentive, with remaining offsets to be treated as a non-refundable tax offset carried forward for use against future taxable income.	**Support in principle, subject to modelling of likely impacts on SMEs** • We note the analysis in the report indicating that the main cause of the substantial growth in the cost of the Tax Incentive program, compared to successive budget forecasts, has been the larger than expected numbers of companies in tax loss registering and claiming for the refundable component of the program. (Report pp.23-4) • Understanding the scale of the budget repair challenge facing the government, we appreciate there may be a strong desire to rein in the program's cost, and provide some more budgetary certainty for its future administration, than is possible under the current uncapped volume-based arrangements. • However, we are concerned that the introduction of a cash refund cap of $2 million may impact negatively on current and future high potential SMEs facing high R&D costs in the initiation phase. For some current business

Review recommendation	University of Sydney comments
	recipients of the refund they may have based their business models on its continuing availability. Therefore, before the government responds to this recommendation we recommend that it release details of the number and types of companies currently registered for the scheme that would be adversely affected, and of the total saving that this proposed measure would deliver. If the government does need to reduce the cost of the scheme, it may be that there are better ways to deliver the desired savings, while consideration may also need to be given to grandfathering or other transitional arrangements for existing businesses. • If changes to the refundable and non-refundable components of the program deliver budget savings, we recommend that funding is provided to establish a substantial 'National Innovation Fund', potentially modelled on the recently created Biomedical Translation Fund. The purpose of this new fund would be to target support for the commercialisation of R&D from all other fields and to rebalance Australia's overall weighting of support for business R&D between indirect and direct initiatives. The size and impact of the proposed Innovation Fund could be leveraged through collaboration with Australian universities, other publicly funded research organisations such as the CSIRO, DSTO and medical research institutes, and private sector fund managers.
Recommendation 4 Introduce an intensity threshold in the order of 1 to 2 per cent for recipients of the non-refundable component of the R&D Tax Incentive, such that only R&D expenditure in excess of the threshold attracts a benefit.	**Supported in principle.** • The policy objective of ensuring that the R&D Tax Incentive stimulates and rewards additional business investment in R&D in Australia is strongly supported. • Based on the data included in the report, however, we are unsure that a threshold of 1 to 2 per cent represents the appropriate level, or of whether setting a uniform threshold is the best way to proceed. • R&D costs and intensity are likely to vary significantly between sectors and firms, and change over time. It would therefore be helpful if further information could be released about the R&D intensity profile of Australian firms registered for the program, compared by age, size, industry sector and also with international benchmarks. • We also note that a country such as Ireland, which has achieved very strong comparative multi-factor productivity growth over the last decade compared to its overall levels of public investment in R&D, pursued a more nuanced approach to achieving additionality from its business R&D tax incentive program. Between 2003 and 2015 this involved establishing a 'base amount' of expenditure for each individual firm and providing a tax credit only for expenditure in subsequent years above that base.[9]

[9] Deloitte, *Global Survey of R&D Tax Incentives*, October 2015, p.21

Recommendation 5 If an R&D intensity threshold is introduced, increase the expenditure threshold to $200 million so that large R&D-intensive companies retain an incentive to increase R&D in Australia.	**Not supported.** • We agree that large firms with strong R&D profiles should continue to be rewarded for increasing their investment in R&D in Australia. • Nevertheless, our assessment is that Australia's overall approach to boosting levels of R&D and innovation requires a considerable rebalancing away from volume-based measures that favour larger, often long established firms, to more direct measures targeted to support quality and the growth of new firms, industries and jobs through the development of opportunities arising from Australia's outstanding R&D. • We have based this conclusion on factors including: - our working knowledge of Australia's unique industry structures and R&D commercialisation challenges; - the current low levels of business/university collaboration in Australia compared to international benchmarks; - the current very heavy weighting of Australian government support for business R&D toward taxation measures; - trends in the utilisation of the Business R&D Tax Incentive since 2011 and its rapidly increasing cost; and - the OECD's various recent findings about how nations' business R&D incentive programs should be designed and weighted to maximise additionality and economic benefits.
Recommendation 6 That the Government investigate options for improving the administration of the R&D Tax Incentive (e.g. adopting a single application process; developing a single programme database; reviewing the two-agency delivery model; and streamlining compliance review and findings processes) and additional resourcing that may be required to implement such enhancements. To improve transparency, the Government should also publish the names of companies claiming the R&D Tax Incentive and the amounts of R&D expenditure claimed.	**Strongly supported.**