



Senate Standing Committees on Economics  
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5 November 2018

Dear Sir/Madam

**Treasury Laws Amendment (Making Sure Multinationals Pay Their Fair Share of Tax in Australia and Other Measures) Bill 2018**

PricewaterhouseCoopers (PwC) appreciates the opportunity to provide a submission to the Senate Economics Legislation Committee on the draft Treasury Laws Amendment (Making Sure Multinationals Pay Their Fair Share of Tax in Australia and Other Measures) Bill (**the Bill**) and Explanatory Materials (**EM**), specifically Schedules 1, 2 and 3.

As a National R&D practice we have in excess of 30 years of experience working with both the Research and Development Tax Incentive (RDTI) and the preceding R&D Tax Concession. We have drawn on this experience to provide our perspective on the proposed changes and the impact they will have on claimants and regulators.

We note that PwC has previously provided input through submissions and various discussions with Government throughout, including in relation to the Review of the R&D Tax Incentive in 2016, ISA2030, leading up to the Federal Budget announcement and release of the draft legislation. For ease of reference a copy of our earlier submissions are provided at Appendix A and B.

We acknowledge the objective of better targeting the RDTI, but do not consider that the proposed changes necessarily achieve this objective. In addition there is a significant amount of support across businesses to ensure any legislative changes are fair and are in line with the policy objectives. We have attached as Appendix C a sample of media articles that highlight the widespread concern about the proposed legislative changes. The general theme across the media articles is that the impact of the proposed changes will have a negative impact and will discourage further R&D investment, or businesses will look for more favourable options offshore.

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We are of the view that the Bill has a high level of complexity and creates inequality between different industries. As such amendments are required to prevent the creation of additional administrative complexity for both claimants and the regulators.

Yours sincerely



**Richard Gregg**  
Partner - National Leader  
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3 November 2016

### **Submission on Review of the R&D Tax Incentive**

Dear Sir/Madam

PricewaterhouseCoopers (PwC) appreciates the opportunity to provide comment on the recently-released Review of the R&D Tax Incentive, conducted by Mr Bill Ferris AC, Dr Alan Finkel AO and Mr John Fraser.

The release of the Review is a welcome contribution to public discussion about the crucial place of business R&D, and the R&D Tax Incentive itself, in the Australian economy.

PwC endorses many of the findings that are made in the Review. However, we also have concerns with some of its recommendations, chiefly in the following areas:

- the quantum of the proposed collaboration premium;
- the application of an intensity threshold to claimants above \$20 million turnover; and
- the level of a suggested new cap on the annual cash refund payable.

We would therefore urge the Government either not to adopt these recommendations or to substantially amend them.

We would also be pleased to provide further information about our positions on each of these and any other relevant issues at any time.

Yours faithfully



Richard Gregg  
Partner, National Leader Innovation & Incentives

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## **Introduction:**

PwC appreciates this opportunity to respond to the Review of the R&D Tax Incentive.

From the outset, we welcome the release of the report prepared by Mr Bill Ferris AC, Dr Alan Finkel AO and Mr John Fraser (“the Panel”) for comment. We are also pleased that the Government has launched an extensive consultation process to allow stakeholders to better understand the content of the Review and the proposed recommendations, and to provide feedback in relation to the suggested changes.

PwC was given the opportunity during the course of the review process to meet with all three of the members of the Panel individually, as well as several staff and other key stakeholders within Ministerial offices and the public service. In each case, those discussions have provided us with improved insight into the perspectives of the Panel, and allowed us to be given a very fair hearing in presenting views of our own.

Ultimately, the Review represents a valuable aid to public understanding about the Incentive and an important contribution to the long and sustained public discussion about the best ways to organise and structure the program going forward as a key lever for supporting innovation in Australia. There are particular recommendations made by the Panel with which we disagree, but many of their other findings and observations are eminently sensible.

This submission from PwC directly addresses each of the specific recommendations delivered by the Panel. It also presents a variety of our own perspectives on these issues, as well as on a range of additional considerations and questions raised by the Review itself.

As a statement of general principle, based on more than 20 years of direct and extensive day-to-day experience with the operation of this program and the earlier R&D Tax Concession, we remain strongly supportive of the Incentive. We believe that it plays a vital role in stimulating additional R&D investment in Australia from companies of all sizes and across all sectors of the economy.

Accordingly, we commend the Panel’s acknowledgements on page 8 of the Review that “R&D activities are a key driving force of productivity and economic growth” and that “it is commonly accepted that due to the presence of benefits that flow to the wider economy and the inherent uncertainty of R&D projects there is an underinvestment in private business R&D compared with a socially optimal level”.

We also welcome the Department of Industry, Innovation and Science’s accompanying release of the Swinburne University of Technology study that was specifically commissioned in late 2015 “with the objective of measuring the level of R&D tax programme additionality in Australia”.<sup>1</sup> Tellingly, this analysis concludes that there is “a significant difference in R&D spending between firms that benefit from the tax subsidies and those that do not” and that “claiming firms invest (in) around 40 per cent more R&D than ‘similar’ firms which are not registered to receive the subsidies”.<sup>2</sup>

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<sup>1</sup> R.Thomson & A.Skali (2016), ‘The Additionality of R&D Tax Policy in Australia’, Centre for Transformative Innovation, Swinburne University of Technology, p.5.

<sup>2</sup> *ibid*, p.6; p.30.



### **Summary of PwC's Position on the Review:**

Broadly, PwC supports three of the six recommendations that are made by the Panel. These three recommendations (Recommendations 1, 2 and 6) speak to changes that are designed to improve the effectiveness of the Incentive and the overall attractiveness of the program to businesses (and research organisations) undertaking highly-innovative R&D activities in Australia.

However, we do not support two of the recommendations (Recommendations 3 and 4) in the Review. Collectively, these two recommendations propose far-reaching and detrimental changes to qualifying criteria for the Incentive and advocate for a wholesale reduction in the levels of public support that are provided through the program. We estimate that, if Recommendation 4 was to be implemented, hundreds of current claimants from our client base would become ineligible to access the Incentive even at the lower 1% threshold level of intensity.

PwC acknowledges the budgetary challenge currently facing the Federal Government. In keeping with this point, we also recognise that one of then Industry, Innovation and Science Minister Pyne's guiding motivations for establishing the Review last year was to "sharpen" the focus of the program.

In that light, we have also included within the submission a range of practical alternatives for the proposed changes in order to address the challenge of cost containment of the program. In each case, we think these provide either additional or different options for the Government to pursue that will achieve the same broad policy objectives as those nominated in the Review.

Where we disagree with specific recommendations, we have drawn heavily on our own local and international experience with the program to design alternative options that we believe are affordable and logical, and will cause the least possible disruption to ongoing R&D investment and activity in Australia.

Above all, we should note that it is gratifying that the Review has revealed that a study conducted for the Government by the Centre for International Economics (CIE) has concluded that the program stimulates considerable additional benefit.<sup>3</sup> The CIE's conclusions on this point are also emphatically reinforced by the (even more definitive) findings of the recent paper by Swinburne University.

Collectively, these comprehensive academic and analytical reports confirm that the R&D Tax Incentive is already a highly-effective program, that it does encourage significant additional R&D spending and spillovers in Australia, and that it has helped to nurture a stunning 13 to 14% increase in business R&D expenditure even in the short period since it has replaced the R&D Tax Concession.<sup>4</sup>

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<sup>3</sup> The Centre for International Economics (2016), *Final Report: R&D Tax Incentive Programme Review*, pp.51-56.

<sup>4</sup> Thomson & Skali, op. cit., p.6; p.26.



**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.**

In various past submissions about the R&D Tax Incentive, PwC has suggested that there may be merit in changes to the definitions of eligible activities. We have also advocated for an increase in the guidance available about the scope of eligible activities and expenses, with a focus on public rulings covering both technical and financial issues.

The main rationale for this position has been that the current range of definitions and guidance is too narrow (and not sufficiently commercially-grounded) to account for the full diversity of R&D activities that occur in Australia.

The existing parameters do not always apply perfectly to new, more dynamic forms of R&D across an innovation landscape in Australia that is changing rapidly. At the other end of the spectrum, the emphasis in the program on applying scientific concepts such as hypotheses and experiments to commercial practices means that it is not always easily amenable to activities on the 'D' side of R&D, either.

Various recent cases (and the regular need for rulings and updates) have underscored these challenges, demonstrating differing interpretations between claimants and assessors of the forms of R&D activities that are respectively eligible and ineligible.

***Summary of PwC's Position on Recommendation 1:***

Given the above background, PwC accepts, appreciates and supports the content of Recommendation 1 of the Review. We believe that it adopts a sensible compromise position, and that all stakeholders in the program (including Australian taxpayers) will benefit from a more extensive range of illustrative guidance being made available.

However, we would also stress that the effectiveness of this guidance, and the practicality and workability of the definitions, should be monitored on an ongoing consultative basis. It is important that continuous oversight be maintained over the definitions in order to ensure that they are effectively keeping pace with the nature and range of R&D activities being undertaken in Australia.

In turn, we would strongly urge the Government to pay particular heed to that element of Recommendation 1 that indicates there is a need for more (funded) instances of case law. Notwithstanding the issues raised on page 28 of the Review about 'black letter' law, public legal rulings will typically establish more meaningful and reliable precedents than purely written and principles-based guidance. They will therefore leave matters less open to subjective interpretation.

We would also endorse the sensible logic used in this section of the Review that adequate time should be taken to understand and assess the impact of consequential changes to the program before other elements are materially altered. Indeed, this approach should generally be replicated in other areas.



**Recommendation 2: Introduce a collaboration premium of up to 20 percent 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.**

PwC has advocated for the potential inclusion of a special rate or premium within the R&D Tax Incentive scheme to encourage increased collaboration between businesses and research organisations.

The Review itself also draws together a number of compelling facts about policies that have helped to drive collaboration in other nations.

***Summary of PwC's Position on Recommendation 2:***

In the light of that history, we support the thrust of Recommendation 2 – which calls for the introduction of a collaboration premium for the non-refundable tax offset. Clearly, it is worth seriously exploring any measure that might drive greater and more meaningful engagement between researchers and industry.

We consider that the suggested rate of 20% is potentially too high. Unfortunately, there is only a general outline on page 34, and no specific modelling in the Review, to quantify the reasons that a figure of 20% has been chosen.

Due to the current budgetary challenges, we consider that a rate in the region of 10% would be appropriate, and that this would also still trigger the rise in collaborative behaviour being sought. We also consider that a lowering of this percentage to 10% would probably be more consistent with the reviewers' own openly-stated concern, on page 3, that their model would need to be structured in such a way that "maintains integrity and does not distract research organisations from fulfilling their core functions".

It also needs to be stressed that the R&D Tax Incentive as a whole should continue to be overwhelmingly focused on stimulating increased private sector R&D activity in Australia.

As is suggested on page 32 of the Review, there are already many existing forms of support for universities and other publicly-funded research institutions, including across a number of the recently-created initiatives in the Government's National Innovation and Science Agenda.

Whilst it is critically important to stimulate increased public-private collaboration, it is also appropriate to ensure that there are incentives in place that provide balanced support for all parts of the innovation system.

If the impact of Recommendation 2 is to be maximised, then we consider there are also various other elements of the approach that will need further consideration and development.

As a fundamentally important step, the precise meaning of the term "publicly-funded research organisations" for the purposes of this recommendation should be clarified. The only definitional reference in the Review to this term is on page 30, in a footnote that offers only a very broad indication of some of the types of organisations to which it might apply.



Ideally, the new premium collaboration rate should include an ability to have incentive(s) for business collaboration with a meaningful percentage of the diverse range of research organisations that now exist across Australia. This should certainly be a substantially wider group than universities, medical research institutes and publicly-funded research bodies.

In keeping with the fact that they are already identified as qualifying organisations and play a valuable role in the current program, so Research Service Providers (RSPs) should also be brought under the auspices of this new collaboration premium proposal.

It is also not entirely clear from the report as to precisely what forms of collaborative activity would (and would not) qualify for the premium. We request, for example, that the commissioning and compilation of independent, expert reports on R&D activities are included. In our experience, these currently represent the most prolific and useful type of collaborative work between the private and tertiary sectors on R&D projects, and should be further encouraged. However, there is no indication in the Review as to whether these (or any of a range of other activities) would qualify for the special new rebate.

There is also no mention in Recommendation 2 of the current disqualification from the program of companies with more than 50 per cent tax exempt ownership. This issue needs to be revisited, as a relaxation of this requirement would almost certainly improve the prospects for private-public R&D collaboration through the program.

We also recommend a review of this new premium two years after implementation to understand whether it has had a positive impact between the two sectors.





**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.**

***Summary of PwC's Position on Recommendation 3:***

We acknowledge that the Panel clearly believes there is an imperative to manage the overall cost of the program. In that respect, it is our view that caps and rate reductions will be the most practical, least-disruptive and least-discriminatory tools to use. It is also clear that the greatest upsurge in the uptake of the program's benefits in recent years has occurred in relation to the refundable component.

We accept that any attempt to contain the cost of the program, and to add extra integrity measures, therefore needs to be concentrated in the first instance on that side of the program.

Nevertheless, we believe that the idea to specifically impose a \$2 million cap requires further and more detailed analysis.

Principally, our concern is not with the principle of a cap itself but with the level at which the proposed ceiling would be applied. Rather than it being at \$2 million, we would recommend that a higher figure be used.

The lack of modelling that accompanies Recommendation 3 makes it difficult to understand why the \$2 million figure has been chosen by the Panel. Depending on the precise impact (both on the budget and on the number of companies that will be materially affected), we believe that a ceiling would be more appropriately set at either \$4 million or \$5 million.

Additionally (or alternatively), tiers could be established between a starting figure and the ultimate cap, so that companies receive progressively reduced rates of refunds at each of a small number of increments. Even if this option was to be pursued, however, we would not recommend a starting figure of lower than \$2 million.



**Recommendation 4: Introduce an intensity threshold in the order of 1 to 2 percent 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.**

and

**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.**

We endorse the report in relation to the concept that policy makers should look for ways of helping to drive increased and higher-quality investment in R&D activities in Australia and, in the Panel's view on page 9, lift "the amount of additional R&D achieved for each dollar of tax forgone".

However, we disagree with the method that has been suggested in these two recommendations. Indeed, we consider the creation of a specific intensity threshold as a means of qualifying for the R&D Tax Incentive is a detrimental penalty orientated proposal that, if implemented, would have highly damaging ramifications. Based on our experience and knowledge, it would preclude thousands of previously-eligible companies from being able to access the program. Clearly, these ramifications would be completely counterintuitive to the concepts cited in the paragraph above.

It is noted that the Review (on pages 4 and 38 respectively) refers to literature that supports this proposal. However, no references are provided to any of this literature.

We cannot identify any other regime worldwide that has a similar mechanism to limit access to the program unless a company reaches a specific level of intensity. Specifically, the Review does not observe that, even among the dozens of national R&D incentive regimes now in existence around the world, none relies on the use of a measure of the kind being specifically advocated here. Japan possesses arguably the closest model, but even its program is incentive-orientated. It does not penalise companies for not reaching an intensity, and it rewards them with a higher rate when they do.

In turn, a number of the findings in Swinburne University's recent study challenge the Panel's conclusion on pages 1, 2 and 26 that the program "falls short of meeting its stated objectives of additionality and spillovers". Rather than indicating any shortfall, Swinburne's research instead contends that Australia's "R&D tax policy review, evaluation or reform should apply a benchmark additionality in the range of 0.8–1.9, observing that the results from our preferred approach fall toward the upper end of this range".<sup>5</sup>

Bearing in mind that the Panel concedes, on page 14, that the CIE's lower calculation of a 0.3-1.5 range is "broadly similar" to findings in relation to many other R&D tax programs globally, Swinburne's findings imply that the level of additionality in Australia would exceed the results in many of those countries.

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<sup>5</sup> *ibid.*, p.30.



### ***Summary of PwC's Position on Recommendations 4 & 5:***

Having modelled the proposal across a wide sample of our own client population, and spoken directly to many of those clients and other program stakeholders since the release of the Review, we believe the practical impact of this proposal would be drastic even at the lower level of the recommendation.

Our analysis of the proposal indicates that even the introduction of a 1% (let alone a 2%) intensity test would be likely to immediately disqualify the majority of the current registrants in the program. This would include a range of companies that, by any objective assessment, would be among the leaders in business innovation in Australia.

To exacerbate the consequences, even the (minority of) companies that managed to exceed the threshold would still have their offsets significantly reduced in value in every single case as the first 1 to 2% of their total spending would not be eligible, a feature that would be unique to the Australian model.

Under this measure, it is our view that all claimants with turnover of greater than \$20 million would be worse off with less support.

### **Complexities & Problems of an Intensity Threshold –**

This is by no means an exhaustive list, but we believe these are among the many conceptual problems and limiting complexities with the potential introduction of an intensity threshold suggested by the Review Panel:

- the threshold would be likely to heavily favour specific business models over others and remove the broad based nature of the program;
- the threshold would be likely to heavily favour specific industries over others which will be permanent differentials, and we do not agree with the comment on page 39 of the Review that sectoral differences will essentially be evened out over time and that the threshold will ultimately be "robust to sectoral biases";
- the definition of R&D intensity used in the Review (R&D expenditure relative to total business expenditure) is different to the more-commonly understood definition (R&D expenditure relative to company revenue);
- there is no indication in the Review as to the specific forms of business expenses to which it would apply and which expenses would be exempted, and it would be a huge challenge for the administrators of the program to adequately prevent the deliberate misclassification of expenses into the exempted categories;
- as three examples of the problems associated with classifying business expenditure, the Review is silent on whether the calculations for the threshold would apply to items like COGS, OPEX and/or CAPEX;



- there is no modelling associated with the proposal, and no rationale is stated for why the 1 to 2% figure has been specifically nominated;
- for most companies, it is counterintuitive (and often highly impractical) to suddenly increase or incur additional costs on R&D, because that typically conflicts with established business models and will frequently lead to a reduced return (and even losses) on a job or project;
- through commercial necessity, most companies are already using all of the resources available to them to undertake R&D in what they believe is the most efficient way. Accordingly, they do not possess any immediate capacity to increase it to the very large degree that would be required even to receive their same pre-existing level of benefit if the intensity threshold recommendation is ever applied;
- an intensity measure could spur the pursuit of inefficient spending on R&D projects, and punish companies that use R&D resources efficiently;
- the measure is likely to act as a greater disincentive for businesses to embark on new, isolated, innovative projects in Australia (especially where the project does not account for a particularly large share of a company's overall budget as they will not meet the new threshold even at 1%);
- part of the argument in the Review seems to be that an intensity threshold would encourage greater spending on R&D as a percentage of the overall expenditure within a business, but this ratio could just as easily be improved by a reduction in spending in other areas of the business and may actually result in firms cutting their expenditure more broadly in Australia;
- perversely, this proposal may lead some companies to send some or all of their activities offshore, leading to a decrease in economic activity, investment and employment in Australia;
- there is no indication in the Review of whether the calculations of expenditure would need to be applied purely to an individual firm/subsidiary in Australia or to that business' wider group – and these alternative calculations would be likely, in every case, to produce very different results. In relation to multinational corporations, how they would calculate business expenditure would be especially problematic;
- an attempt to judge the intrinsic quality or worth of an R&D activity purely by calculating how large the expenditure is on it relative to the company's overall spending misunderstands the way that businesses consider, pursue and evaluate R&D;



- as far as we aware, there is no precedent in any other national R&D incentive that bases qualification so explicitly on a link between R&D expenditure and overall expenditure within a business. It is also instructive that, even where far more understated measures to link support to R&D spending patterns and percentages have historically been used in Australia, these have ultimately been jettisoned in every single instance – with arguably the closest of these in complexion to the intensity threshold concept being abandoned almost as soon as it was proposed!
- typically, the costs of R&D projects across the economy vary markedly (and therefore do not always represent an especially large percentage of businesses' overall expenditure). But this does not mean that the lower-cost projects are automatically any less worthwhile, less innovative or important than those on which higher amounts of money have been spent;
- linking any measure to annual total business expenditure will create uncertainty and complexity for companies in knowing whether to apply for R&D support (or indeed even to pursue certain R&D projects) because the total expenses will not be known until the conclusion of the year end when business expenditure is identified, collated and confirmed;
- in turn, the reality that private spending on R&D can often fluctuate substantially from year-to-year makes this an even more complex mechanism with which to comply. This is a point that also conflicts with the reviewers' own reflection on page 17 that the level of annual benefit from the R&D Tax Incentive must be "stable enough to provide certainty for companies engaged in long-term planning of R&D";
- a proposal of this kind would be likely to lead to higher risk and greater problems in compliance in a host of different ways – not least because it would increase the likelihood of fraudulent claims, overestimations and underestimations of actual spending, and underhanded classifications and calculations of business and R&D expenditure;
- the increase in compliance and red tape requirements for each participant in the program would inevitably be sizable – an outcome that is completely contrary to one of the main objectives of the Review; and
- this proposal appears to fundamentally conflict with the reviewers' own observations elsewhere in the report (on page 14), where they cite the findings of Arque-Castello and Mohen (2015) that "an increase in overall R&D intensity within a country ... must necessarily be achieved through expanding the number of R&D performing companies, and not by increasing expenditure by existing R&D performing companies".

The authors of the Review also suggest that, if their proposal to introduce an intensity threshold is adopted, it should be accompanied by a move to raise the annual cap on qualifying R&D expenditure from \$100 million to \$200 million.



For anyone who supports a stronger, more expansive and more impactful R&D Tax Incentive, the prospect that a lifting of this cap is being contemplated is a welcome development.

As iconic companies such as Cochlear and CSL have observed on a number of occasions, the advent of this cap has been one of a number of (negative) recent changes to the scheme that have made the prospect of investing in Australian R&D more difficult for innovative businesses.<sup>6</sup> In the process, it has plainly stymied additional export growth, employment opportunities, and inflows of new revenue into Australia's economy.

However, if the recommended change from a \$100 million to a \$200 million cap is contingent purely on the advent of an intensity threshold, then we do not support it.

There is also an implication in the Review, and in subsequent public commentary from the Panel, that these two changes would represent a balanced trade-off.<sup>7</sup> However, it does not strike us that this would be the case, due to the severe limitations that would result from an intensity threshold. The lift in the level of the expenditure cap would be likely only to marginally benefit a small number of companies, but the introduction of the intensity threshold would ensure reduced benefits for every other recipient of the non-refundable offset, including causing the complete disqualification of many hundreds of companies.

To put it very simply, there is little doubt in our view that an intensity test threshold would radically (and negatively) reshape access to the program. At the very least, its introduction would create a skeleton of the current model and exert a devastating impact, eradicating much of the current base of R&D spending encouraged by the program and many of the spillovers that flow from that investment.

There would inevitably be a large number of disqualifications of companies from the program, and dramatically reduced investment and jobs in the field of R&D in Australia as a result.

### **Practical Alternative Models to Encourage Additionality –**

#### **Option 1:**

Insofar as there are better means of finding ways through the R&D Tax Incentive to encourage higher annual intra-firm R&D spending, then we would recommend that the Government create a rolling average R&D spend threshold that rewards claimants.

In our view, it would need to be progressively phased in, ideally over a three-year lead-in period. However, it should otherwise be relatively straight-forward for an annually-updated average system to be introduced by the Government, under which participating companies' relative eligibility to an offset is measured against their previous three years of R&D spending.

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<sup>6</sup> For one such example, see: S.Tasker, 'Cochlear warns on cut to R&D tax offset rate', The Australian, 11 March 2016 <retrieved from: <http://www.theaustralian.com.au/business/companies/cochlear-warns-on-cut-to-rd-tax-offset-rate/news-story/7c1fa008b6bdd8049fff26355ad58a55>>.

<sup>7</sup> B.Ferris, A.Finkel & J.Fraser, 'Making sure that research and development means business', Australian Financial Review, 25 October 2016 <retrieved from: <http://www.afr.com/news/economy/making-sure-that-research-and-development-means-business-20161025-gsa4it#ixzz4O6QKdUqV>>.



In summary, if their spending in the fourth year is greater than their previous three-year average, then businesses become eligible for a rate of offset that is higher than for those that do not lift their spending above their average. This model will still enable companies to access a base level of support for the average spending each year and will encourage companies to consider their future R&D plans and focus on increasing their spend to unlock a higher additionality rate of offset.

Modelling would naturally be needed to precisely determine the two respective levels of offset rates that would be appropriate. But, as a base example, those companies that do not spend a higher figure than their previous average might qualify for a permanent tax benefit for the year of 8c (rather than the current 8.5c) in the dollar, and those that do spend a higher figure than their previous average might qualify for a permanent tax benefit for the year of 10c in the dollar.

#### Option 2:

We appreciate that, for each of Options 1 and 2, it may be difficult to legislate another drop in offsets in the short term. However, another avenue to try to generate higher spending may be to reduce the current offset rate from 38.5% to 37.5% across the non-refundable side of the program, but then to re-raise that figure to 38.5% for each company that can provide suitable evidence in a newly-required statement as part of its application form that its R&D activities incorporate genuine additionality and a material benefit to the nation.

#### Option 3:

We have advocated strongly in previous submissions for a shift in accounting treatment to make the R&D Tax Incentive the subject of 'above the line' application, on a range of grounds.

Foremost among these reasons has been the specific potential for the change to facilitate additionality, as it would allow for consideration of new and/or increased R&D spending to be far more readily incorporated in overall business investment decisions.

We therefore believe it should be another option that is closely scrutinised by the Government as part of its response to the Review.



**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.**

In our original submission to this review process, we responded favourably to the prospect that the administration of the R&D Tax Incentive could potentially be streamlined. We are therefore pleased to see that the Review has added further weight to this idea, by canvassing the potential for various administrative changes to be made to the program.

***Summary of PwC's Position on Recommendation 6:***

In short, PwC would generally be supportive of movement to a single agency model that successfully harnesses the experience and expertise of the best administrators from each of the two organisations.

Similarly, we would support any consolidation of administrative responsibility in one agency that may also pave the way for a transition to an effective single-stage registration process. Rather than continuing to require participating businesses to separately submit their R&D Tax Incentive application form and acquire a registration number to include in their tax return, action to bring these two steps together would be a long-overdue development.

Clearly, there is also a need to redress practical problems such as the duplication across AusIndustry and the Australian Taxation Office (ATO) during review activity. It has not been an infrequent occurrence over recent years for one of the agencies to conduct and finalise a review and then have it almost immediately succeeded by the instigation of a review by the other agency.

In respect of the final element of Recommendation 6, PwC has reservations about the mandatory public disclosure of all of the details of the names of companies claiming the R&D Tax Incentive and the annual amounts of R&D refunds and offsets they have each claimed.

Naturally, we appreciate that there has been a broader, recent transition in Australia to greater levels of public tax disclosure by companies. We also acknowledge that there is a legitimate public interest in knowing how the funds committed to government programs have been used.

However, this needs to be balanced against the likely practical effect in this case.

Frequently, there are good reasons for ensuring that the details of companies' investments in R&D in Australia are allowed to remain confidential. In various circumstances, there is often considerable commercial sensitivity attached to investments in innovation, not least where it involves a new discovery and/or the pursuit of a largely new invention or process.

Even the mere disclosure of the amount of benefit that a company is receiving from the R&D Tax Incentive can therefore be unwelcome. Especially if one or more of their competitors is based in another country in which the same requirements for public disclosure do not exist.

We hope that there may be room for the take-up of a compromise option that might strike a balance between these two competing sets of priorities. One might be simply to elect to publish only the names of the businesses that are program claimants, and not the amounts they have received. Another (and a





better) option may be to allow companies to apply for and/or receive an exemption from having any of their details published if they are able to indicate that this will potentially cause them commercial disadvantage.

These are issues that need to be carefully considered.

In turn, and in the same spirit as the reviewers are asking that more information be made available about the recipients of the Incentive and the amounts of refunds and offsets that have been distributed to them, we would also ask that more information be made available about the program's administration.



## **Further Comments:**

### **1: Request for Modelling**

In keeping with our comments in Recommendation 6, we request the public release of the relevant modelling and assumptions on which the conclusions and recommendations in this Review were based. In short, it is challenging to respond in full to the Review in the absence of that information.

We fundamentally concur with the Review Panel that, within reason, the release of additional data into the public domain about the cost and operation of the Incentive would clearly be beneficial. They are correct in saying on page 23 that “in the history of R&D tax measures, the lack of transparency on the tax data has impeded policy evaluation and public scrutiny. Other countries have better access to the R&D tax data from their programmes and as a consequence have better internal and external contestability of policy reform”.

As a matter of transparency, we would suggest that comprehensive information about the actual costs of the program be released on an annual basis. No understanding of the impact and value of the R&D Tax Incentive can be complete simply from looking in isolation at the bottom-line, aggregated total of the tax offsets returned to the participating companies. This annually-released figure should include a full breakdown of how the total cost of the program is calculated and whether that amount includes deductions for items like the utilisation of losses earlier than would otherwise occur; feedstock and clawback adjustments which are counted as R&D expenditure but do not ultimately cost the Government the full amount of the offset; and the reduction in participating companies’ franking credits.

There would be much to be gained from the release each year of a statement providing vast detail about the overall economic and social benefits that are stimulated by the program, including its contribution to economic growth, job creation, inward flows of investment, and increased tax receipts.

It is our understanding that none of those factors (nor the 1.5% rate cuts across the entirety of the program, already legislated earlier this year) has been directly included in any of the Panel’s calculations and statements about the cost of the program, nor in the accompanying graphs from Treasury on page 24 about future cost projections.

In these respects, it is worth referring to Swinburne’s highly-instructive observation that “it is vitally important to bear in mind that inducing additional R&D is not an end in itself. The rationale for subsidising R&D is to induce positive spill-over benefits to other firms and consumers. If left to themselves, for-profit organisations will under-invest in R&D and thereby forgo welfare-enhancing spill-over benefits. Sound theory and extensive empirical evidence suggest each dollar of R&D investment makes a contribution to the material well-being of Australians considerably greater than one dollar”.<sup>8</sup>

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<sup>8</sup> Thomson & Skali, op. cit., p.9.



## **2: Objectives of Australia's R&D incentives regime**

On page 8 of the Review, the Panel cites wording from 1997 to describe the key objective of the program as being to “encourage industry to conduct research and development activities that might otherwise not be conducted ... to benefit the wider Australian economy”. It then interprets that objective to mean that the “effectiveness of the program ... relates to the extent to which it induces additional R&D activities that also lead to spillovers to the Australian economy”.

We interpret that clause more widely – particularly in view of the fact that, since 1997, there has been exponential growth in international competition for R&D investment between jurisdictions.

In assessing the program's effectiveness, PwC believes it is as important to consider how much extra R&D investment the program helps to attract from offshore, and to retain in Australia, as it is to assess the additional investments that it helps to stimulate within existing local businesses. Other than for the acknowledgment on page 38 that “if companies choose to locate their R&D in Australia it will be additional”, the Review does not cover this crucial issue.

## **3: International competition and comparisons**

In our submission to the Issues Paper for this Review, written in February 2016, we noted that there has been an extraordinary recent intensification of international competition for R&D investment. This was underscored by the statistics that at least 26 of 28 European Union (EU) and 28 of 34 OECD member states (and many other countries beyond them) provided fiscal incentives for business R&D.

We added that the proliferation of R&D tax incentive based programs around the world clearly demonstrated that Australia is currently locked in a more formidable struggle to attract this investment than ever before, and this remains our strongly-held view.

Since that time, there have been further moves by other countries to increase the attractiveness and competitiveness of their schemes. Even as this new submission was being written, the European Commission formally announced a set of new policy directions that, if implemented, will not only extend business R&D tax incentives into all of the EU's member states, but also significantly increase the generosity of each of the schemes that currently exist.<sup>9</sup>

Accordingly, moves by Australia to again make deep cuts to our cornerstone innovation program will stand in sharp contrast to international trends. They will also conflict with many of our own Government's recent statements about its determination to ensure that this country is a world-leading destination for innovation investment and of wanting to “attract the world's best innovative talent to Australia”.<sup>10</sup>

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<sup>9</sup> European Commission, 'Proposal for a Council Directive on a Common Tax Base', 25 October 2016, Strasbourg <retrieved from: [https://ec.europa.eu/taxation\\_customs/sites/taxation/files/com\\_2016\\_685\\_en.pdf](https://ec.europa.eu/taxation_customs/sites/taxation/files/com_2016_685_en.pdf)>; E.Kelly, 'EU Proposes Europe-Wide Tax Breaks for R&D', *Science/Business*, 27 October 2016 <retrieved from: <http://www.sciencebusiness.net/news/79979/EU-proposes-Europe-wide-tax-breaks-for-R-and-D>>.

<sup>10</sup> The Hon M.Turnbull MP, Prime Minister of Australia, 'Launch of the National Innovation and Science Agenda', 7 December 2015 <retrieved from: <http://www.malcolmturnbull.com.au/media/launch-of-the-national-innovation-and-science-agenda1>>.



Swinburne University's calculation of additionality rates suggests that Australia had likely derived a distinct comparative advantage from its R&D tax regime through the opening years of the operation of the R&D Tax Incentive. However, PwC has little doubt that the combined effect of the introduction of the \$100 million expenditure cap and the 1.5% whole-of-program cut to the rates of benefit will have subsequently weakened the country's position in this regard. Moreover, any further changes that reduce the size of the program, and the scope of business participation in it, will exacerbate these consequences.

#### **4: Timing of proposals for further changes**

The Panel states in the first section of the report that no changes should be made to the current definitions and the scope of eligible activities and expenses, partly because they have "only been in place for less than five years". On page 30 of the Review, they effectively call for a 10-year moratorium on change. This is a very logical and sensible argument, and one that we think should be applied more widely in other parts of their document and in relation to other recent developments.

Over recent years, the R&D Tax Incentive has been the subject of an exceptionally high number of inquiries and reviews, proposals for change, and indeed multiple parliamentary votes that have already significantly altered the scope and nature of the 2011 legislation.

Those changes have included the establishment of an annual cap on the amount of R&D expenditure that can be claimed for R&D activities, and a reduction of the offset rates. Together, these two decisions simply in 2015 and 2016 alone have removed, over the respective forward estimates at the time, at least \$2 billion of tax offsets potentially available to Australian businesses through the program. In other words, a substantial proportion of the value of the Incentive has already disappeared in just the past two years, even before the new recommendations in this Review (which would result in even further and more acute cuts to the program) are considered.

If it is true that the changes made in 2011 to the definitions of R&D cannot yet be fully appreciated (and that further amendments are not advisable until there is more clarity about how effectively they are working in practice), then it is very difficult to understand how the same argument does not apply to other elements of the program and to new proposals to change them.

## Appendix B



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26 July 2018

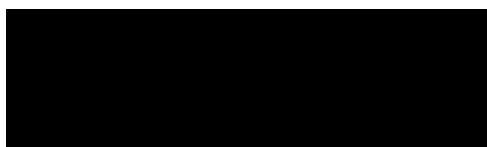
**Submission on the draft *Treasury Laws Amendment (Research and Development Incentive) Bill 2018***

Dear Sir/Madam

PricewaterhouseCoopers (**PwC**) appreciates the opportunity to provide commentary and feedback to the draft Treasury Laws Amendment (Research and Development Incentive) Bill 2018 (**the Bill**) and Explanatory Materials (**EM**), as well as matters that are not contained in the Bill or EM, but are of concern.

We have attached our comments for your consideration.

Yours sincerely



Richard Gregg  
National Leader  
Incentives & Innovation

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## **Introduction**

PwC appreciates this opportunity to respond to the Bill and EM drafted by Government.

We note that PwC has previously provided input through submissions and various discussions with Government throughout, including in relation to the 2016 Review, ISA2030, leading up to the Budget announcement and release of the draft legislation. These discussions have been positive in nature and have provided insight into the perspectives of members of Government and the Department of Industry, Innovation and Science, while allowing us to have a fair hearing of our views.

We acknowledge the objective of better targeting the RDTI, but do not consider that the proposed changes necessarily achieve this objective. We also acknowledge the need to change sections of the program to reflect the proposed Enterprise Tax Plan issued by the Government, that aims to lower corporate tax rates by 2026-27, however it must be noted that this has yet to be enacted.

As a National R&D practice we have in excess of 30 years of experience working with both the RDTI program and the preceding R&D Tax Concession. We have drawn on this experience here to provide our perspective on the proposed changes and the impact they will have on claimants and regulators. In light of this, we have attached our comments on the proposed changes, as well as responses to the questions outlined in the Consultation Paper accompanying the Bill and EM.



## Our comments

The Government's intent is clear with respect to the proposed changes to the RDTI. However, we do not believe that the proposed legislative changes will achieve the policy intent.

We are of the view that the draft legislation has a high level of complexity and creates inequality between different industries. As such amendments are required to prevent the creation of additional administrative complexity for both claimants and the regulators. It is our view that additional time for consultation should be allowed to address these issues and other unintended consequences.

By way of illustration, we note the following issues:

- The use of accounting principles in the calculation of total expenditure creates unnecessary complexity and inconsistency within the calculations'. Differences in accounting treatment will create different outcomes for 'Total Expenditure' on a company by company basis and creates an incentive for companies to change their accounting treatment (such as additional capitalisation of expenditure) for favourable tax outcomes.  
For example, while some industries use accrual based accounting others, such as financial leasing, can recognise gross lease liability for accounting purposes. Another foreseeable complexity may arise when software development is capitalised to the balance sheet and claimed outright in the year as an accelerated deduction under the existing RDTI provisions.
- Any changes to accounting treatment in prior years will now require an amendment to the claimants Income Tax Return as the 'Total Expenditure' changes and the rate of R&D tax benefit (due to the tiered rates system) changes. This could result in a large administrative burden for claimants and the ATO as the number of amendments increase.
- We understand the changes to the feedstock and clawback provisions were drafted with the intent to clawback any benefit to the extent that the entity has received another benefit in connection with an R&D activity, thus ensuring claimants do not obtain a double-benefit. The provisions as currently drafted are unnecessarily complex, particularly considering the relatively small revenue impact.  
Firstly, it would appear to be unnecessary to use total R&D expenditure in the feedstock calculation when it does not impact the feedstock adjustment. Secondly, the proposed clawback changes do not appear to consider that funds received in the form of a Government grant are assessable income, which in the case of the example given in the EM would result in the R&D entity having a negative benefit for claiming the R&D tax offset.
- The definition of clinical trial activities appears to be too narrow as it does not include pre-clinical trial activities, such as experimentation using animals to model



the biological effects of a compound before progressing to human trials. It is also limited to experimentation on pharmaceuticals not including trials focusing on medical devices.

- The impact of the \$4M refundable cap introduces an additional compliance burden as multiple calculations are required to generate a refundable offset.
- The use of 'Total Expenditure' as defined by accounting principles as a methodology to calculate an R&D entities benefit generates inequality between industries. Manufacturing for example, has high overhead costs as part of its business function. High overheads increase its total expenditure and decreases its R&D intensity when compared to similar sized companies in other industries. This limits the benefit that manufacturers can gain through the RDTI which might be an unintended consequence of the legislation given domestic manufacturing has a large Australian cost base (workforce and facilities) to the benefit of the wider Australian economy.





## **Response to your questions**

*1. Do you foresee any implementation and ongoing compliance challenges arising from the proposed calculation of R&D intensity?*

As detailed above, we believe that the use of accounting principles to calculate R&D intensity will create significantly complexity, increasing the compliance burden for RDTI claimants.

*2. Does the proposed method of calculation of R&D intensity pose any integrity risks?*

There is potential for claimants to change or use different accounting principles to achieve higher rates of intensity.

*3. Could total expenditure be aggregated across a broader economic group? Would this create any implementation and ongoing compliance challenges?*

If this was implemented it would increase the complication of calculating the 'Total Expenditure' as adjustments for different accounting standards would have to be made.

*4. Does the definition of clinical trials for the purpose of the RDTI appropriately cover activities that may be conducted now and into the future?*

We consider pre-clinical trial activities and experiments with medical devices should also be included in the definition of clinical trials.

*5. Does the proposed finding process represent an appropriate means of identifying clinical trials expenditure for the purposes of the \$4 million refund cap?*

We consider the finding process is appropriate but we note that this will add to the cost and administrative burden for claimants.

*6. Do the draft feedstock and clawback provisions give rise to any unintended consequences that need to be addressed?*

We consider the proposed provisions do not account for Government grant money being assessable income, which in the case of the example given in the EM would result in the R&D entity having a negative benefit for claiming the R&D tax offset.

## Appendix C

- 'This will hurt': Innovation stifled by tough R&D scheme, say founders
- R&D killer hidden in SME tax cuts
- Lithium miner's fears for new tax rebate law
- Call for clarity on research tax incentives
- Cochlear calling for more R&D incentives - SINO-AUSTRALASIAN SUMMIT
- UK government's Tech Rocketship startup competition comes to Australia for the first time
- Incentives loss hits Carnegie
- WA senator throws weight behind lithium research incentive boost
- R&D tax break raid to balance budget 'stupid'
- Business doesn't spend enough on R&D
- Business has friend in unis for creating new products
- R&D savings used to balance the budget
- Ferris calls for more direct corporate R&D funding
- R&D it and weep: politics blights studies
- Universities call for funding to arrest slump in R&D
- R&D tax incentive plan lacks clarity: experts
- Unite to save R&D, urges Northern Minerals
- Carbon Revolution and Deakin in R&D tie-up
- R&D AT HEART OF TAX PLAN
- Tax breaks could enhance R&D culture
- \$2.2b boost for science research
- Small business to suffer drop in refund for research work
- Brain drain fears due to research cut
- Tax hit 'may lose R&D investment' - BUDGET 2018
- Industry sounds investment alarm on 'world's lowest' R&D incentive
- R&D at risk of going offshore as incentive payments slashed



## 'This will hurt': Innovation stifled by tough R & D scheme, say founders

Emma Koehn

861 words

5 November 2018

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The Sydney Morning Herald - Online

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English

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Emma Lo Russo wants to invest in research and development to boost her business, but she is frustrated.

"I feel confident we are doing the right thing, but I'm not going to invest next year," she says.

Lo Russo's business, Digivizer, has been claiming Australia's research and development tax incentive for the past five years, relating to a range of software development projects for its digital content tracking tools.

### Hours of work

Lo Russo said the incentive had been invaluable in growing her business. But Digivizer, which turned over more than \$5 million last year, is spending hours proving itself to AusIndustry.

The organisation is reviewing two research and development tax incentive claims that were granted to the business over the past two years.

"To go through the exercise of showing we've done the right thing, we've spent another \$22,000," Lo Russo says.

Digivizer has featured on several lists of fast-growing companies in recent years and Lo Russo says the company can clearly show the value of its research and development projects.

But with claims worth hundreds of thousands of dollars under review, she says her team has had to put significant man hours into showing how their software projects are creating new knowledge.

"I don't know what this will lead to - it hurts us either way," she says.

#### Issues with the scheme

Digivizer is not alone. A number of voices across the small business and start-up community have taken issue with the reviews process of the research and development tax incentive scheme in recent months.

The scheme, which allows businesses to claim a refund or offset for projects which build on new areas of knowledge, is self-assessing.

This means businesses put in their claims with documentation, but the onus falls on them to prove they qualify for the cash they receive.

The federal government has signalled measures to tighten the claims process, [including introducing legislation to Parliament earlier this year to cap the concessions that can be made.](#)

But businesses like Digivizer are critical of how the scheme is operating because reviews and audits, conducted by either AusIndustry or the tax office, can occur after cash has been given to companies.

The result is they may have to prove, in retrospect, their claims are genuine. There is the possibility they will have to repay the research money they have been given in previous financial years.

Eligible R&D projects need to show they are creating new knowledge, and require a strict outline including a hypothesis and research process.

A range of start-up organisations, including the 2018 Start-up Muster report and the 2018 EY Fintech Census, called for the R&D scheme to be more encouraging of businesses to invest in uncovering techniques and knowledge.

Another business in the IT space has told Fairfax Media it is under review from AusIndustry for its claims, in an "extremely onerous and frustrating" reviews process.

The review, which is still under way, is for small amounts of about \$100,000 which were approved in previous financial years for research projects.

The company says it's clear that when the research incentives program changed in 2011, "the level of complexity in how to go about the claim extended significantly".

## The intent of the scheme

The office of the assistant treasurer, Stuart Robb, told Fairfax Media businesses are ultimately eligible for making sure they're able to make an R&D claim.

A spokesman said reviews of past claims were conducted using a "risk-based approach", but those businesses keeping detailed records need not worry about proving the legitimacy of their claims.

"Companies that have in place the appropriate systems and processes to effectively identify, evaluate and record eligible R&D activities and their associated expenditure should be able demonstrate that they are complying with the program's requirements," a spokesman for the office said.

## 'Aggressive stance'

But accounting experts working with businesses in the field question whether the scheme is working to its intended purpose.

"The ATO are now taking quite an aggressive stance," R&D tax partner at BDO, Nicola Purser, says.

Purser says she has seen recent client cases where businesses' claims have been under review by the tax office, even though they have considerable documented evidence they are adhering to the scheme.

She says companies are nervous about these review processes and are tempted to give away legitimate incentives because they are worried about the time it takes to object to a review.

"A lot of the time, companies are just rolling over and giving away expenditure, because they don't want to have that fight," Purser says.

Lo Russo says the most frustrating part of the scheme for her is that it makes her think twice about investing in new knowledge projects in future.

"When you look at it, [the scheme's] reason for existence, I think we should be applauded for our use of it," she says.

"It's absolutely critical that the government looks at this."

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# FINANCIAL REVIEW

Leadership

**R & D killer hidden in SME tax cuts**

Michael Bailey

760 words

18 October 2018

The Australian Financial Review

AFNR

First

17

English

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One of Australia's biggest early-stage technology investors has urged the government to not pass a **law** that would result in the refund on **research** and development spending available to start-ups being slashed 14.5 per cent from its 2015-16 level.

The **law**, hidden in a bill named Treasury **Laws** Amendment (Making Sure Multinationals Pay Their Fair Share of Tax in Australia and Other Measures), which on Wednesday remained due for debate in the lower house, would permanently link the **R&D** refund available to non-profitable companies with turnover below \$20 million at 13.5 per cent above the prevailing company tax rate.

That refund will be 38.5¢ for each dollar of qualifying **R&D** spend from 2021-22, after a cut in the company tax rate for small-to-medium companies from 27.5 per cent to 25 per cent was brought forward by five years under **legislation** that passed the lower house with bipartisan support on Tuesday.

Start-ups had enjoyed a 45¢-in-the-dollar refund until 2016-17, before it was cut arbitrarily to 43.5¢, and another 5¢ cut would hurt the development of Australian ideas, according to Peter Devine, chief executive of Uniseed, a university-owned funds manager, which since 2000 has been the first source of funding for 51 companies, achieving exit valuations totalling \$1.9 billion.

"It made it a whole lot easier for us to invest \$1 million to take a concept forward when we knew we'd get \$450,000 back," Mr Devine said.

"We're investing at the riskiest stage, trying to get as many good ideas off the shelves of our uni

shareholders as possible, and anything that helps each dollar go a bit further is vital."

A cut in the **R&D** refund to 38.5¢ would reduce the number of investments made by Uniseed by at least 20 per cent, Mr Devine estimated.

However, Treasurer Josh Frydenberg disagreed that the cut to tax on businesses turning over \$50 million or less would, inadvertently or not, hurt start-ups if their **R&D** refund ultimately got linked to the lower rate.

"Start-ups will be among the many small and medium-sized businesses that will benefit from the business tax relief **legislation**," he said in a statement. "Our reforms of the **Research and Development Tax Incentive**, to be debated soon, will better target the **incentive** towards additional **R&D** while also ensuring the program's integrity and fiscal affordability."

Start-ups would benefit from company tax cuts once they reached profitability, agreed StartupAUS chief executive Alex McCauley, but cuts to **R&D** refunds could mean fewer of them do so.

"It's a huge boost for start-ups to have this cashflow that, provided they do the right thing, they can rely on and plan around, instead of applying for grants they might not get," Mr Devine said.

There would be less **incentive** for **R&D** spending among larger companies under **new** "intensity measures" included in the same bill, according to BDO **R&D** partner Nicola Purser.

"Businesses would need to be spending at least 13.25 per cent of expenses on **R&D** to get a higher tax offset than they had been, and hardly any Australian companies with turnover above \$20 million are doing that or even can do that," she said. The intensity measures would reduce the **R&D** tax offset from 8.5 per cent to 4 per cent for most large businesses, a rate where "the cost of claiming is likely to outweigh the benefit", Ms Purser added.

It is understood there is a chance the bill containing the **R&D** reforms will be referred on Thursday to the Senate economics committee for refinement.

Apart from keeping the **R&D** refund higher and decoupled from the company tax rate, Mr Devine said the current ineligibility of start-ups with more than 50 per cent ownership by tax-exempt institutions needed to be overturned.

"Where there's proof of arm's-length investment, the government should be supporting these companies, in the spirit of trying to lift our poor international ranking when it comes to the translation of university **research**," he said.

Key points Treasurer Josh Frydenberg disagreed that the tax cut would hurt start-ups.

The **new law** will cut the **R&D** refund to start-ups to 38.5¢ in the dollar.

Start-ups had enjoyed a 45¢-in-the-dollar refund until 2016-17.

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# THE AUSTRALIAN

TheNation

**Lithium miner's fears for new tax rebate law**

PAIGE TAYLOR, VICTORIA LAURIE

386 words

9 October 2018

The Australian

AUSTLN

Australian

2

English

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Western Australia's lithium boom is at risk from a crackdown on company tax rebates introduced by the federal government, the Labor Premier says.

Mark McGowan fears there will be fewer efforts to add value to the burgeoning lithium sector — there are now seven mines in WA — because of imminent **changes** to tax **incentives** for **research** and development.

Lithium Australia managing director Adrian Griffin said the **changes**, introduced into parliament but not yet passed, caused his company to scale back its most recent project in the WA goldfields.

Northern Minerals chief executive George Bauk, who said his company was the only heavy rare earths producer outside China, has told the federal government of his concerns that the **new** limits would hurt -Australia's promising energy minerals industry.

Northern Minerals operates near the Kimberley town of Halls Creek in far north WA.

"The \$4 million cap on **research** and development rebates will have a negative impact on groundbreaking mineral resource projects in Australia," Mr Bauk wrote in July.

"Without access to the uncapped **R&D** rebate, Northern Minerals may not have been able to construct the pilot stage of the Browns Range heavy rare earths project. The **proposed** cap will force innovative projects, such as Browns Range, to develop very slowly and result in missed -opportunities for

Australia.” The **new** limits are enshrined in the Treasury **Laws** Amendment (Making Sure Multi-nationals Pay Their Fair Share of Tax in Australia and Other Measures) Bill 2018.

Josh Frydenberg said the **changes** still supported small innovators. “The government’s **proposed Research and Development Tax Incentive** will better target additional **R&D** while also ensuring the program’s integrity,” the federal Treasurer said. “The annual \$4m cap on cash refunds provides generous support for small innovative Australian companies.

“Amounts in excess of the cap can be carried forward as tax offsets to future years and can be used to reduce the claimant’s -future tax liability.” The WA government has asked the Coalition to waive the rebate limit for the energy and battery materials sector, essentially giving those companies the same exemption that has been provided to clinical trials. “This industry has been identified as an important future driver of the WA economy,” Mr McGowan said.

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# The Sydney Morning Herald

Business

Call for clarity on research tax incentives

Emma Koehn

542 words

4 October 2018

The Sydney Morning Herald

SMHH

First

26

English

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## OFFSETS SCHEME

Australian start-ups say there's still uncertainty over what qualifies as "research and development" for tax purposes, and **legislation** that aims to **change** tax **incentive** claims won't help matters.

More than \$2.4 billion of savings from **changes** to the **R&D tax incentive** program were outlined in the May budget. These **changes** are now working their way through Parliament after the government attached them to a tax bill to fight multinational tax avoidance two weeks ago.

The tax offsets scheme was marked for review after a Treasury report on the system suggested placing caps on the amount that could be claimed.

The **legislation** currently before the House of Representatives makes a number of key **changes** that affect how much companies can claim and how their research spending is scrutinised.

For companies with turnover of \$20 million or less, it caps the cash refunds available for **R&D** at \$4 million. It also **changes** the tax offset rate for these companies from a flat 43.5 per cent to their corporate tax rate, plus 13.5 per cent.

Prior to this, businesses with turnover of \$20 million or less could apply for an unrestricted cash refund of 43.5¢ for every dollar spent on research and development activities.

And while the **changes** have been in the wings for some time, those in research-heavy sectors like biotech say the caps don't inspire confidence.

"I think [the aim] should have been to have a more effective policing method of the scheme, rather than kneecapping it the way they did. For biotechs, \$4 million doesn't get you very far ... and for those in their earliest stage of development, it's going to hurt them," says Telix Pharmaceuticals CEO Christian Behrenbruch.

Telix is developing a range of radiation products to be used in treating prostate, kidney and brain cancer. In 2017, it told investors it had received more than \$460,000 in cash receipts from the **R&D tax incentive** scheme.

Start-up peak body StartupAus has also been warning for some months that any policies tightening the **R&D tax** scheme also have to give more guidance about what is and isn't a legitimate claim.

Under the **legislation** before Parliament, Innovation and Science Australia would have the ability to decide what is and isn't an **R&D** activity.

StartupAus chief operating officer Alex Gruszka told Fairfax Media there was personal risk in getting an **R&D tax** claim wrong - and because of the lack of clarity, it's one many start-ups don't want to make.

"For start-ups and in particular founders, they can be trying to do the right thing and still be putting themselves at risk of financial ruin," he says.

"I think many are genuinely unsure about whether their work qualifies under the scheme ... and so they're underclaiming."

He says the **changes** still don't come with "a very clear statement saying what is encouraged under the scheme" to be eligible for a tax offset.

Treasury was contacted for comment.

Key points

The **R&D tax** offsets scheme is currently under review.

However, what can be claimed legitimately remains unclear.

Document SMHH000020181003eea400023

# THE AUSTRALIAN

Business

## Cochlear calling for more R & D incentives - SINO-AUSTRALASIAN SUMMIT

PERRY WILLIAMS, RESEARCH

487 words

25 September 2018

The Australian

AUSTLN

Australian

21

English

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Cochlear chairman Rick Holliday-Smith has called on the federal government to provide **incentives** for research and development in the medical technology and life science sectors so both new players and incumbents can successfully compete with international rivals.

The hearing implant company spends \$150 million a year on research and development but up to \$50m of that is now conducted offshore.

"If we do that for 10 years, we'll have \$500m of all our **R&D** and patents sitting in other jurisdictions," Mr Holliday-Smith told The Australian yesterday. "That's what you've got to stop. You want all the patents here, kept here, developed here, leveraged here and no one gets that." Australia should look to countries like Israel, which are making funds available to ensure the country's best companies and its ideas can thrive in its domestic setting, he said.

"If you go to Israel they have a massive fund that is investing in these companies and \$500m a year goes into these innovative companies," Mr Holliday-Smith said. "They say we want to put in the money that no one else puts in because it's too risky but these companies have got to stay in Israel. That's really smart." Countries courting Cochlear to lure some of its highly prized **R&D** to their own home nations are spread through Europe and Asia.

"You're fighting very powerful forces — big medical tech and big pharmaceutical companies and lots of governments that are acting like companies to incentivise you to go somewhere else," Mr Holliday-Smith said. "Cochlear has Ireland, England, Switzerland, Singapore offering us all sorts of **incentives** to take our **R&D** there. That can be much better than we get here at times." Fresh government **incentives** and more patient capital funds could help ensure smaller companies than Cochlear remain

in Australia.

“The tail in life sciences is so long. You come up with really good invention, innovation, trials and then it can be seven to eight years to get to regulatory approvals, and we don’t have that patience here,” he said. “You’ve got to really fight hard to leverage that opportunity. But once you get them, they’re really valuable.” Cochlear, which derives 98 per cent of its income from international markets, said at its results last month that a reduction in the US tax rate gives it more money to put back into the company’s business and a similar cut in Australia would also lead to more investment domestically. The hearing device maker said it was focused on long-term growth, particularly in the seniors market, and outlined several large long-term investment projects over the next few years, including the development of its China manufacturing facility and investments in IT platforms to strengthen its connected health, digital and cybersecurity capabilities.

Document AUSTLN0020180924ee9p0008b



Source: <https://www.smartcompany.com.au/startupsmart/news-analysis/uk-government-tech-rocketship-startup-competition-australia-new-zealand/>

### **UK government's Tech Rocketship startup competition comes to Australia for the first time**

Stephanie Palmer-Derrien

6 September 2018

Smart Company

The UK's Department for International Trade (DIT) is on the hunt for Australian startups to whisk away on a Great British tour, opening its Tech Rocketship Awards to Australian startups for the first time. The awards seek out international startups and bring them to the UK to build a local presence, helping them grow internationally while also bringing business to the UK ecosystem.

Previously, the competition has only run in India, with 40 winners travelling to the UK over the past five years. After the Australia and New Zealand program is launched the competition may be rolled out to additional regions, although this has not been confirmed.

Applicants should be relatively established and ready to embark on a journey of international expansion, and offer innovative and technology-led solutions in one of eight industry categories.

The categories cover a broad spectrum of technologies, including digital security; artificial intelligence and data; the future of mobility; and connecting consumers and creativity.

There are also categories focused on social change, seeking startups producing tech for an ageing society, clean growth, and feeding the nation.

Finally, a 'great tech for change' award is available for a startup making an impact on the community, whether that's through making technology more accessible, creating tangible social change or championing diversity in the tech ecosystem.

Each category winner will be invited on a trip to the UK to take part in a curated program of events, meeting potential partners and venture capital firms, while being introduced to a network of contacts to help launch or develop their operations in the UK and internationally.

Announcing the awards in Melbourne on Monday, UK Minister for Investment Graham Stuart said the competition represents an opportunity for startups to "turbocharge their global expansion".

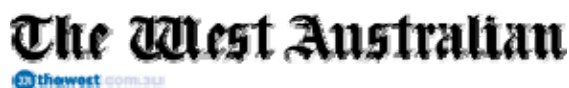
The trip will help winners “expand your networks, secure new customers and explore investment and funding opportunities”, Stuart said.

In a statement, Michael Ward, British consul general and director general of the UK DIT said the UK is “the perfect place for determined, ambitious tech companies to scale globally”.

“With support from our teams on the ground in Melbourne, Sydney, Auckland and Brisbane, we’re already seeing a strong increase in the number of innovative Australian and New Zealand tech-led companies achieving real success in the UK,” Ward added.

Applications for the Tech Rocketship Awards are open until 23 November 2018.





Business

**Incentives loss hits Carnegie**

Peter Milne

431 words

22 September 2018

The West Australian

TWAO

First

101

English

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Carnegie Clean Energy said its wave energy project off Albany may be delayed and require more money if changes to research tax **incentives** are implemented as the company tries to resolve the project's first grant payment with the State Government.

Carnegie, which counts former AFL chairman Mike Fitzpatrick as a director, received a State Government grant of \$15.75 million last October to deploy the next version of its technology in the ocean near Albany during the 2019-2020 summer.

The company said in a statement yesterday it was in talks with the Government about the company's invoice for the first payment of \$5.25 million in July that it expected to be resolved next week.

It said uncertainty driven by limits to research and development tax **incentives** announced in the May Federal Budget had hindered progress.

The project could take longer and require extra funding if the proposals, which include a \$4 million annual cap on cash refunds for companies with a turnover of less than \$20 million, are implemented.

In June Carnegie said it would spin off its off-grid energy arm, EMC, in a move that would preserve its eligibility for the **R&D tax-back incentive**.

Carnegie wrote down the value of its wave energy intellectual technology by \$35 million last month, "in light of the increasing cost competitiveness of alternative renewable energy technologies, particularly wind and solar".

Future Smart Strategies managing director Ray Wills said Carnegie had one of about a dozen viable wave energy technologies. Professor Wills said the main attraction of Carnegie's technology was that the ocean swells it used to generate electricity were more consistent than wind or solar energy.

He said Carnegie's advantage was reducing as taller wind turbines accessed higher, more reliable air streams to produce more consistent power and falling battery prices made the remaining variability cheaper to manage.

Professor Wills said wave energy was an ideal partner for solar in the tropics where there was little wind, and with wind in far northern and southern regions where solar performed poorly.

"If it's going to work, it has got to reach a point at which it gets to scale, because that's the only way they'll ever get costs down," he said.

"They've still got, in my view, a few years to get it right, but if they don't crack on ... in a few years they'll be bypassed."

Carnegie did not respond to requests for comment.

Its shares closed yesterday steady at 1.2¢.

Document TWAU000020180921ee9m00005



## WA senator throws weight behind lithium research incentive boost

Hamish Hastie

464 words

15 August 2018

17:39

The Sydney Morning Herald - Online

SMHHOL

English

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The \$4 million cap on research and development tax refunds for businesses should be raised in some circumstances, WA Senator Linda Reynolds said on Wednesday.

Businesses from the emerging lithium and battery sector have raised concerns the cap on refunds available for **R&D** expenditure, introduced in this year's federal budget, [would hurt Australia's chances at moving further up the battery supply chain, beyond just mining minerals.](#)

The cash refunds were intended to be used by **R&D**-heavy businesses to invest back into their operations.

Ms Reynolds led a delegation of industry groups and major lithium mining companies to Canberra this week to garner federal government support of the burgeoning industry, culminating in a round-table discussion with the Resources and Northern Australia Minister Matt Canavan and Trade, Tourism and Investment Minister Steven Ciobo.

She said **R&D incentives** were brought up at the meeting and there was a case for the government to raise the cap for certain businesses.

"We've got a lot of discussions to go but the case that we are seeking to put to government is that we do need to raise the cap in certain circumstances," she said.

"For example, for remote processing facilities and doing some more research and development for that across remote and regional Western Australia."

Mr Canavan said the government introduced the cap following a review of the suite of **R&D incentives** available to businesses.

He said the review recommended a cap of \$1 million but following industry consultation it was increased to \$4 million.

Lithium and battery industry insiders have told Fairfax Media they were concerned eastern states-based MPs and ministers didn't fully grasp the multi-billion dollar potential of the sector, but today's round-table looked to have made some headway.

Mr Ciobo said the government was "absolutley committed" to seeing the expansion of the industry in Australia, even beyond just mining.

"We know the future in relation to lithium, in relation to battery technology, will include Australia potentially being at the forefront of it," he said.

"A key ingredient for us achieving success in this area and what we can do with partners like Japan, like the US, the EU, as well as established partners like China.

"All of us should work constructively to invest in the lithium supply chain, to invest in the rare earths and battery technology, to make sure that we develop an industry that is ultimately going to be good for Australia, good for Australian jobs and for Australian exports."

WA's state Labor government has established a taskforce to capitalise on the emerging battery sector and held industry-wide briefings to inform a lithium and energy materials strategy.

Document SMHHOL0020180815ee8f001ba

# FINANCIAL REVIEW

News

## R & D tax break raid to balance budget 'stupid'

Ben Potter and Jonathan Shapiro

663 words

1 August 2018

The Australian Financial Review

AFNR

First

10

English

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### Incentives

Cutting \$2.5 billion out of the research and development tax break and returning the savings to general revenue to balance the budget was a "mind-numbingly stupid" thing for the Turnbull government to do, according to one of Australia's highest-profile venture capitalists Daniel Petre.

Mr Petre is a co-founder of AirTree Ventures and a colleague on the board of Innovation and Science Australia with chair Bill Ferris and Chief Scientist Alan Finkel, who recommended that savings from tweaking the **R&D** tax break should be ploughed back into innovation via direct **R&D** grants because they are more effective.

But Jobs and Innovation Minister Michaelia Cash told The Australian Financial Review Innovation Summit 2018 on Monday that the government decided to pocket the savings because it wanted to balance the budget.

Senator Cash said she would be willing to discuss the creation of a new program of direct **R&D** grants for a future budget, an olive branch that Mr Ferris welcomed.

But Mr Petre told the summit on Tuesday that the \$3 billion-a-year **R&D** tax break was critical to start-up founders because it helped them stay in control of their business for longer rather than being forced to give up control to venture capital firms, a circuit breaker that he said was in turn critical for the innovation "ecosystem" in Australia.

Stressing that he was not speaking as an ISA director and that he did not have a problem with the general direction of Mr Ferris and Dr Finkel's recommendations aimed at larger corporations' **R&D** deductions, Mr Petre said the government should leave the system for small start-ups alone.

"The government shouldn't f--- up the **R&D TI [R&D tax incentive]** - it's critical for start-ups and critical then for founders to retain equity. That is really what is happening," Mr Petre said.

"It's where start-ups can claim a percentage of their expenditure as a tax refund in cash. The more cash they can get that way, the less cash they have to get from venture capital firms, which means the less dilution for founders."

Mr Petre said if the system changed "it will come back to venture money the founders will get diluted earlier and it's not good for the ecosystem".

"They shouldn't take \$2.5 billion out of **R&D** to stick in general revenue and make the budget balance. At a time when China is investing trillions of dollars and OECD countries like the UK are investing billions of dollars - for our government to take money out of **R&D** and put into the general surplus is mind-numbingly stupid," Mr Petre said.

The budget changes reduced the premium tax break for companies that spend less than 2 per cent of total expenditures on **R&D** to 4.5 per cent from 8.5 per cent, but increased it on a sliding scale to 12.5 per cent for "high intensity" companies that spend more than 10 per cent of expenditures on **R&D**.

These changes apply to companies with revenues in excess of \$20 million, but the system for smaller companies - a 43.5 per cent deduction on **R&D** spending, which can be taken as a cash refund - remains unchanged.

Mr Ferris and Dr Finkel led a review of the **R&D tax incentive** scheme that recommended a shift in emphasis from the tax **incentive**, which they found did not stimulate a lot of **R&D** from large companies that would not have otherwise been done, towards direct grants used by top innovation countries such as Germany, Sweden and Israel.

#### Key points

Daniel Petre says \$3 billion-a-year **R&D** tax break is critical to start-up founders.

As other nations invest heavily, the government cut to **R&D** was 'mind-numbing'.

Document AFNR000020180731ee810003u

# FINANCIAL REVIEW

News

## Business doesn't spend enough on R & D

Jennifer Hewett

992 words

31 July 2018

The Australian Financial Review

AFNR

First

2

English

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It may seem longer to voters but it's less than three years ago that new Prime Minister Malcolm Turnbull launched his innovation agenda and his vision of an agile economy propelled by world-class research and development.

Given Tony Abbott had effectively banned the use of the term "innovation" in government circles, this was meant to encourage the change required for Australian business to adapt to a competitive world. Within another several months, the 2016 campaign demonstrated a heavy political focus on innovation that only made many people in marginal electorates fear for their jobs.

But despite a revolving door of federal ministers, the government's innovation agenda remained relatively intact - if less high profile - with private equity and venture capital veteran Bill Ferris as chairman of the federal advisory body.

Ferris is still determined to turbo-charge the investment of Australian business in **R&D**, including by recommendations in his report Australia 2030 - Prosperity Through Innovation. Among other ideas, this called for changing the mix of tax **incentives** and direct funding the government uses to encourage companies undertaking **R&D**.

Business spending on **R&D** is an area where Australia is a global laggard with that gap more obvious given such increased business spending elsewhere.

In a speech to The Australian Financial Review Innovation Summit, Ferris pointed out a graph from the Reserve Bank showing gross spending by OECD countries on **R&D** had risen as a percentage of GDP

over the past decade. In Australia, however, the trend was the opposite. On the latest figures, it equalled about 1.9 per cent of GDP in 2015-16 compared to an OECD average of 2.4 per cent.

That might not seem so significant as the Australian economy heads into another record year of uninterrupted growth. But it's clearly going to have an impact on the industries and jobs of the future. Australia's ambition to be a top-tier innovation nation by 2030 looks even more remote when the top five OECD countries spend an average of 3.7 per cent of GDP. Yet the really big divergence is in what Australian business spends on **R&D**.

By comparison, government spending on **R&D** comes in about the middle of the pack - 0.9 per cent of GDP. There may be arguments about its effectiveness but that's the same as Germany, South Korea and Singapore, and above the US at 0.8 per cent, Japan at 0.7 per cent and Britain at 0.6 per cent.

So it's the **R&D** spending by business in Australia - at 1 per cent of GDP - that is the missing link. That business figure compares with 3.3 per cent in Korea, 2.6 per cent in Japan, 2 per cent in the US and Germany, 1.3 per cent in Singapore and 1.1 per cent in Britain. Only Canada is relatively worse.

Ferris ponders whether Australian business reticence is cultural or due to the quality of government support programs. His answer isn't surprising.

"Our hypothesis is that a key path to address these disparities should be through rethinking the form, and not just the amount, that government support for business **R&D** takes in Australia compared with the leading innovation nations," he told the Summit.

Change has included plans to remove general tax concessions for **R&D** in favour of more targeted tax **incentives** that increase along with the percentage of business revenue spent on **R&D**. The government has adopted this approach, though with slightly different research "intensity" triggers, as well as maintaining refunds for companies with turnover of less than \$20 million.

But Ferris argues this type of indirect **incentive** via the tax system will not be sufficient and that government must make more direct investments and co-investments to leverage business spending. The government has already made some moves in this direction despite Coalition suspicion about "picking winners".

Ferris cites the example of the recently established Biomedical Translation Fund (BTF), a \$500 million venture capital fund, with equity shared by government and private sector investors, including super funds.

Without such risk capital and expertise being available, he says, Australia risks valuable IP drifting



offshore or dying in laboratories.

More export development grants are another recommendation. And he wants the government to make better use of procurement to encourage innovation and provide the potential for businesses to scale up - including the use of "challenge" grants that have become popular in other countries.

None of this comes cheap, even if potential return on investment could dwarf it. So Ferris suggests the government use the estimated \$3 billion it saves over four years by targeting **R&D incentives** to reinvest that money in more direct funding.

This would make Australia's pattern of support more akin to other countries. Australia's level of direct government support or funding of business **R&D** at only 15 per cent of the total (relative to 85 per cent indirectly via tax concessions) is unusual.

In Germany it's 100 per cent direct, in the US 72 per cent, in Korea 49 per cent, in Britain 43 per cent.

"But business, big and small, scientists and researchers in institutions, big and small, will also have to step up to respond with about a 3 x 1 multiplier of activity and funding," Ferris says.

As it turns out, business isn't likely to have the chance to prove whether it can respond. According to Innovation Minister Michaelia Cash, the government is concentrating on getting the budget back into balance.

"When you have lots of money you can do lots of things," she says.

"I think the best approach is one that is split between the direct and the indirect investment, which is what we are doing."

Translation. Money saved from curbing **R&D** concessions goes to the budget bottom line.

Document AFNR000020180730ee7v00017

# FINANCIAL REVIEW

Computers

**Business has friend in unis for creating new products**

Robert Bolton

439 words

31 July 2018

The Australian Financial Review

AFNR

First

22

English

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Research and development

Business needs a "behavioural nudge" to direct more of its **R&D** spending to the university sector, given that universities have a track record of generating revenue in partnerships with the private sector.

Professor Margaret Gardner, who is vice-chancellor of Monash University and chairwoman of Universities Australia, said collaborations between industry and unis produced about \$10.6 billion a year in direct revenue for participating companies, and about \$19.4 billion for the wider economy.

Professor Gardner said the federal government would not tip more money directly into companies but told the The Australian Financial Review Innovation Summit that companies should get "more points" for being engaged in **R&D** development with universities.

She said unis were the most significant engine for "new to market" innovation - that is developing original products or intellectual property - rather than producing more iterations of existing technologies.

The recent Universities Australia report Clever Collaboration said 16,000 businesses already partner with a university and an independent study showed the return to companies is about \$4.50 for every \$1 invested in collaborative research.

Professor Gardner's comments were supported by the government's innovation guru Bill Ferris, whose

report Australia 2030: Prosperity through Innovation recommended a 20 per cent premium on the **R&D** tax rebate for companies that directed money to joint ventures with the tertiary sector.

"Unis are very good at reaching out to business. What we want is to encourage business to reach back. And we can do this through the tax system," Mr Ferris said.

Professor Gardner said that Australia had a high level of entrepreneurial activity, as demonstrated by the fact more than 14 per cent of adults had been involved in starting a new business. And the proportion of companies that report engagement in innovation is high, at more than 48 per cent.

She said in the last nine months her own university, Monash, had raised more than \$22 million for three spin-out companies from its own research activities.

Meanwhile the University of Queensland had spun out more than 100 business since 1988 and these have gone on to raise more than \$600 million to commercialise research.

Despite these strong indicators, business did not turn automatically to the uni sector as a natural partner, relative to other OECD economies.

Apart from **R&D tax incentives**, Professor Gardner said business-uni collaboration could be encouraged by more development of science precincts, for example the Melbourne Biomedical Precinct, which is home to more than half of Australia's ASX-listed life science companies.

Document AFNR000020180730ee7v0000u

# FINANCIAL REVIEW

News

## R & D savings used to balance the budget

Ben Potter and James Thomson

998 words

31 July 2018

The Australian Financial Review

AFNR

First

1

English

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Jobs and Innovation Minister Michaelia Cash said the government pocketed \$2.9 billion in savings from research and development tax breaks in the budget rather than recycle them into direct **R&D** grants because it had to balance the budget.

But Senator Cash said the government would be willing to discuss returning some of the savings to **R&D** companies in the form of increased direct **R&D** grants sought by Innovation and Science Australia chairman Bill Ferris and Chief Scientist Alan Finkel in future budgets.

This year's federal budget trimmed the \$3 billion a year **R&D tax incentive** scheme by \$2.9 billion over the four-year forward estimates, tightening eligibility for companies that spend a tiny proportion of their total expenditures on **R&D** and expanding the rebate for big **R&D** spenders. But the budget failed to recycle the savings into the type of direct grants used by top innovation countries such as Germany, Sweden and Israel that Mr Ferris and Dr Finkel had recommended in their review of **R&D incentives**, opting instead for a big program of income tax and company tax cuts.

Mr Ferris conceded the government had shortchanged the **R&D** community but said Innovation and Science Australia (ISA) was still hopeful of getting the savings back. He said in his prepared speech to The Australian Financial Review Innovation Summit 2018 the direct grants should start about \$1 billion a year and build to \$3 billion a year by 2030.

"I think it is still possible we get there but I think we are going to need a lot of people in this room to back it and one doesn't give up the chase," he said. "I think the minister today said we welcome an ongoing discussion about this, so we are going to try to enable exactly that."

Senator Cash hinted that the government could look at the proposition again. "If that is a conversation that people want to have then absolutely the government is willing to have the conversation," she said.

"But ... we are concentrating on getting our budget back into balance. When you have lots of money you can do lots of things. When you are looking at ensuring you have the basic economic fundamentals right, I think the best approach is one that is split between the direct and the indirect investment, which is what we are doing."

The budget changes reduced the premium tax break for companies that spend less than 2 per cent of total expenditures on **R&D** to 4 per cent from 8.5 per cent, but increased it on a sliding scale to 12.5 per cent for "high intensity" companies that spend more than 10 per cent of expenditures on **R&D**.

Mr Ferris gave short shrift to large Australian companies that complained about their tax breaks for spending a tiny fraction of their sales on research and development that yields "modest" dividends being cut and threatened to take the activity overseas.

He said most of the large companies applying for **R&D** tax breaks spend only about half of 1 per cent of their total annual expenditures on **R&D**, and reviews "have shown very modest - sometimes negative to zero 'additionality' from that part of the program".

By contrast, he said, the world's leading technology companies such as Google and other tech firms that are reshaping the global economy "are all spending something like 15 per cent or more of total expenditures on **R&D**, not half a per cent, not 1 per cent".

"I am not very sympathetic to a program that doesn't encourage and reward that sort of seriousness," Mr Ferris said. "Additionality" is the amount of extra **R&D** expenditure conducted in Australia as a result of **incentive** programs, versus **R&D** that firms would do anyway.

Dulux and some advisers to "old economy" manufacturing and mining companies with low rates of **R&D** expenditure complained that they would lose large amounts of their **R&D** tax breaks under budget changes and may shift some activities offshore.

But top Australian **R&D** companies like blood products group CSL and hearing implant pioneer Cochlear, that spend 10-12 per cent or more of their annual expenditures on **R&D**, welcomed the changes.

The **R&D** review was part of the Turnbull government's wider innovation agenda designed to boost business **R&D** spending and commercialisation of research - which are low by global standards - to

create another engine of economic growth.

Innovation and Science Australia (ISA) published its Strategy 2030 in January advocating "national missions" in health genomics and saving the Great Barrier Reef to boost commercialisation.

But Mr Ferris said: "I can't see how we do it without a dramatic improvement in business investment in innovation."

He said seriously innovative companies should be spending "pretty big bucks on your **R&D**", certainly more than the half of 1 per cent of total expenditures allocated by typical Australian **R&D tax incentive** recipients. The review recommended that for highly innovation-intensive companies the cap of \$100 million on total grants should go to \$150 million.

He said this would increase the appeal of doing serious **R&D** in Australia and our ability to encourage some larger international **R&D** intensive firms "to think about doing more in Australia" rather than shifting the activity offshore. "So I don't accept there is an inbuilt exit of serious **R&D** spenders".

Senator Cash said Mr Ferris' review of **R&D** had recommended an even tougher tougher approach, which would have cut companies with **R&D** intensity of less than 1 or 2 per cent right out of the scheme.

"I consulted widely, and the government decided that was not the approach it was going to take," she said. "So under the changes we are putting forward ... everybody continues to get something."

Document AFNR000020180730ee7v00005

# FINANCIAL REVIEW

News

**Ferris calls for more direct corporate R & D funding**

James Eyers

587 words

30 July 2018

The Australian Financial Review

AFNR

First

1

English

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Business investment in research and development would lift if the federal government made industry funding more targeted and focused, instead of relying on "indirect" support like the **R&D tax incentive**, the chairman of Innovation and Science Australia, Bill Ferris, will tell The Australian Financial Review Innovation Summit today.

Declaring sagging levels of business expenditure on **R&D** a matter warranting "significant national attention", Mr Ferris will say "it is very clear much more needs to be done" before Australia becomes a top-tier innovation nation.

He will call on the government to reallocate \$1 billion from existing programs so innovation can be more directly supported like it is in other nations, which are leaving Australia behind in terms of spending on new technologies.

While supportive of government moves to reform the **R&D tax incentive** to improve its integrity, Mr Ferris will say Australia puts too much emphasis on the program, which is agnostic towards sectors, self-assessed and continually available regardless of performance outcomes.

Rather, "direct support" programs like co-investment funds can "seek to powerfully leverage government investment in innovation".

"We believe a smarter rebalancing of our direct and indirect support mechanisms is overdue and will be essential to reversing Australia's decreasing levels of business investment in innovation," Mr Ferris will tell the Summit, which will bring together leaders in science and business with policy makers and

entrepreneurs in Sydney.

It's necessary to "rethink the form, and not just the amount, that government support for business **R&D** takes in Australia compared with the leading innovation nations", he will say.

An increase in direct investment in innovation programs of \$1 billion is required now and this must grow to about \$3 billion per annum by 2030, according to Mr Ferris, which could be funded by the government re-allocating some of its current "indirect" **incentive** expenditures of \$3 billion per annum.

Germany, Sweden and Israel have zero indirect government support and only use direct measures to drive their level of business expenditure on **R&D**.

In Australia, business expenditure on **R&D** has been in steady decline since 2008, falling from 1.4 per cent of GDP to just 1 per cent, while the level of spending in competitor nations has been increasing.

This was one of the key shortcomings identified in Innovation and Science Australia's 2030 plan for Australia, titled "Innovation through prosperity", which made 30 recommendations to government, including on how to increase the commercialisation of research.

Successful examples of direct **incentive** programs include co-investment funds such as the \$500 million Biomedical Translation Fund, which involves a 50/50 sharing of equity funding by the government and private sector investors; and the Co-operative Research Centre (CRC) scheme, which has achieved a leverage of four times the government investment by support from academia and industry since it was set up in 1990.

Compared to other nations, the private sector leverage on public sector investment in innovation is only 1.1 times in Australia, compared to 2.2 times in Germany, 3.7 times in South Korea and five times in Israel, Mr Ferris will say.

The government is making various compliance, enforcement and administration changes to improve the integrity of the **R&D Tax Incentive**, after various claimants were found to have made incorrect self-assessment of eligible **R&D** activities, exaggerated expenditure claims, and pushed the boundaries of **R&D** definitions to rort the **incentive**.

Document AFNR000020180729ee7u00002



# The Sydney Morning Herald

News

**R & D it and weep: politics blights studies**

Nigel Gladstone

536 words

26 July 2018

The Sydney Morning Herald

SMHH

First

8

English

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Australian research is confounded by politics as federal government organisations and businesses spend less on research and development.

**R&D** spending by such organisations shrank \$118 million or 5 per cent in 2016-17, with more than 400 staff cut last year, ABS data shows.

University of Queensland Innovation Studies Professor in the school of business Mark Dodgson said the loss of researchers is "symptomatic of the way the government has taken its eye off the ball".

"It is important to consider these figures within the whole system in Australia, especially the low investment made by the private sector and the poor connections between business and research institutions," he said.

Governments can focus on areas of deficiency or where we have comparative advantages, he said, adding that lower funding for areas such as environmental science is "damning and reflects some retrogressive political choices".

Universities Australia chief executive Catriona Jackson said it is a "worrying trend".

"Research expands Australia's economy. Research saves lives. Research creates new products and industries that generate jobs," Ms Jackson said. "Australia now spends 1.88 per cent of GDP on research and development, well below the OECD average of 2.38 per cent. And for the first time since records have been kept, OECD figures show that Australia's business **R&D** declined in 2015-16."

The federal 2017-18 budget lifted **R&D** funding by 2.3 per cent, a Department of Industry, Innovation and Science spokesman said.

The budget included \$2.4 billion for a "science and technology growth plan", \$1.9 billion over 12 years for "critical research infrastructure", \$300 million on space industry and spatial imagery capabilities, plus \$140 million for the next generation of Australia's super computers, the spokesman said.

The government's largest investment is through a tax **incentive** program that represents 32 per cent of the \$10.3 billion **R&D** budget.

A senior economist, who asked to be unnamed, said Australia has "a more ideological approach" to science than anywhere else in the world, and that continuing to waste money on **R&D** tax concessions was a poor way to fund research.

"The mindset here is [**R&D**] tax breaks first to the three big sectors - finance, mining and technology. But even the OECD says you should only make those [tax breaks] available to SMEs [smaller businesses], as larger businesses can manipulate their tax activity. High-performing countries like Israel create an innovation authority and allocate funds for them to do a task. A local example of this is the Clean Energy Finance Corporation."

Professor Beth Webster, director of the centre for transformative innovation at Swinburne University, said political interference needs to be excised from research funding through the creation of durable research organisations.

"We need to have a more stable platform for these things, rather than just having it highly political and depending on the minister for their ongoing funding.

"[Politicians] want to put their mark on things rather than be a custodian of a good program."

Opposition spokesman Kim Carr said the new figures show the effect of "savage cuts to the CSIRO, universities and other agencies since 2013".

Document SMHH000020180725ee7q0001h



Higher Education

## Universities call for funding to arrest slump in R & D

Tim Dodd

544 words

12 July 2018

The Australian - Online

AUSTOL

English

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Cash needed to halt **R&D** slump. Universities have raised the alarm on Australia's declining spending on research and development, and will tell a parliamentary committee that more investment is -needed to avoid falling behind competitor countries and risking the nation's future prosperity.

In a submission to the House of Representatives standing committee on employment, education and training, universities will -recommend a goal of "significantly increasing the intensity of -research and development in the Australian economy".

The university representative body, Universities Australia, will make the submission to the committee's ongoing inquiry into the research funding system.

UA chief executive Catriona Jackson said Australia's research and development spend of 1.88 per cent of GDP in 2015-16 was well below the OECD average of 2.38 per cent.

"Australia's **R&D** spend as a percentage of GDP is less than Iceland's," Ms Jackson said.

While Australian **R&D** is falling, the British government has set a target to spend 2.4 per cent of GDP on **R&D**. "The world's leading economies know just how -important **R&D** is and are investing accordingly," Ms Jackson said.

Both business and government are contributing to the decline in **R&D** spending.

Business **R&D** spending in 2015-16 totalled \$31.2 billion, down from \$33.5bn two years -earlier, the first time business **R&D** had fallen since records have been kept.

And figures from the Australian Bureau of Statistics last week showed that **R&D** spending by the

federal and state governments, through such organisations as the CSIRO, has fallen to a 10-year low.

Federal and state **R&D** investment in 2016-17 amounted to 0.19 per cent of GDP, down from 0.21 per cent two years earlier.

The worst-hit area was basic research (down 29 per cent). This fall “is particularly concerning as it is the start of Australia’s -research pipeline”, said Vicki Thomson, chief executive of the Group of Eight universities.

“A nation walks away from -investing in research at its peril,” Ms Thomson said.

“Research creates jobs, stimulates the economy, saves and changes lives and contributes significantly to the economic, social and environmental wellbeing of the Australian community.”

In its submission to the parliamentary committee, Universities Australia will also urge the government to make no further changes to the research funding system until the present ones have been bedded down. These -include the tightening of the **R&D tax -incentive** announced in the May budget.

In the submission, UA will also renew its call for the federal government to reactivate the Education Investment Fund, which has sat dormant since 2012 but still holds \$3.8bn that was previously earmarked for university and TAFE infrastructure.

The Turnbull government’s plan to redirect the money to the National Disability Insurance Scheme has been stymied in the Senate and the money has -remained untouched. Universities say they are grateful for the government’s 12-year plan for -research infrastructure spending announced in the May budget but they are frustrated by the stalled fund.

“It’s ridiculous that ... there’s a fund sitting around doing absolutely nothing,” Ms Jackson said.

Document AUSTOL0020180712ee7c001p5

# FINANCIAL REVIEW

News

**R & D tax incentive plan lacks clarity: experts**

Tom McIlroy

605 words

5 July 2018

The Australian Financial Review

AFNR

First

8

English

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Tax experts say the Coalition hasn't provided enough clarity about **proposed changes to R&D tax incentives**, risking resources and agriculture businesses fundamental to the economy.

**Changes** announced in the May federal budget are subject to a public consultation this month, with Treasurer Scott Morrison seeking improvements to better target the largest component of government spending on research and development.

The budget saved \$2.9 billion on the **R&D incentive** scheme over 2018-19 to 2020-21 by reducing grant levels for many claimants and beefing up compliance and enforcements measures.

The cost of the program was expected to be \$1.8 billion when it was introduced in 2011-12, but the government said it had blown out to about \$3 billion by 2016-17.

Mr Morrison said higher, more- intensive **R&D** investment for larger companies would be favoured as part of efforts to limit the scheme.

Under a so-called intensity test, companies that spend less than 2 per cent of their sales on **R&D** will from this week be able to deduct that spend from their taxable income at a rate of just 4.5 per cent above their standard company tax rate.

BDO **R&D** tax partner Graham Wakeman said a discussion paper released by Mr Morrison and Innovation and Jobs Minister Michaelia Cash last week showed the scheme would be much more difficult to understand and didn't explain relevant accounting principles. "Particularly in relation to the

intensity test applying to the large companies, they have replaced what was a pretty simple system with a far more complicated calculation," he said.

"It is far more difficult to understand, great for professionals like me but not good for industry.

"They've also brought in the accounting concept of intensity of **R&D** expenditure over total expenditure and made it by reference to accounting principles. It was always going to be a complicated system ... but they haven't given a great deal of clarity."

The **incentive** has two core components: a refundable tax offset for businesses with turnover of less than \$20 million and a non-refundable offset for those above the \$20 million threshold.

Mr Wakeman said the more complicated the **changes**, the less effective the benefit would be at boosting research.

"This additionality is about people making investment decisions. People like to make those investment decisions based on stability and certainty," he said. "The intensity test in itself introduces uncertainty into the calculation of what a company's tax benefit is going to be." In May experts warned Australia was at risk of losing **R&D** from manufacturers and mining companies after cuts came without offsetting increases in other grants.

Mr Wakeman said big resources, manufacturing and agriculture would be among those hardest hit.

"The extent of the benefit that large companies will receive will be based on whereabouts they fall in the intensity bracket. At the end of the day, if people's reality ends up differently to their budgets then they're not going to be able to know in advance what their total expenditure or what their **R&D** spend is."

Releasing the **draft legislation** last month, Mr Morrison said the Coalition was committed to backing **R&D** investment and flow-on economic benefits.

"At the same time we need to make sure that the investment of taxpayers' money is well targeted by encouraging companies to do more, and not just be rewarded for **R&D** they would have conducted without an **incentive**," he said.

Consultation on the **changes** continue until July 26.

Document AFNR000020180704ee750001b



Business

Unite to save R & D , urges Northern Minerals

Stuart McKinnon

275 words

29 June 2018

The West Australian

TWAU

First

58

English

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Northern Minerals managing director George Bauk says the company's \$56 million rare earths pilot plant in the Kimberley would not have been built if Federal Government cutbacks on research and development in this year's Budget had been introduced a year earlier.

Treasurer Scott Morrison announced last month that from July 1, the Government would introduce a \$4 million annual cap on cash rebates for companies with turnovers of less than \$20 million who were spending on **R&D**.

Speaking at a WA Mining Club lunch yesterday, Mr Bauk said Federal funding was a big contributor to the company's plant, which will process ore from the company's Brown's Range mine into a dysprosium-rich heavy rare earth carbonate.

Dysprosium is an element that allows permanent magnets to retain their charge and efficiency at high temperatures and is used in the motors of electric vehicles and wind turbines.

"I've been promoting this while I've been travelling around the world and saying how wonderful our government is and unfortunately with tough times, they're cutting the **R&D**," Mr Bauk said. "We're talking about STEM, we're talking about the future and unfortunately some policy makers are not connecting the dots."

He called on colleagues in the mining industry to lobby their local members to emphasise the importance of **R&D**.

“There will be projects that we put on hold because we don’t have **R&D** available to us,” Mr Bauk said.

The policy change aims to shave \$2.4 billion from spending on the **R&D incentive** for businesses.

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# FINANCIAL REVIEW

News

## Carbon Revolution and Deakin in R & D tie-up

Ben Potter

561 words

18 June 2018

The Australian Financial Review

AFNR

First

5

English

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Carbon fibre automotive wheels pioneer Carbon Revolution has formed a \$15 million research and development partnership with Deakin University to boost the materials science and engineering inputs into its unique manufacturing process.

The partnership, to which the Innovative Manufacturing Co-operative Research Centre will contribute \$3 million, will give Carbon Revolution access to Deakin's core materials science and engineering capabilities, chief executive Jake Dingle said.

The company, based on Deakin's Waurin Ponds campus, embarked on preliminary talks with fund managers last week with advisers from JP Morgan as part of the getting-to-know-you process ahead of a capital raising of up to \$100 million and a possible public float, Street Talk reported.

It plans to use the new capital to scale up its production of carbon fibre wheels through further automation and "industrialisation" of its processes. The **R&D** partnership with Deakin will complement that drive, Mr Dingle said.

The goal is to reduce unit costs so that Carbon Revolution can offer its world leading carbon fibre wheels - which so far have mostly been fitted on high-end performance cars such as -Ferrari, Ford GT and Ford Mustang - for use on higher volume, lower-priced vehicle makes.

Mr Dingle said the **R&D** would be conducted with Deakin's advanced composite materials group under the direction of Russell Varley, a former top research scientist at CSIRO's Materials Science and Engineering division.

"It's tapping into their advanced materials science capacity which is world-leading. The **R&D** is about supercharging the materials science and engineering inputs to our processes," Mr Dingle said.

Composites are materials that combine fibres and resins to outperform traditional materials such as steel and aluminium for strength and weight savings.

"This project has the potential to take our technology more rapidly to the next level, which will further strengthen our global leadership and competitiveness in the area of composite wheels.

"We are already recognised as the global leader in this space thanks to our design and engineering capabilities, and the focus for this next critical phase is to fully industrialise and scale up our manufacturing processes and operations."

Conducting the **R&D** in collaboration with a university or public research agency also fulfils a policy objective of the Turnbull government's innovation agenda and could earn Carbon Revolution a premium on its **R&D tax incentive** payments under new rules proposed in this year's federal budget.

"This is what we need to be doing in this country - collaborating with Deakin on **R&D** with a real commercial outcome," Mr Dingle said.

Industry-research collaboration is one area of innovation in which Australia lags badly behind other rich world economies.

Head of the Innovative Manufacturing Co-operative Research Centre David Chuter said the project was a great example of the potential benefits Australian manufacturers could enjoy from a collaborative approach to innovation.

"The IMCRC's focus is on catalysing tangible, commercial outcomes for Australian manufacturers, by bringing together manufacturing businesses and research organisations, to support innovations that will ensure the Australian manufacturing industry can meet the challenges and opportunities presented by today's global economy," Mr Chuter said.

Professor Varley said the technology from the project "will ensure Deakin and Carbon Revolution remain at the leading edge of global composite materials research".

Document AFNR000020180617ee6i0000v



Feature

## R & D AT HEART OF TAX PLAN

Robert Gottliebsen

771 words

26 May 2018

The Australian

AUSTLN

Australian

38

English

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We need to create an environment to attract investment

Don't tell anyone, but Pauline Hanson has done the government a favour in blocking its company tax cuts. Not only were lower company tax rates a weight in the election saddlebag, but frankly I don't think they were the most efficient way of stimulating the economy and creating long-term growth and employment.

Our company tax rates are not that far above the US when you add American state taxes, and while lower taxes would have encouraged some capital expenditure and employment, it was a very wasteful mechanism.

It also lowered the value of franking credits but I will leave that subject for another time. I recognise that those favouring lower company taxes had a legitimate argument, but as I have pointed out in these columns on many occasions increased depreciation allowances and extra money for research is the best way to create much needed investment.

We need to modernise our industrial and service base and so I am an advocate of the so-called Calderon plan.

Alberto Calderon, the chief executive of Orica, first advocated the plan at the Melbourne Mining club last February.

In the budget lock up Finance Minister Mathias Cormann was adamant that Calderon (and myself) were wrong and that company taxes were the best way to go. While I recognise his point of view we

don't have to continue that debate because company tax reductions now look to be dead.

I think there is a good chance that the ALP would back accelerated depreciation but in any event it could be an excellent campaign point for next year's election.

In this context I want to restate that an important part of the Calderon plan was increased research allowances and the government very foolishly decreased outlays on research.

To remind you of the advantages of the Calderon plan let me requote extracts from his historic Melbourne Mining Club address last February.

Calderon: "The main drivers of growth during the past two decades — mining and housing — will no longer contribute at the same level and household consumption will not be able to fill the gap. This underscores the need to create the right conditions to boost business investment and capital productivity.

"But under the current tax and regulatory environment it is difficult to see how business investment is going to fill the void left by the mining and housing sectors.

"We need a tax environment that is conducive to growth and is competitive relative to the countries against which we compete for capital.

"Doing nothing will in time — maybe not next year but certainly in the near future — without a doubt, lead to very low levels of growth.

"I am not necessarily suggesting we blindly follow the US in its tax strategy. There should be much more discussion around the optimal combination to create the greatest benefits for society, and the largest impact on growth.

"There is a view that a reduction in the corporate tax rate would result in increased investment activity, the creation of more jobs and higher wages. However, our franking system makes the analysis a little more complex.

"There are complementary and alternative ways to encourage local and offshore companies to invest in Australia.

"Companies invest to expand their operations, build new plants and factories, buy equipment and develop new technologies to boost productivity. It would seem to me that introducing targeted **incentives** in areas such as these can directly increase activity in Australia, in a way that provides

lasting benefits.

“This could be achieved by improving the Australian research and development **incentive**, introducing better capital allowances either directly or through accelerated depreciation, or targeted reductions in tax rates for capital intensive or high technology manufacturing.

“A tax environment that incentivises investment will benefit all Australians through job creation, increased wages and improved living standards in the long term.

“Changes to the tax regime alone will not induce long term, sustainable economic growth.

“If we are to support private investment, our regulatory regimes for energy, transport, water, land access, telecommunications and other infrastructure services need to support, not add to the cost and timeliness of projects and the cost of operations.

“It is equally important that access to mobile and skilled workers is not hampered by populist politics.”  
So that’s the Calderon plan.

Let me repeat those all important words from the Orica chief executive. “Doing nothing will in time — maybe not next year but certainly in the near future — without a doubt, lead to very low levels of growth.”

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AustralianIT

## Tax breaks could enhance R & D culture

YOHAN RAMASUNDARA, COMMENT

629 words

15 May 2018

The Australian

AUSTLN

Australian

24

English

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The federal government's 2018 budget last week detailed a range of changes impacting the technology sector, including funding for AI and machine learning and -encouraging more women into science and technology careers, not to mention an initial seed for a nascent space agency for Australia. All exciting announcements.

All of these ultimately are underpinned by something else that is often taken for granted in Australia: research and development.

It's no surprise the budget also detailed changes to the Research and Development Tax **Incentive** (R&DTI), which include a tighter focus to limit those who may be abusing the system, but also to -implement some recommendations from the Innovation Australia 2016 review that include a \$4 million cap on cash refunds smaller companies, and raising the **R&D** expenditure threshold for tax offsets from \$100m to \$150m for larger companies. However, driving **R&D** in Australia needs more than tax **incentives**.

As outlined in the 2016 review, some OECD countries such as Sweden and Germany use grants instead, and a mix of the two might provide a better result for Australia's ecosystem. The government expects the changes to the R&DTI to save \$2.4 billion over four years, which could be -invested, for example, back into the economy in the form of grants.

But there are other factors. In the OECD's 2017 Science and Technology Scoreboard, its most recent data ranks Australia in last place for collaboration between businesses and research institutions. The same report reveals we're in the top 10 for scientific production, so clearly there's -potential here as well.

Then there's culture. Despite the fact Australia can punch above its weight — Wi-Fi and Google Maps are but two of our innovations — there first has to be appetite and support for **R&D**. Silicon Valley is often held up as a poster child due to the sheer volume of world-changing technology companies that began or scaled there, but if you visit the valley the driving force of this is a function of the culture behind it: the willingness to take risks, to learn and share, and to grow and give back through support.

Last year while I was based in San Francisco, I got to experience this first-hand. I was impressed by the humility of some of the top 100 venture capitalists. Wherever I went I was never turned down for a meeting — opportunity knocks, after all. One of these was with Andrew Braccia of Accel (which catapulted through seed funding Facebook, Spotify, Dropbox, and Australia's Atlassian among many others) on what drives innovation in the sunny state.

Key was understanding and -interacting with the full ecosystem, not just your own patch. -Opportunities to collaborate are sought out. And — something we struggle with here — there's -plenty of funding available to back businesses with the right ideas and the ability to be flexible and adapt. And an understanding that all innovation begins with **R&D**. That smartphone in your pocket, which has revolutionised the way you live and built a half-trillion dollar industry, is the culmination of decades of **R&D**.

Currently the Global Innovation Index ([www.globalinnovationindex.org](http://www.globalinnovationindex.org)) — which looks at a range of metrics from regulation to productive outputs — places Australia at 23rd, behind expected heavy weights the US, Britain, South Korea and Japan. But we're also behind China, Israel, France and even our friends across the pond in New Zealand.

Two years earlier, we were ranked 17th. It's time to get honest about the value of **R&D** in Australia, its role as an inception for innovation, and the resultant economic boost. Yohan Ramasundara is the president of the ACS.

Document AUSTLN0020180514ee5f0002p

# FINANCIAL REVIEW

News

## **\$2.2b boost for science research**

Robert Bolton

530 words

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The Australian Financial Review

AFNR

First

8

English

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More than \$1 billion of federal government money will be poured into super computers and high-speed digital networks as the Coalition shifts its science spending into research.

That's on top of more than half a billion dollars previously allocated to the Australian Synchrotron - a particle accelerator outside Melbourne.

Altogether \$2.2 billion will be spent over 10 years as the government implements the National Research Infrastructure Roadmap drawn up by Chief Scientist Alan Finkel.

An announcement on Tuesday by the federal education minister will outline other research infrastructure spending, including \$100 million in new money for rescuing the Great Barrier Reef, \$240 million for precision satellites, \$120 million for the European Southern Observatory and \$169 million in nuclear research.

The spending was projected in last week's budget, but the government will outline its priorities with a heavy emphasis on digital technology.

The government will accept six out of nine recommendations by the chief scientist, including creating a long-term investment plan for science infrastructure, taking expert advice on health, manufacturing and agriculture and investing in international science partnerships. It will single out new money for upgrading the Pawsey super computer in Perth and the National Computational Infrastructure in Canberra, which are shared by multiple universities.



Dr Finkel said computing power and high-speed networks were vital to all research.

"We're entering a world of massive volumes of data. The super computers we have need upgrading so they can model new medicines, building materials and climate science; plus process data from the Square Kilometre Array."

He said scientists were "delighted to see new long-term thinking" by the government and acknowledgment of research facilities.

The \$2.2 billion for scientific infrastructure nearly balances the \$2.4 billion the government pulled from research and development in the budget when it tightened up **R&D tax incentives**.

Partner and national education and skills lead at PwC David Sacks said the change in government priority is an "implicit recognition" that tax **incentives** for **R&D** have not worked well. And it is an "implicit recognition" that direct investment in scientific projects delivers results.

He said building up computing power, nuclear research and astro-physics would be a drawcard for overseas researchers and investment. It showed the government understood that all research was underpinned by computational power.

Business warned the loss of \$2.4 billion in tax **incentives** would undermine innovation.

Co-CEO of Intersective, which links educators with technology companies, Beau Lesse said the government was reinforcing the infrastructure side, which was good, but by cutting tax **incentives** it had taken money away from outcomes and productivity.

Mr Lesse said Australia was No.12 on a global ranking of science infrastructure. The new spending would strengthen the ranking. But it was No.23 on the index of product development and commercialisation, which is where the country needs to make new investment.

"Putting money into basic science is good use of public funds. But you are taking money away from the area of innovation and commercialisation."

Putting money into basic science is good use of public funds. Beau Lesse, Intersective co-CEO

Document AFNR000020180514ee5f0000e

# FINANCIAL REVIEW

News

## Small business to suffer drop in refund for research work

Michael Bailey

565 words

11 May 2018

The Australian Financial Review

AFNR

First

10

English

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## R&D

Start-ups with turnover under \$10 million will get a lower refund on their research and development activities from 2018-19, in a little-remarked part of the budget's slashing of \$2.9 billion from the **R&D incentive** over the next three years.

Businesses turning over less than \$10 million have, since 2015-16 been subject to a reduced company tax rate of 27.5 per cent. This means the net benefit on their 43.5 per cent refund on **R&D** was 16 per cent once they started to pay tax.

This will drop to 13.5 per cent from July 1, as Tuesday's budget linked the **R&D** offset rate to the corporate tax rate for the first time.

"It's not big bikkies, but it's a material hit to the start-ups we are banking on for the future of our economy, and the **incentive** foregone will only get larger as the corporate tax rate reduces as **proposed** into the future," said Damian Smyth, a principal at specialist **R&D** tax advisers Swanson Reed.

Meanwhile only a handful of companies would be better off under the **new R&D** "intensity" regime that will govern the tax offset received by companies turning over more than \$20 million a year, Mr Smyth said.

From July 1, 2018, companies that spend less than 2 per cent of their annual business expenses on

**R&D** will only be able to claim a tax offset of 4 per cent above the company tax rate, down from the blanket 8.5 per cent that previously applied. However, the rate ratchets up to the extent that big **R&D** spenders will now be better off: companies funnelling more than 10 per cent of business expenses into **R&D** can now claim a tax offset at 12.5 per cent above the company tax rate.

"But it's a big ask for most companies to even get to the 5 per cent intensity rate they need to stand still under these **new** arrangements," Mr Smyth said.

"We're talking Cochlear, CSL and not too many others."

Most recipients of the **R&D** tax offset would see their benefit cut drastically, in the majority of cases by more than half, said PwC **R&D** partner Sandra Boswell. "The **changes** are also contrary to international trends of providing support to innovation," she said.

"In recent weeks both Hong Kong and **New** Zealand have announced **new**, more attractive **R&D** programs with one base rate of 9 per cent in both territories. This is well above the 4 per cent most Australian companies with turnover of more than \$20 million will now be able to access from July 1 onwards. We are the only country that has reduced rates for the majority of claimants in 2018."

The reduced scheme will also be subject to greater integrity and enforcement measures. The Innovation and Science Australia statutory board will have a **new** role in publicly releasing its binding interpretations of what are considered eligible **R&D** activities under the program.

These so-called "public findings" will be contestable in the Administrative Appeals Tribunal.

Mr Smyth expected the **new** regime would soon add to the relatively paltry amount of case **law** precedents surrounding the **R&D incentive**.

Document AFNR000020180510ee5b00014

## The Daily Telegraph

Business

### Brain drain fears due to research cut

Edward Boyd, Budget

476 words

10 May 2018

Daily Telegraph

DAITEL

Telegraph

46

English

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BUSINESS lobby groups and commentators have mostly -applauded Tuesday night's Budget, however some have questioned the crackdown on research and development -incentives and claim it could -result in a brain drain.

Treasurer Scott Morrison's 2018 Budget is forecast to del-iver a \$2.2 billion surplus next year, with the surplus growing to \$11 billion in 2020-21 and \$16.6 billion in 2021-22.

Mr Morrison also unveiled a radical new plan to reform income tax scales by abolishing the 37 cent tax bracket.

Business Council of Australia chief executive Jennifer Westacott said the Budget was "strong and sensible" and -focused on growth.

"A strong business community and sound budget management by the government has delivered the -dividend of tax relief for low- and middle-income earners, -increa-sed support for older Australians and funding for much-needed infrastructure," Ms Westacott said.

The budget papers revealed the federal Government will dish out \$25 billion in infrastructure spending with NSW set to receive \$1.5 billion.

NSW Business Chamber chief executive Stephen Cartwright said NSW's recent economic success resulted in it missing out on the lion's share of the handouts.

“The inactivity of other state governments over recent years seems to have been -rewarded by the federal Government, keen to ensure road and rail projects are commenced across the nation. It’s the case that the other states now have to play catch-up to reach NSW,” he said.

“In NSW, the \$400 million set aside for the Port Botany rail line duplication will ease congestion and take trucks off the road in one of Sydney’s busiest areas, and additional funds set aside for the Pacific Highway on the mid north coast is a welcomed allocation of money.” Numerous business lobby groups applauded Mr Morrison for extending the \$20,000 instant asset write-off, the cuts to personal income tax and the move to make GST -reporting simpler for those who complete BAS paperwork.

But business commentators questioned why the government had launched a \$2.4 billion crackdown on research and development (**R&D**) **tax incentives**, which could affect manufacturing, agribusiness and other industries.

The changes include a new \$4 million annual cap on **R&D tax incentives** to businesses with a turnover below \$20 million, and a lifetime cap of \$40 million.

“Thousands of Australian companies will be denied **R&D** claims as a result of the budget action,” KPMG national -partner **R&D incentive** David Gelb said.

“Such companies will be forced to consider relocating their **R&D** to countries with more attractive **incentives**.” Australian Industry Group CEO Innes Willox said the changes would add “new layers of complexity”, especially for small businesses. “Further close consultation with industry in refining the measures will be required,” Mr Willox said.

Document DAITEL0020180509ee5a0002f

# THE AUSTRALIAN

Business

## Tax hit 'may lose R & D investment' - BUDGET 2018

SARAH-JANE TASKER, RESEARCH

572 words

10 May 2018

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23

English

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Thousands of Australian companies have been hit with the lowest research and development tax offset rate since the measure was introduced, in a move by the Turnbull government to “crack down” on the **incentive**.

Treasurer Scott Morrison revealed in Tuesday’s budget that reform of the **R&D tax incentive** would save the government \$2.4 billion over four years.

The reforms included a cut to the **R&D** tax offset rate, which for companies with an annual turnover of less than \$20m was expected to have a limited impact. But for businesses with an annual turnover above \$20m, the hit was tipped to be significant.

Companies in agribusiness, food, packaging and industrial products would all be affected.

KPMG national partner David Gelb said the offset rate had never been as low as it would now be since it was introduced 33 years ago.

He argued that the majority of the 3000-plus companies in the \$20m-plus cohort would have their **R&D** claims reduced by more than 50 per cent.

“In global comparative terms that will reduce Australia to be effectively uncompetitive in that space,” he said.

Mr Gelb said there appeared to be no strategic reason to implement the reforms, adding that it was an austerity measure to reduce the cost because the program had run out of control among companies

that were pre-revenue.

“It is unfortunate that Australia’s destination as an **R&D** location will be relegated to a level where it may lose out on **R&D** investments,” he said.

Mr Morrison said on Tuesday that the government was “cracking down” to ensure that **R&D tax incentives** were used for their proper purpose. The government also argued that the measures supported additional **R&D** rather than “business-as-usual” activities.

A 2016 review of the **R&D tax incentive** by Innovation Australia chairman Bill Ferris, chief scientist Alan Finkel and Treasury secretary John Fraser found that the **incentive** did not fully meet its stated policy objectives.

Jamie Munday, EY’s national **R&D** leader, said that as global countries began to reduce corporate rates, **R&D incentives** were being introduced or expanded as a lever to retain and attract investment and jobs.

“It’s the very companies that we want to innovate in the old economy, including but not limited to, mining, manufacturing, fast-moving consumer goods and agriculture, that will be impacted most by the announced **R&D** changes,” he said.

“These companies are being told to innovate and encouraged to do things differently, and at the same time the government has announced that it will significantly reduce the only material **incentive** for them to do things differently.” There were some winners in the reforms, including Australia’s largest biotechs. The government announced that from July 1, it would increase the \$100m **R&D** expenditure threshold to \$150m, -allowing larger companies to continue to be rewarded for additional **R&D** they undertake as they grow.

Dig Howitt, chief executive of Cochlear, backed the reforms, adding that increasing the cap on expenditure to \$150m per year would allow Cochlear to increase eligible **R&D** by 50 per cent over the coming years, with most of that in Australia rather than offshore. “This means more high-paying **R&D** jobs in Australia and more valuable intellectual property held here,” he said.

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# The Sydney Morning Herald

Business

## Industry sounds investment alarm on 'world's lowest' R & D incentive

Nassim Khadem, Nick Toscano

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### BUDGET

Some of Australia's largest companies will have their tax **incentives** for local research and development programs cut in half under this week's federal budget changes, with industry leaders and experts warning more work may shift offshore. In a move to save \$2 billion over four years, federal Treasurer Scott Morrison has announced a revamp of Australia's research and development tax **incentives**, which, he says, will ensure the policy supports genuine investment in innovation.

The most divisive part of package is a new "intensity measure", under which companies with turnover of \$20 million or more will, in most cases, be adversely affected.

Large businesses across manufacturing, pharmaceutical and biotech industries are bracing for a dramatic drop in their **R&D** tax savings from 8.5 per cent to 4 per cent.

If a company's **R&D** "intensity" — that is, expenditures on its research and development divided by its sale — is between zero per cent and 2 per cent, the company will only be eligible for a tax offset of 4 per cent. But if intensity range is above 10 per cent, it will be able to attract a higher rate of 12.5 per cent.

Representatives for some of the country's top manufacturers — including Dulux, BlueScope, Brickworks, CSR and Rheem — said the change would create a "two-speed **R&D** system".

"What we will see is a system that benefits international companies while disadvantaging local manufacturers," said Ben Eade, executive director of Manufacturing Australia.



"Multinational manufacturers that choose to undertake **R&D** in Australia but little or no local production are likely to see their **incentives** increase, but local manufacturers who undertake comparable **R&D** but have a capital-intensive cost base in Australia ... are likely under these changes to see their **incentives** halve."

Mr Eade said the industry agreed with the government on the need to manage costs of the scheme but it must be "equitable".

"It's too early to say whether specific manufacturers would [move **R&D** offshore], but this would certainly weaken the case for research and development to remain in Australia," he said.

KPMG Australia's lead partner for **R&D** advisory, David Gelb, said a 4 per cent **R&D tax incentive** would be the lowest rate in 33 years and "lowest in the world".

"Companies are likely considering more attractive offshore locations to undertake **R&D** as a result of this," he said.

PwC partner Sandra Boswell said Hong Kong and New Zealand had both recently announced "new, more attractive **R&D** programs with one base rate of 9 per cent in both territories".

"We are the only country that has reduced rates for the majority of claimants in 2018," she said.

Ms Boswell said small companies — those with less than \$20 million turnover — had "fared somewhat better".

A spokeswoman for CSL said the company would await more detail to assess the impact on its annual \$800 million spend on **R&D**.

CSL said the **R&D tax incentive** was just one factor taken into account when it decided where to base its investments but it was a "significant factor in Australia's international competitiveness.

Cochlear chief executive Dig Howitt welcomed the lift in the previous \$100 million cap to \$150 million which was restricting its ability to increase its local spend saying it could allow the company to grow its local investment.

"Now that cap has increased, we will continue to get a tax benefit, which makes Australia more attractive, we will be more inclined to do it [invest in **R&D**] in Australia," he said.

Cochlear's **R&D** intensity is above 10 per cent which means it qualifies for the highest offset rate, which is 12.5 per cent. Mr Howitt said the change rewards companies that are genuinely investing in **R&D**.

But tax experts say Cochlear may be a rarity among companies with \$20 million plus turnover.

Kris Gale, of **R&D** advisory firm Michael Johnson Associates, was involved in the redesign of the **incentive** back in 2011. He agreed that most \$20 million-plus companies would be left worse off by the intensity measure.

"There seems to be an attack on Australian mainstream companies again for the sins of some smaller start up companies," he said.

"We have an environment where business expenditure on **R&D** is going down and the program that supports it is being undermined."

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# FINANCIAL REVIEW

Budget

**R & D at risk of going offshore as incentive payments slashed**

Ben Potter and Michael Bailey

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AFNR

First

10

English

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Research

Australia is at risk of losing research and development done by manufacturers and mining companies to other countries after the budget slashed \$1 billion a year from the **R&D tax incentive** scheme without offsetting increases in grants elsewhere.

The budget saves \$2.9 billion on the **R&D incentive** scheme over 2018-19 to 2020-21 by reducing grant levels for many claimants and beefing up compliance and enforcement measures, including handing Innovation & Science Australia (ISA) the same power as the Australian Taxation Office to set precedent on claims under the scheme.

But none of that money goes back into the sector via the increased direct grants for **R&D** that ISA recommended in its Australia 2030: Prosperity through innovation report released in January.

EY national **R&D** director Jamie Munday said "old economy" companies in the mining, manufacturing, fast moving consumer goods and agriculture industries with high volumes, low margins and low **R&D** "intensity" will be among those hardest hit by the **new** rules.

Companies that spend less than 2 per cent of their sales on **R&D** - the so-called intensity measure - will be able to deduct that spend from their taxable income at a rate of just 4½ per cent above their standard company tax rate after 1 July.

Dulux warned it would lose more than half its **R&D incentive** payments under the **proposal** to reward

higher "**R&D** intensity".

But hearing implant pioneer Cochlear, which spends \$150 million or more than 12 per cent of sales on **R&D** including \$100 million in Australia, welcomed the **changes**. "This means more high paying **R&D** jobs in Australia and more valuable intellectual property held here," Cochlear's chief executive Dig Howitt said.

Previously the premium was 8½ per cent above the company rate - 27.5 per cent for companies with sales below \$50 million and 30 per cent for companies with sales above \$50 million - for all firms undertaking qualifying **R&D**. A year ago the premium was 10 per cent.

Mr Munday said the scheme would now be of marginal benefit to low **R&D** intensity companies when they take into account the increased cost of compliance, and that they could find other jurisdictions such as **New** Zealand - which offers a 12.5 per cent premium on deductions for **R&D** - more appealing for experiments.

"Some of those \$2.9 billion savings could have been redirected to this part of the ecosystem but what seems to have happened with the budget is those savings have been taken directly back into consolidated revenue."

An unintended consequence of the "**R&D** intensity" model was an advantage for importers at the expense of Australian manufacturers, according to manufacturing peak body Manufacturing Australia (MA).

The "intensity" model measured **R&D** as a proportion of total operating expenditure, disadvantaging an Australian manufacturer because it has a high domestic manufacturing cost base, said MA executive director Ben Eade.

"Under this **proposal**, an Australian manufacturer that employs Australian workers, buys Australian raw materials and pays for local inputs like energy and services can typically expect to receive less than half the **R&D incentive** afforded to a company that undertakes the same **R&D**, but imports the manufactured products," he said.

Businesses with turnover of less than \$20 million a year avoided the "worst case scenario" of reforms **proposed** by ISA in 2016, with a cap on annual **R&D** refunds set at \$4 million from July 1 instead of the feared \$2 million, the ignoring of a recommended lifetime cap on refunds, and the rate unchanged at 13.5 per cent above the company tax rate.

However there was still uncertainty around the "crackdown" on rorting mentioned by Treasurer Scott

Morrison in his budget speech, which the ISA's **new** powers would hopefully clear up, according to chief executive of start-up peak body StartupAUS, Alex McCauley.

"The **R&D incentive legislation** is too slanted to the 'R' - it's clearly based on the research model of **new** knowledge, a hypothesis-driven, scientific experimentation-based approach, and that's not a clear fit with development and commercialisation, particularly software development," Mr McCauley told The Australian Financial Review.

Genuine development work had been eligible for an **R&D** refund in the past, but less so since the ATO issued a directive on the scheme last year which saw claims from software start-ups for activities like beta testing begin to get rejected. "Software has begun a square peg in a round hole, and the stakes are really high here for startups and founders who often rely on this scheme for the survival of their business in its early stages," Mr McCauley said.

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