

Inquiry into the Treasury Laws Amendment (Research and Development Tax Incentive) Bill (2019) [Provisions] 06 April 2020



To the Senate Standing Committee on Economics,

Thank you for the opportunity to provide feedback on the inquiry into the Treasury Laws Amendment (Research and Development Tax Incentive) Bill 2019 [Provisions].

Science & Technology Australia (STA) is the peak body representing more than 88,000 scientists and technologists in Australia through our member organisations including associations and societies, research institutes, and research strategy bodies such as councils of deans.

The Research and Development Tax Incentive (RDTI) is the largest component to research funding in the Australian economy. According to the latest Science, Research and Innovation Tables the tax incentive accounted for \$2.6 billion in refundable and non-refundable credits for the 2017-18 financial year.

However, while the RDTI provides the largest single source of funding for research and development in Australia, the 2016 review into the RDTI highlighted some significant concerns on the effectiveness of the tax incentive.

The greatest concern was that the RDTI did not encourage new research and development. That is, the research and development attributed to the tax incentive would have most likely occurred without the incentive.

The review highlighted two broad areas that needed to be addressed to ensure the RDTI properly incentivised new and ground-breaking research in the private sector: improving the integrity of the program to ensure it did not incentivise research and development that would be conducted in the normal course of business; and increasing the effectiveness of the RDTI through encouraging collaborations.

While this legislation makes important moves to improving the integrity of the RDTI it does not implement any measures to increase the effectiveness of the RDTI. With the Research and Development Tax Incentive review in mind Science & Technology Australia recommends:

- 1. Creating a Research Translation Fund using the savings from the proposed legislation that improves the integrity of the RDTI; and
- 2. Introduce a 20 per cent collaboration premium for R&D projects that collaborate with Australian research institutes, universities or government agencies.

Associate Professor Jeremy Brownlie

President

Science & Technology Australia

Introduction

The Research & Development Tax Incentive (RDTI), initially implemented in 1986, has been a key policy and financial lever to provide incentives for the business sector to invest in research and development¹. More recently, the *Stimulating Business Investment in Innovation*² report highlighted that businesses with a "growth by innovation" mindset were longer lived and had a higher sustained growth rate.

In 2016, however, a review of the RDTI highlighted that problems with the current legislation meant the RDTI was not effective in incentivising industry to undertake research and development they would not have done anyway³.

Australia, like other economies, is also facing global challenges affecting domestic and global economies. Investment in research and development is a proven way to ensure that Australian industries can boost labour productivity and compete on a global scale. One way to provide a cost-effective boost to the economy is to ensure that industry has a "growth through innovation" mindset.

While STA supports the legislation in its goal to improve the integrity of the RDTI we do not agree that savings achieved through this legislation should be directed to budgetary savings. Given the current economic situation, STA recommends amending the proposed legislation to encourage collaboration through a collaboration premium and direct any savings to a new research translation fund.

More specifically STA recommends:

- 1. Creating a Research Translation Fund using the savings from the proposed legislation that improves the integrity of the RDTI; and
- 2. Introduce a 20 per cent collaboration premium for R&D projects that collaborate with Australian research institutes, universities or government agencies.

Implementation of a Research Translation Fund

While the RDTI is the single largest source of funding for research and development in Australia it is becoming less effective in encouraging new research from the private sector. Since 2016-17 the investment from the RDTI has fallen indicating that less is being spent by industry on research and development⁴. This fall in investment has come at a time when investment in research and development should be incentivised to stimulate the economy.

The RDTI review emphasised that the tax incentive was not effective in incentivising research and development in Australia. A recent report from Innovation and Science Australia also highlighted the failings of the RDTI, but legislation still does little to address these shortfalls.

Australia is also one of the few economies that incentivises business investment in research and development almost wholly through a tax incentive. Germany mostly incentivises industry research and development through direct funding sources⁵, while Singapore and Finland utilise co-investment programs to encourage business investment in research and development. These countries are

¹ "Bill Digest: Treasury Laws Amendment (Research and Development Tax Incentive) Bill 2019" Parliamentary Library, 2020

² "Stimulating business investment in innovation" Innovation and Science Australia, 2020

³ "Review of the R&D tax incentive" B. Ferris, A. Finkel, & J. Fraser, 2016

⁴ "<u>Science, Research and Innovation Budget Tables</u>" Department of Industry, Science, Energy and Resources, 2019

⁵ "OECD Time-Series estimates of government tax relief for business R&D" OECD, 2019

considered highly innovative economies who have reaped the benefits of long-term, effective strategies to incentivise business research and development.

While STA supports tightening the language around the RDTI we call for the anticipated savings to be reinvested to incentive business investment in research. Changes to the RDTI are expected to save \$435 million in the 2020-21 financial year alone⁶ and, at a time when business investment in research is falling, these savings provide a new opportunity for the innovation sector.

To incentivise more business investment in research and development STA recommends reinvesting the savings from this legislation into the sector through a research translation fund. Australia has seen great success from the Medical Research Future Fund⁷ and its work in research translation. Such success stories include developing genetic tests to identify people at high risks of heart disease, and novel devices to monitor brain oxygen levels following a traumatic brain injury⁸. The implementation of a research translation fund is the perfect opportunity to build upon this success.

A Research Translation Fund would work to translate research from disciplines covered by the Australian Research Council in the same way that the Medical Research Future Fund works to translate research covered by the National Health and Medical Research Council. International examples have previously shown how such funds can be successful beyond the medical technology sector. Companies that have been founded on innovative ideas like Compaq and Intel both began only after receiving government support through the Small Business Innovation Research Scheme⁹

In the current research funding environment, ARC Linkage grants aim to provide funding for industry backed research, but this is still heavily researcher driven. While the linkage grants can work to turn research into final products the research translation fund would then develop these products into new and exciting industries in Australia's economy. We anticipate the Australian Research Council would administer such a research fund with a focus on addressing gaps in the innovation pipeline for key Australian industries.

STA Recommends: creating a research translation fund to reinvest savings from changes to the RDTI.

Incentivising collaboration between industry and universities

A key recommendation from the RDTI review was including a collaboration premium as part of the tax incentive¹⁰. This collaboration premium would incentivise businesses to collaborate with research institutes on research and development programs. Innovation and Science Australia later backed this call in their Australia 2030: Prosperity through Innovation¹¹ which outlined the benefits of collaboration between universities and the private sector.

Increasing collaboration between industry and universities has been a cornerstone of recent government innovation policy, and this legislation provides the opportunity to further strengthen these collaborations. The review of the research training system recommended research students gain

⁶ "<u>Bill Digest: Treasury Laws Amendment (Research and Development Tax Incentive) Bill 2019</u>" Parliamentary Library, 2020

⁷ "Medical Research Future Fund" Department of Health, Accessed March 2020

⁸ "BioMedTechHorizons" MTPConnect, Accessed Match 2020

⁹ "<u>Public financing of innovation: new questions</u>" M. Mazzucato & Gregor Semieniuk, Oxford Review of Economic Policy, 2017

¹⁰ "Review of the R&D tax incentive" B. Ferris, A. Finkel, & J. Fraser, 2016

¹¹ "Australia 2030: Prosperity through Innovation" Innovation and Science Australia, 2017

industry experience through the Australian Postgraduate Internships¹². Programs such as the Cooperative Research Centres¹³ and the Medical Research Future Fund show the importance of developing new markets through collaboration between researchers and industry.

There are also financial benefits to industries and businesses that collaborate with research institutions. It provides smaller businesses with access to expertise it may not be able to support in house, and it provides universities an avenue to create greater impact with their expertise. Overall, businesses that collaborate with universities receive a return on investment of \$4.47 for every dollar spent. Such a return on investment adds \$26.5 billion to the Australian economy and supports 38,500 fulltime jobs¹⁴. While research and development collaboration may already boost the economy, there are still greater opportunities to be unlocked.

A collaboration premium has the added advantage of encouraging businesses to invest in research and development here in Australia. According to the latest figures from the Australian Bureau of Statistics, the largest increase in business expenditure in research and development was incurred overseas. This was an increase of \$534 million in research investment, investment that could be going to Australian universities¹⁵.

STA Recommends: Introduce a 20 per cent collaboration premium for R&D projects that collaborate with Australian research institutes, universities or government agencies.

¹² "APR Intern" Australian Mathematical Sciences Institute, Accessed March 2020

¹³ "Funding for long-term, industry-led research collaborations" Australian Government, Accessed March 2020

¹⁴ "Uni-Business collaborations deliver strong returns on investment" Universities Australia 2020

¹⁵ "Research and Experimental Development, Businesses, Australia, 201-18" Australian Bureau of Statistics, 2019