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29 February 2016

R&D TAX INCENTIVE REVIEW - ISSUES PAPER RESPONSE

Dear Sir/Madam

As part of the review of the R&D Tax Incentive programme, we are pleased to provide you with BDO's response to the Issues Paper published by the Centre for International Economics.

In the following response we provide the following:

- Outline the key observations made of the Issues Paper
- Address the issues underlying these observations
- Provide feedback on the review progress to date and its current trajectory
- Recommend methods that improve the programme's efficiency and reduce compliance costs
- Suggest cost cutting measures for consideration to ensure long term programme viability

Should you wish to discuss any of the items raised within the response further, please feel free to contact me on +61 2 9240 9736, or via email Lance.Cunningham@bdo.com.au.

Yours sincerely



Lance Cunningham
BDO National Tax Director

Executive Summary

Per the issues paper, the Government has asked the review to identify opportunities to improve the effectiveness and integrity of the R&D Tax Incentive, including by sharpening its focus on encouraging additional R&D expenditure.

BDO recognises that despite the scope of the review outlined above, a key driver for the review is to reign in the increasing cost of the R&D tax incentive. It is BDO's strong view that the programme, for the most part, is achieving its objective. In fact, the increasing cost is, in itself, evidence of its effectiveness in encouraging additional R&D. Nonetheless, we have set out in the next section our recommendations that may assist in containing the cost of the programme without damaging its accessibility, integrity, global competitiveness and effectiveness.

In terms of the issues paper itself, we make the following key observations:

- Business requires certainty. Companies have made long term decisions regarding the nature and location of their R&D based on the R&D tax incentive as it was implemented in 2011. Whilst recognising the Government's responsibility to ensure the programme is operating as intended, flagging substantive change less than 5 years after its introduction without first finding on its effectiveness, removes confidence in the programme
- The premise of The Centre for International Economics ("CIE")'s paper appears to be flawed as it relies on a misinterpretation of the R&D Tax Incentives object. In the introduction CIE misquotes the object as it is legislated by including a reference to the 'private benefits to firms'. This reference substantially narrows the scope of what is considered 'additional R&D' by effectively ignoring any R&D that benefits a firm even if it would not have occurred in the absence of the programme
- The R&D Tax Incentive was introduced as a replacement mechanism for the R&D Tax Concession and was developed with a great deal of feedback from industry stakeholders. The continued growth in applicants and positive stakeholder feedback suggest that R&D Tax Incentive is, for the most part working as intended
- The issues paper focusses too narrowly on the concept of additionality and narrowly defines that term in itself. Whilst, recognising additionality as being an objective of the programme as currently worded in Sub-division 355-A of the Income Tax Assessment Act 1997, that concept was introduced by the then Labor Government and no consideration has been given as to whether this should indeed be the objective
- Under the coalition Government the objective of the Concession was to encourage R&D in Australia and make Australian business more internationally competitive. It is our view that it certainly achieves this latter objective.
- The tax incentive is designed to be a business incentive, similar to most other R&D incentives around the world. It is not designed to benefit universities or other public sector research organisations.
- The paper for the large part fails to list assumptions made, methodologies used and only has limited references to empirical data.

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Policy Design

Programme Objectives

In the Issues Paper, CIE defines the objective of the R&D Tax Incentive as a programme to “*support industry to conduct R&D activities that might otherwise not be conducted because the private benefits to firms may be less than the wider benefit to the Australian society*”. This is a misquotation of the object as written in Subdivision 355-A of ITAA 1997.

ITAA1997 s355-A | Object

“The object of this Division is to encourage industry to conduct research and development activities that might otherwise not be conducted because of an uncertain return from the activities, in cases where the knowledge gained is likely to benefit the wider Australian economy.”

The reference to ‘private benefits’ is not the same as the object clause in s355-A and we are concerned that the reference to “private benefits” could be seen as substantively changing the object of the programme, narrowing the definition to a very specific type of R&D. CIE’s definition could be seen as effectively excluding R&D activities that benefit a firm even if they would not have occurred in the absence of the programme. We assume the reference to “private benefits” is just a shorthand way of describing the current object provision that refers to “activities that might otherwise not be conducted because of an uncertain return from the activities” and there is no intention of changing the object of the R&D Tax Incentive.

We also it more concerning that CIE goes further by narrowing the definition to generating ‘additionality’ and ‘spillovers’. While these are useful tools for measuring the performance of the program, these do not exclusively represent the object of the program. This is a narrow reading of the object for a programme that was intentionally designed to be a broad-based.

Related Materials

When considering the object of the Industry Research & Development Act 1986, it defines additional objectives including improving efficiency and international competitiveness of the Australian industry. Similar goals are shared by many international R&D incentive programmes and they do not necessarily align with the ‘additionality’ and ‘spillovers’ described by CIE.

IRDA 1986 – Part I-3 | Object of Act

“The object of this Act is to promote the development, and improve the efficiency and international competitiveness, of Australian industry by encouraging R&D activities, innovation activities and venture capital activities.”

The object of the IRDA 1986 is also mirrored in the object of the repealed R&D Tax Concession legislation. While repealed, this object provides a historical point of reference for the R&D Tax Incentive.

ITAA 1936 – 73B 1AAA | Object of this section

“The object of this section is to provide a tax incentive, in the form of a deduction, to encourage research and development activities in Australia and make eligible companies more internationally competitive...”

CIE must consider the R&D Tax Incentive as whole, taking information from related materials to establish the true purpose of the programme. It cannot rely on the narrow interpretation presented in the Issues Paper.

Collaboration

At all levels of government there is currently a strong push for an increase in collaboration between publically funded research organisations and industry on R&D projects. The scope of the R&D Tax Incentive review includes investigating whether the programme can help contribute to this policy goal.

However to encourage collaboration, particularly with small & medium enterprises (SMEs), the universities need to remove the impediments for business to want to collaborate. Namely, relevance of the research being done by our universities; timeliness of universities to respond to research needs and commerciality of contractual arrangements including around intellectual property rights.¹

Enhancing the R&D Tax Incentive

One option for improving the R&D Tax Incentive to encourage additional R&D partnerships is through replicating the French R&D Tax Credit, recognised as one of the leading R&D incentives in Europe. The French system rewards industry partners for undertaking R&D projects in collaboration with public research organisations by allowing businesses to claim 200% of the costs invoiced by public research organisations.²

Additional Mechanisms

The Government already has in place a couple of programs, in addition to the R&D Tax Incentive that help to address these hurdles including the Australian Research Council Linkage Projects (Applicable Research) and the Innovation Partnerships (Strategic Connections) programs.

Other mechanisms that could potentially be introduced, in addition to the R&D Tax Incentive that would encourage research partnerships include:

- A programme that allows public and private entities to reach agreeable terms more readily regarding IP rights and contract design
- A programme that encourages the mobility of researchers into the private sector, and private industry experts into the public research sector, without negatively impacting job prospects.¹

1 Economic Insight Ltd, "What is the relationship between public and private investment in science, research and innovation?," Economic Insight Ltd, London, 2015.

2 Business France, "France's Research Tax Credit," 2016. [Online]. Available: <http://en.businessfrance.fr/portfolio-posts/frances-research-tax-credit/>. [Accessed 20 February 2016].

Policy Rationale

The R&D Tax Incentive is a well-constructed programme that has relied on an expansive amount of stakeholder feedback. It is BDO's strong position that a tax credit type system is a much more efficient and effective system for encouraging R&D within Australia, compared to alternative discretionary subsidies such as a discretionary grant. This is supported by a wide body of evidence. Beneficial properties of a tax credit system include:

- Lower compliance costs³
- Higher rates of additionality⁴
- Higher accessibility⁵

Further, discretionary subsidies can become subject to the 'Matthew Effect'.⁷ This causes successful recipients to appear more competent and therefore more likely to be successful in future applications, crowding out new entrants.⁷ The Matthew Effect also establishes a reliance on public funding for R&D by these recipients, resulting in the reduction of private contributions to the programme and therefore a reduction in the additionality generated per dollar of public funding.⁶

Garza et al. (2015) also suggest that discretionary systems have the potential to "*induce competing firms to over-spend on R&D, generating negative producer surplus and possibly negative social returns.*"

R&D Definition

BDO agrees with CIE's assertion that, when read widely, the 'Core R&D Activity' definition is flexible enough to apply to a range of R&D activities across a number of industries. The definition broadly aligns with other accepted definitions such as the definition established in the Frascati Manual.⁷ Attempting to adjust the definition so that it is more prescriptive will only increase industry uncertainty and raise the compliance costs associated with the programme.

3 Economic Insight Ltd, "What is the relationship between public and private investment in science, research and innovation?", Economic Insight Ltd, London, 2015.

4 D. Garza, Y. Giat, S. T. Hackman and D. Peled, "A computational analysis of R&D support programs," *Economics of Innovation and New Technology*, vol. 24, no. 7, pp. 682-709, 2015.

5 Bettina Becker; Aston Business School, "Public R&D policies and private R&D investment: A survey of the empirical evidence," *Journal of Economic Surveys*, pp. 917-942, 2015.

6 C. Antonelli and F. Crespi, "The 'Matthew effect' in R&D public subsidies: The Italian evidence," *Technological Forecasting & Social Change*, pp. 1523-1534, 2013.

7 OECD, Frascati Manual 2015: Guidelines for collecting and reporting data on research and experimental development, Paris: OECD Publications, 2015.

Rates and Caps

Rate Reduction

It is BDO's position that the R&D offset rates should remain a 45% and 40% for businesses with aggregated turnovers of <\$20 million and >\$20 million respectively. The effective subsidy rates for both SMEs and large businesses are below the international average and reducing these rates further could potentially resulting in multinationals choosing to complete their R&D elsewhere.

Further, the Tax and Superannuation Laws Amendment (2015 Measures No. 3) Bill 2015, that includes the 1.5% reduction of the R&D tax offsets to 43.5% for and 38.5% is poorly constructed. The policy has failed to consider both the clawback and feedstock adjustment mechanisms in Subdivisions 355-G and 355-H of ITAA 1997. The Bill in its current form could potentially result in a company making a loss on its R&D activities if either the clawback or feedstock provisions are triggered.

Programme Caps

\$100 Million Cap

The results of the \$100 million cap introduced on 1 July 2015 are yet to be seen. However it is possible that there may only be a limited reduction in the total cost of the program. The Law as it was introduced fails to include a 'connected with' test, and therefore a large corporate body could potentially establish new R&D entities to access additional funding above the cap. The 'connected with' test could use similar wording to the 'connected with' test in the small business concessions in Division 328 ITAA 1997, which would give a \$100m expenditure cap for a group of connected entities. Through introducing a 'connected with' test the Government could potentially reduce the cost of the programme further with minor changes to the legislation.

Refundable Cap

Another potential mechanism for reducing the direct cost of the programme is place a cap on the refundable component of the program, with the remaining offset converted to carry forward losses. Again, the Government must be careful when considering this cap as it would negatively impact the cash flows for some startups potentially resulting in a reduction of R&D intensity in SMEs.

Non-Refundable Offset for Overseas IP

A number of multinational companies are taking advantage of the refundable component of the Australian R&D Tax Incentive. These companies establish startups in Australia to undertake the R&D while holding the IP offshore. During the initial stages R&D the Startup makes use of the refundable offset and then either closes the business if the R&D fails, or move overseas if the commerciality of the IP is realised. In both scenarios, the multinational entity does little to contribute to the long term growth of the wider Australian economy.

A potential approaches for addressing the issue include either:

- Restricting multinationals that hold IP offshore to the non-refundable component of the programme
- Introduce a lower cap on the refundable component of the program.

Patent Box

Another potential option to encourage the retention of IP in Australia structure is to introduce a 'Patent Box' system similar to that in the UK. The Patent Box incentivises businesses to hold IP within Australia and will complement the R&D Tax Incentive by increasing the rate of Output Additionality achieved by the program.

Deferred Franking Debits

One substantial pitfall with the current policy design is the special deferred franking debits (DFD) rules. Under the current rules, the full 45% offset is eventually clawed back effectively removing the benefit from a company and its investors. This structure provides investors with limited incentive to undertake R&D over business-as-usual activities defeating the purpose of the program.

We suggest that these rules are changed to limit the DFD clawback to the 30% deduction while leaving the 15% incentive in the hands of the company and its investors.

Measuring Performance

28.5% Corporate Tax Rate

The paper makes reference to the reduction in the corporate tax rate to 28.5% for small profitable companies with a turnover of <\$2 million. We note that this change takes place from 1 July 2015 (the current financial year) and does not apply to the years in review by CIE. If this rate was applied to financial years prior to 2015, then CIE's analysis would be incorrect.

Refundable Offset

In the issues paper CIE states at page 1:

"The refundable tax offset means that where a company's tax liability is smaller than the value of the R&D tax offset they receive the full, benefit as an immediate refund rather than carrying forward the offset as in the non-refundable component"

This statement is either poorly worded, or wrong. For companies that are eligible for the refundable offset, if the tax liability is smaller than the value of the offset, they will receive a portion of the benefit based on the company's taxable position. The company will only receive the full benefit if the business is operating with a loss greater than the offset.

CIE should ensure that it has correctly modelled the refundable offset component of the R&D Tax Incentive.

International Experience

BDO recommends that CIE scrutinise the values provided by the OECD in reference to the Australian tax subsidy rates for R&D expenditure. We note that the effective subsidies for the offsets are 10 cents for large companies (Aggregated Turnover >\$20 million) and 15 cents for SMEs (Aggregated Turnover <\$20 million) in Australian dollars under the R&D Tax Incentive.

The 1-B Index provided by the OECD is equalised in USD, and while the subsidy rates for large profitable and loss-making companies appear to be correct, using the following assumptions:

- Current Conversion Rate - AUD = 0.8 USD
- Discounting rate of 10% for carried forward losses
- 50% chance of a business becoming profitable in the subsequent year

The 20 cent value for SMEs appears to be incorrect, or at the very least considers other benefits in addition to the R&D Tax Incentive.

Assuming the same currency conversion rate, it would place the Australian effective subsidy rate at 12 cents for the R&D Tax Incentive for both profitable and loss making SMEs (since the offset is refundable). This rate would place Australia below the average subsidy rates for both large companies and SMEs.

Additionality

Additionality rates are a useful tool for quantifying the performance of R&D incentive programs, however it heavily relies on the assumptions and methodology used.⁸ In the paper CIE has not only oversimplified additionality, it has also failed to demonstrate the assumptions and methodology that is has used.

There are three established types of additionality that can be generated from R&D Incentive programs including Input, Output and 'Behavioural Additionality'. The paper fails to consider the different types of additionality, which may result in a flawed analysis of the R&D Tax Incentive performance.

Input Additionality

'Input Additionality' can be briefly described as the additional dollar value of private funds spent on R&D activities for each dollar of support provided. This appears to be the only type of additionality considered by CIE. This is suggested by the definition of Additionality used by CIE - '*R&D that would not be undertaken in the absence of the programme*'; and the ratio used to calculate the additionality rate - '*additional dollars of R&D per dollar of tax forgone*'.

'Input Additionality' does not necessarily translate to additional R&D activities. For example, a firm may choose to pay its R&D manager an increased salary instead of hiring an additional researcher; this would result in an increased R&D spend without contributing to any additional R&D.⁹

Input Additionality also relies on a number of assumptions that tend to generalise the results of R&D activities potentially masking the benefits of the program, including:

⁸ IDEA Consult; Rachel Falk, "Does Europe change R&D-behaviour: Assessing the behavioural additionality of the Sixth Framework Programme," IDEA Consult, Brussels, 2009.

⁹ IDEA Consult; Rachel Falk, "Does Europe change R&D-behaviour: Assessing the behavioural additionality of the Sixth Framework Programme," IDEA Consult, Brussels, 2009.

1. There is a linear relationship between R&D inputs (funding) and R&D outputs (improved competitiveness, productivity and economic contribution)
2. Returns of scale remain the same for all companies no matter their size or industry
3. Public and private funding generate the same level of R&D outputs per dollar invested

Output Additionality

Analysing ‘Input Additionality’ in conjunction with the ‘Output Additionality’ can ensure a more accurate analysis of the programme’s performance and mitigate the impact of the flawed assumptions associated with the ‘Input Additionality’ value.¹⁰

‘Output Additionality’ includes any outputs from R&D activities that would not have occurred without the public funding, for example:

- New or improved products, processes, services or devices
- Improved business competitiveness or efficiency
- Additional jobs associated with the commercialisation of the R&D outputs
- Experience or understanding that leads to future R&D activities.

While CIE does consider Spillovers, this is only an indirect measure of Output Additionality. It considers the flow-on effects of Output Additionality into the wider economy. In its survey, CIE included questions in the ‘Consequences of R&D’ section to comment on the outcomes of R&D activities. An analysis of these results has not been included in the Issues Paper.

Behavioural Additionality

Behavioural additionality refers to the behavioural changes that occur in an organisation that lead to more efficient or effective R&D as a result of public funding and policy design. The Department of Industry, Tourism and Resources (DITR) carried out a study of the Behavioural Additionality of the R&D Tax Concession during the 2004-05 financial year (the 2005 year). The review consisted of a survey that addressed the following behavioural changes:

- Commitment to R&D
- R&D management
- Business strategy
- Product commercialisation
- New collaboration with public and private entities

¹⁰ IDEA Consult; Rachel Falk, “Does Europe change R&D-behaviour: Assessing the behavioural additionality of the Sixth Framework Programme,” IDEA Consult, Brussels, 2009.

The review found that between 86% and 98% of respondents experienced positive behavioural changes as a result of undertaking an R&D project registered under the R&D Tax Concession.¹¹ DITR estimated that for the 5,830 applicants in 2005, the net economic benefit of the behavioural changes was in the range of \$150m to \$300m.¹¹

Assuming the R&D Tax Incentive has a similar degree of Behavioural Additionality as the concession, the estimated economic impact of 2013-14 financial years would be in the range of \$350m to \$680m (adjusting for inflation and the diminishing return for applicants previously involved in the program). This would effectively increase the total Additionality rates from 20% to 40%.

Methodology

The Issues Paper does not demonstrate the methodology CIE used to calculate the Input Additionality rates limiting scrutiny of the results. Only question 13 in the survey distributed by CIE allowed respondents to place an estimate on Input Additionality generated by the program.

In the paper CIE explicitly refers to ‘new R&D’ suggesting that it has failed to consider the extension of existing R&D projects. The extension of R&D projects still represents additionality, as it represents an additional R&D activity that would not have occurred in the absence of the program. Examples of project extension include:

- Acceleration of an R&D project through additional resources made available by the R&D Tax Incentive funds
- Expanding the R&D project scope to address additional unknowns or enhance the likelihood of beneficial result

In the behavioural review of the R&D Tax Concession 71% of respondents stated that R&D would have been slower without assistance and 73% stated that R&D would have continued, albeit with a smaller budget.¹² These results demonstrate the incentive programs can have a substantial impact on additionality through extension.

Compliance & Administration

Timing

Two Year Claims for First Time Applicants

It is BDO’s position that the Government should introduce an option for first time applicants to claim expenditure on the first two years of R&D activities, similar to that of the Export Market Development Grant programme.

We have seen a number of Startup companies miss out on the support of the R&D Tax Incentive as they were either too focused on establishing the business and its IP, or they had not yet heard of the programme.

¹¹ Department of Industry, Tourism and Resources, “How R&D Assistance Influences Company Behaviour,” Department of Industry, Tourism and Resources, Canberra, 2007.

¹² Department of Industry, Tourism and Resources, “How R&D Assistance Influences Company Behaviour,” Department of Industry, Tourism and Resources, Canberra, 2007.

Allowing startups to claim an additional year of R&D activities would substantially improve the cash flow and stability of new businesses while only slightly increasing the total cost of the program.

Pre-Registration

The suggestion of pre-registration demonstrates a lack of understanding of R&D in a commercial environment. The nature of R&D in itself means that the level of detail required to demonstrate eligibility may not be known in advance. Programs of work regularly start, stop or change direction. Not being specifically tied to R&D funding enables the nimbleness required for commerciality.

CIE has pointed towards the high levels of additionality achieved by the Norwegian R&D Tax Credit - SkatteFUNN. However, in doing so it has failed to consider a range of other measurable factors including both the industry composition, accessibility and compliance cost of the program.

For example, the accessibility of SkatteFUNN is substantially worse than the Australian R&D Tax Incentive. Erik Furseth, a senior advisor at The Research Council of Norway (SkatteFUNN's administrator), stated that only 0.7% of all Norwegian companies make use of SkatteFUNN, and that they would like to see that number increase.¹³ Comparatively, in 2014 more than 13,000 applicants participated in the R&D Tax Incentive out of roughly 750,000 actively trading Australian companies suggesting a participation rate of 1.7%, more than double that achieved in Norway.¹⁴ This suggests the Australian programme is much more accessible than SkatteFUNN.

A recent analysis of SkatteFUNN also suggests that as a result of the methodology used in previous studies, additionality generated by the programme has been overestimated as researchers failed to consider other economic impacts.¹⁵

Two Agency Model

BDO believes the two agency model provides a level of integrity and balance to the programme. The 'cultural' difference referred to by CIE in the Issues Paper lends the programme a degree of integrity. The conflicting positions, delivering benefits vs. collecting revenue, allow the two agencies to strike a balance, which in theory will result in an objective and fair application of the law.

Innovation Australia represents a source of expert knowledge that can be leveraged to assist in the administration and strategic oversight for a range of innovation programmes including:

13 GCE NODE, "Norsafe tops Skattefunn project list," 9 February 2016. [Online]. Available: <http://gcenode.no/news/norsafe-tops-skattefunn-project-list/>. [Accessed 24 February 2016].

14 Australian Bureau of Statistics, "8165.0 - Counts of Australian Businesses, including Entries and Exits, Jun 2010 to Jun 2014," 2 March 2015. [Online]. Available: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0>. [Accessed 23 February 2016].

15 F. Castellaci and C. M. Lie, "Do the effects of R&D tax credits vary across industries? A meta-regression analysis," *Research Policy*, vol. 44, pp. 819-832, 2015.

- R&D Tax Incentive
- Entrepreneurs' Programme
- Accelerating Commercialisation
- Venture Capital Programmes
- Cooperative Research Centres Programme

Even without the R&D Tax Incentive, Innovation Australia would likely exist in some form or another. Therefore its knowledge should be utilised to prevent the potential wastage generated from having similar roles within both the ATO and Innovation Australia.

Compliance Costs

Stakeholder feedback published by CIE suggests that many applicants consider the compliance costs to be reasonable, except in the case of post-claim compliance reviews. In the survey, CIE requested that businesses include estimates for the following values:

- Preparing the application and claim
- Inclusion in the company Income Tax Return
- Post-project record keeping and compliance
- Other compliance costs

We recommend that CIE investigates the nature of the compliance costs based on this breakdown when developing a method on how best to improve the programmes performance. The stakeholder feedback published by CIE suggests that a majority of the unnecessary compliance costs are likely associated with the post-project compliance activities, which found low levels of non-compliance.

BDO also notes that record keeping is a good business practice for entities carrying out R&D activities and could potentially be considered behavioural additionality.

Improved Compliance Strategies

A substantial reduction in the cost of compliance can be achieved through refining AusIndustry's compliance strategy making it more consultative and less risk-averse. As mentioned by CIE, recent evidence from the compliance review process has found that there are low levels of non-compliance. This suggests a less risk-averse approach can be taken with minimal impact to compliance rates.

UK & USA Self-Assessment Model

One method for reducing compliance costs would be to switch to the self-assessment model employed by both the UK and USA for their respective R&D tax credits. Under this model, applicants would only be reviewed if they were selected for audit by AusIndustry or the ATO. This would substantially reduce an applicant's administrative burden associated with the annual activity registration activities.

Evidence suggests that this system still achieves reasonable rates of Input Additionally. A recent study of the UK system suggests additionality ratio of 1.53-2.35:1 GBP per GBP of forgone tax, with estimates for the US sitting closer to a 1:1 USD for each USD of forgone tax.¹⁶¹⁷ These are broadly similar to, if not slightly better than the rates achieved under the R&D Tax Incentive.

Systematic Compliance

Another less substantive change that streamlines the compliance process is to place a greater focus on systematic compliance rather than the reactionary approach currently employed by AusIndustry. The current system places a substantial focus on the 'requests for information' (RFI) and review meetings. This approach damages the value of the programme by:

- Removing an applicant's technical staff from R&D activities in favour of administrative activities resulting in an increase of compliance costs and a reduction in R&D results
- Placing a greater administrative burden on AusIndustry that is not necessarily required, as demonstrated by the high levels of compliance.

In line with Government policy, AusIndustry should take a less risk-averse systematic compliance strategy, for example:

1. Applicant submits an application that is found to have low to moderate risk of non-compliance
2. AusIndustry issues a 'Notice to Act' (NTA) suggesting changes for future applications
3. If the applicant fails to comply with the NTA in the subsequent application or continues to demonstrate a low to moderate risk of non-compliance, AusIndustry can elevate the applicant to the formal review process.

We note that AusIndustry does use a similar approach; however the NTA is often delivered to a client after responding to and RFI thereby failing to reduce the time-cost of preparing an RFI response.

Refined Compliance Queries

AusIndustry can also improve its approach when preparing RFIs. AusIndustry uses a basic template with minor modifications which often results in superfluous questions that have either been answered in the application or demonstrate a lack of understanding of the industry.

For example, recently a software developer was asked the following question:

“Question 7. Registered core activities 1.1, 2.1 and 3.1 appear to be occurring in a production environment. Please describe them in more detail and discuss the company's rationale for defining them as discrete core activities.”

For a software developer all R&D activity would occur within the development environment. The production environment for a developer is considered to the period after the product is released that includes distribution (physical or digital) and post-release support.

16 R. K. Fowkes, J. Sousa and N. Duncan, "Evaluation of Research and Development Tax Credit," HM Revenue & Customs, London, 2015.

17 B. Hall and J. VanReenen, "How effective are fiscal incentives for R&D? A review of the evidence," *Research Policy*, vol. 29, no. 4-5, pp. 449-469, 2000.

By refining the questions in an RFI so that they only address AusIndustry's key concerns it has the potential to substantially reduce the compliance cost associated with preparing and RFI response.

Application of the R&D Definition

In a number of recent RFI activities, AusIndustry's feedback on R&D activities drastically differs from what is broadly considered R&D activities within the legislative definition. In review activities AusIndustry often narrows the legislative definition of a core R&D activity through introducing additional criteria that are absent from Section 355-25 ITAA 1997. The following are some examples, of the narrowing definition applied by AusIndustry:

- AusIndustry suggests an eligible core R&D activity cannot include a standard experimental procedure, as the results can already be determined in advance. This is a flawed position as it fails to consider all the variables that could result in an unknown outcome, such as the various experimental parameters and their interactions.
- AusIndustry suggests that incremental R&D is ineligible, because the results can be determined in advance. The results of incremental R&D can be unknown and still create new knowledge.¹⁸ The core activity provisions do not require R&D to be revolutionary, or at the very least more than incremental.
- In a similar vein to standard procedures, AusIndustry has demonstrated a stance with modelling activities suggesting that, 'if a model is based on existing knowledge the results are already known'. This position is anachronistic when compared to the level of computerisation seen in industry. Many entities completing R&D activities now choose to develop prototypes and complete experiments '*in simulacra*'. These virtual experiments should still meet the legislative definition as the result is unknown, and can only be resolved through completing a systematic experimental process to create new knowledge.

This approach of narrowing the definition is demonstrated in the recent case of JLSP vs Innovation Australia, in which it was AusIndustry's took the position that 'for the purpose of generating new knowledge'¹⁹ should be read as 'for the dominant purpose' referring to other uses of the term within the legislation. This position would substantially restrict what is considered R&D under the law and was rejected by the AAT.²⁰

To minimise the cost of compliance, and avoid confusion with applicants AusIndustry must be consistent in its application of the law. It should not include arbitrary criteria that are absent from the legislative definitions.

18 OECD, Frascati Manual 2015: Guidelines for collecting and reporting data on research and experimental development, Paris: OECD Publications, 2015.

19 Income Tax Assessment Act 1997 s355.25(1)(b)

20 JLSP vs Innovation Australia [2016] AATA 23, 22 January 2016.

Conclusion

The R&D Tax Incentive is a well-constructed piece of legislation that encourages industry to undertake R&D activities that improves the international competitiveness of Australian companies and helps to grow the wider economy.

CIE's paper suggests a number of substantive changes that without careful consideration, could detrimentally impact Australia's innovators. In response BDO has offered a number of recommendations for small changes that would help to lower the cost of compliance and support more Australian startups. These recommendations include:

- Switching to a systematic compliance process
- Improve the communication between AusIndustry, applicants and tax advisors
- Ensure consistent application of the legislative definitions
- Enable first time applicants to claim two years' worth of activities and costs.

In addition to these measures, BDO has also suggested a number for low impact cost reduction measures for consideration including:

- Introducing a cap on the refundable component of the programme, with the remaining offset converted to a carry forward loss
- Implement a 'connected with' test on the \$100 million cap to prevent corporates from establishing new entities that can access additional funding
- Introducing mechanisms that exclude multinationals, which hold IP offshore from accessing the refundable component of the incentive.

These measures, combined with some of the other suggested mechanisms to encourage public-private collaboration and improve the commercialisation rate for research, will ensure the continued growth of innovation within Australia.

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