
# Submission to the R&D Tax Incentive Review Report

**Addressed to:**
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## Contributors

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# Summary

This submission focuses on two areas: our opposition to a tax incentive to hire science, technology, engineering and mathematics (STEM) PhD graduates, and the accessibility of R&D incentives for smaller businesses.

We recommend that tax incentives should not be applied based on formal STEM qualifications (such as PhD) of the person being hired, as doing so will create perverse incentives that will push people to do PhDs when it is unnecessary and make the labour market inefficient. We suggest that these individuals can be supported by proper funding of research institutions, national competitive grant schemes and the R&D tax incentives.

We also recommend that the R&D tax incentive be paid quarterly, and that the application process be simplified, to make the incentives more accessible to small businesses. Small businesses might be better placed to take advantage of R&D grants rather than tax incentives, due to lack of capital.

The Science Party supports Recommendation 1 from the Review Panel report, regarding providing greater clarity around eligible R&D activities.

# 1. Tax incentives for hiring PhD graduates in STEM fields

The Science Party is a strong supporter of higher education in STEM fields. However, we strongly oppose a tax incentive to hire STEM PhD graduates (Recommendation 2 from the Review Panel report).

### 1.1. Perverse incentives for employers and employees

This incentive will not promote the hiring of STEM professionals in greater numbers; rather, it will exclude STEM professionals who have lesser formal qualifications. If two candidates are roughly equal in suitability for a role, but one has a PhD, the one with a PhD would likely be chosen because they would be cheaper to hire under this incentive. With the government picking up the bill for the PhD training and for the tax incentive, the net benefit to the economy is negative.

A tax incentive to hire PhD graduates will compel STEM professionals with an undergraduate degree to undertake a PhD to make themselves more attractive to employers, whether or not this is the best career move for either the individual or the sector. If the PhD is unnecessary, unoriginal or unneeded, a large chunk of a person's career will have been taken out to attain a qualification simply to achieve a tax break for their employer.

### 1.2. Sovereign risk means the PhD market is inelastic

PhDs are a long-term commitment, sometimes taking up to five years in Australia. Government policies that try to stimulate PhD demand and increase PhD upskilling through tax incentives

(which only kick in once graduates are employed) have a sovereign risk element. There is a strong chance of a change in government—and a change in tax policy—within a five-year period.

As such, tax incentives will do little to incentivise individuals to attain a PhD in the short-term.

### 1.3. Won't have the intended effect of boosting collaboration

The Review Panel report suggests that "*Encouraging business to employ new STEM PhD graduates will facilitate the development and utilisation of informal networks between research organisations and business in the generation and commercialisation of new ideas*" (p.34).

This suggests that graduates will maintain links with their former educational institutions that will benefit the education and the graduate's new employer. However, if the culture of the workplace is pro-collaboration and pro-R&D, it is likely that those managers in a position to hire a PhD graduate will already be acquainted with the university departments undertaking similar or complementary work.

Also, many PhD graduates go on to work in a field not closely related to their area of study, in which case collaboration is not applicable. For example, physics graduates are sought after in the finance industry as they have a strong mathematics background.

### 1.4. Alternatives

The relatively low employment of STEM PhD graduates in their chosen fields is of concern, as it means much expertise goes unused. The Science Party believes that the government's role in increasing such employment is to grow the R&D sector by supporting the employment of highly-qualified STEM professionals—both directly (e.g. maintaining strong capabilities within the CSIRO) and through the provision of a larger pool of competitive research grants.

## 2. Availability of R&D incentives to small companies

### 2.1. The current incentives favour larger businesses

The current and recommended incentives are more useful for larger companies than for smaller ones, which seems to discourage the creation of new businesses. Smaller companies may not have the capital to take advantage of incentives such as hiring a new employee and would be better able to make use of grants to undertake R&D.

The R&D Tax incentive is not particularly helpful for startups for the following reasons:

- The R&D tax incentive is paid once yearly (while other taxes such as PAYG and GST are paid quarterly). This means that startups, which tend to have larger short-term cash-flow issues, may not be able to access the R&D tax incentive when they need it. There are companies that provide loans backed by R&D tax incentives, however they tend to have large interest charges. These loans also create complications for companies that wish to raise capital as many investors don't like to see debts that are coming due on the balance book;

- R&D tax incentives require the company to spend capital in order to access the incentive, which means that companies without capital will struggle to access the R&D tax incentive; and
- Accessing the R&D tax incentive requires relatively expert knowledge of the tax system, and hence trying to apply for the tax incentive for small amounts is outweighed by accounting overheads.

### 2.2. Recommendations to level the playing field between small and large business

To address these problems which mostly affect smaller businesses, the Science Party recommends that:

- The R&D tax incentive be paid quarterly, to bring it in line with other tax structures;
- Targeted R&D grants be offered to small businesses, to allow R&D spending in the absence of capital;
- The application process be simplified to a reasonable level, such that the average businessperson can correctly complete it.

## 3. Encouraging public-private collaboration

As noted on page 13 of the Review Panel report, "*Australia's rate of collaboration between industry and public researchers is the lowest in the OECD.*" The Science Party believes that this is at least partly a consequence of our rate of government spending on R&D, which low by OECD standards and has been far outstripped by business spending on R&D in the past decade, according to ABS figures. We believe that this could be remedied in the first instance by greater funding of competitive grants offered for public-private collaboration.