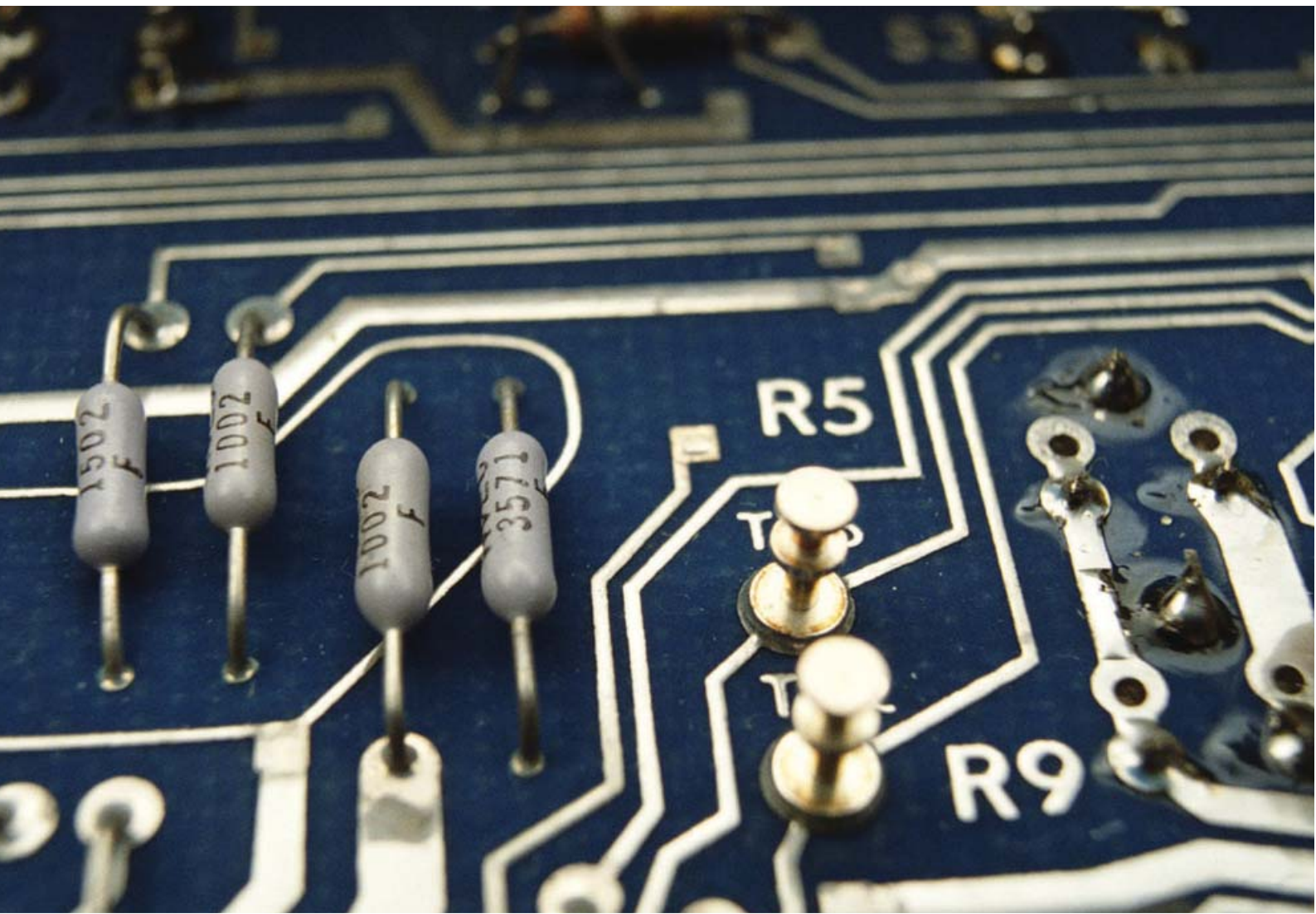


House of Representatives Standing Committee on Science and Innovation

Inquiry into Business Commitment to Research and Development in Australia



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– Domenic Martino, CEO Deloitte Australia

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Executive Summary and Key Recommendations

Deloitte Touche Tohmatsu welcomes the opportunity to contribute to the House of Representatives Standing Committee on Science and Innovation's Inquiry into Business Commitment to Research and Development in Australia.

We have sought to contribute to this process by undertaking an analysis of recent studies focussed on R&D, innovation and the needs of SMEs. We focussed on the terms of reference of the Inquiry, and have tried to outline what in our experience are the R&D drivers in small and medium sized business; the needs of fast-growing companies; and the considerations by which major international corporations site R&D investment. To assist us in preparing this submission, we undertook a survey of our clients engaged in R&D activities in Australia to elicit their responses to a range of questions concerning business commitment to R&D in Australia.

The survey comprised 30 questions and was electronically delivered to over 180 clients in NSW and Victoria. We received 20 responses.

In this submission, our analysis of a range of the key drivers of and impediments to private sector R&D in Australia indicates that a broad range of factors influence a firm's capacity and imperative to invest in R&D activities. These factors include, but are not limited to: the company's size and position in its industry, the industry itself, the relationships it has with suppliers, customers and sales networks, whether it exports, and the skills of its labour force and their ability to access relevant training.

The role of government assistance, specifically in the form of the R&D tax concession, R&D Start program and the recently introduced R&D tax offset scheme are observed to influence R&D activity, although we are not in a position to conclude on the degree of influence. We highlight a recent study that indicates that the R&D tax concession does, in a statistically significant degree, positively influence R&D spending in a sample of 1848 Australia companies. Our survey also indicates that Australian companies are positively influenced to conduct R&D by the level of assistance offered by government.

We note that a number of key impediments to private sector R&D in Australia are:

- Access to appropriate funding.
- Access to appropriate resources, including human resources.
- Regulatory compliance.
- Stable innovation policy platform.

We are not in a position to assess the degree to which these factors negatively influence private sector R&D in Australia.

We acknowledge the recent legislative changes to the R&D tax concession and R&D tax offset which we believe will make a positive contribution in supporting private sector R&D in Australia. We have also presented a number of legislative and policy initiatives for consideration and debate on the basis that we believe they will further improve the effectiveness and efficiency of the R&D tax concession and R&D tax offset.

A summary of our key legislative initiatives for consideration and debate are as follows:

- Minimise the compliance burden on companies seeking registration for the R&D tax concession where possible.
- Align the current R&D plan requirements for companies with R&D projects with less than \$1 million in eligible expenditure with the current short form Schedule 2 requirements.
- Increase the R&D expenditure maximum threshold for the R&D tax offset from \$1 million to \$5 million per annum
- Increase the tax-exempt ownership threshold in entities seeking to claim the R&D tax offset from 25 per cent to more than 50 per cent.
- Allow companies to claim the R&D tax offset in an amended income tax return, so long as this claim is made within the '10-month post end of year of income AusIndustry registration requirement'.
- Simplify the calculation of the 175 per cent component of the R&D tax concession, by adopting the same threshold for grouping as contained in the Income Tax Assessment Act.
- Remove the exclusion of non-labour related components in the calculation of the 175 per cent incremental premium.
- Allow companies access to the 175 per cent incremental tax concession immediately on incorporation without the need to wait three years.
- Replace current requirements to have a consecutive three-year registration history with simply having been registered previously for any three-year period.
- Reintroduce the 150 per cent R&D tax concession for base level R&D activities in Australia.
- Re-open the R&D START program as soon as possible.
- We support the recommendations contained in the final report of the Innovation Summit Implementation Group of August 2000 concerning skills training.



Key Observations

Economic Benefits of Greater Private Sector Investment in R&D

The following section provides an overview of selected recent literature regarding the economic benefits that derive from public sector research and development and innovation. The commentary focuses on some developments in economic growth theory, and incorporates some of the literature that considers the mechanisms through which these benefits accrue to an economy.

We acknowledge that there are many drivers that contribute to private sector investment in R&D in Australia. Investment decisions differ depending on the size of the firm. For example, small firms rely primarily on the ability to access finance (rather than technological and product market opportunities) while larger firms are often influenced by the cost of capital, operating costs, capacity utilisation and technology, amongst others, as determining investment decisions.¹

Both the federal and state governments have responsibility for the administration of a broad range of incentives that directly and indirectly influence private sector R&D (these include state technology diffusion programs and a range of federal innovation programs).

We aim to assess and observe the effectiveness of the federal R&D tax concession scheme, the R&D tax offset initiative and the R&D Start scheme towards SME commitment to R&D in Australia.

Changes in the Theoretical Base

The main focus of the literature that considers the economic benefits of R&D or innovation attempts to measure the impact of innovation on economic growth.

The economic benefits that long-term growth can deliver to an economy include higher standards of living, lower inflationary pressure, improvements in the trade balance, value in the national currency and interest rate stability.

In relatively recent times, a revolution has been occurring in the way economists construct and measure economic growth forecasts. This revolution is in part associated with the role afforded to innovation or “technological change”. This debate has resulted in something of a paradigm shift in economic literature, from “old growth” to “new growth” theories.

¹ Bosworth & Loundes “The Dynamic Performance of Australian Enterprises”, Melbourne Institute Working Paper No. 3/02, April 2002, p4.

The new growth theory examines the factors that drive innovation and R&D expenditure, and contains greater attempts to quantify the contribution of innovation to economic growth. There is a significant implication for economic policy makers through the results of this work. As the Productivity Commission puts it: "...these theories clearly imply...that countries can, by employing appropriate policies towards R&D, maintain a growth path that remains above countries which employ inappropriate policies".

Taking the analysis to the next level, Dowrick (as quoted in the Commission's Report) identifies two mechanisms through which R&D activities influence long-term growth. He calls these:

- The R&D *feedback* effect, which basically says that the larger the stock of knowledge, the simpler the process of increasing it. This is based on the premise that "better educated and more knowledgeable people learn faster and develop ideas more easily"².
- The R&D *spillover* effect, which is founded on the concept that innovation will result in some knowledge uptake by firms other than the one funding the initial innovation.³

As the Productivity Commission highlights, the presence of these effects at the economy-wide level provide strong justification for the existence of R&D support programs, as there will be no incentive for entities at the firm-level to undertake higher levels of innovation. This is because the benefits highlighted through these mechanisms accrue to companies and individuals other than those undertaking the initial investment.

An important adjunct to the discussion around spillover effects is the location of the initial research and development activity. The literature suggests that the benefits of R&D are substantially based around the country in which the R&D is conducted, and additionally that the creation of a country as an R&D base will attract other international R&D expenditure.⁴ These effects would not be realised from an Australian company outsourcing a discrete R&D project, even if the ultimate product or service were ultimately manufactured locally.

The OECD study also focussed on what it saw as the trend throughout the 1990s towards innovation becoming a more important supporter of economic growth over time. It sees innovation now as "...more market-driven, more rapid and intense, more closely linked to scientific progress, (and) more widely spread throughout the economy."⁵

² Productivity Commission (1995) "Research and Development", p152, sourced from www.pc.gov.au/ic/inquiry/44randd/finalreport/index.html.

³ Dowrick, S. 1994, The Role of R&D in Growth: A Survey of the New Growth Theory and Evidence, A Paper Commissioned by the Industry Commission, as quoted in Productivity Commission (1995), p153.

⁴ Maddock, R (2002), "Social costs and benefits from public investment in innovation", Business Council of Australia.

⁵ OECD (2000) "A New Economy?: The Changing Role of Innovation and Information Technology in Growth" sourced at www.oecd.org/pdf/M00018000/M00018036.pdf, p3.

The reason behind the greater speed, intensity and spread is largely attributed to the increased use of ICT (information, communication and telecommunication) tools. These create a significant opportunity in the current environment for countries to capitalise on the presence of ICT to capture higher levels of innovation-driven economic growth. This will occur both through individual firms making choices about increasing their innovation levels, and through governments delivering the right policy framework to facilitate and encourage firms to innovate.

Measuring Economic Benefit

One important measure in determining the contribution of innovation to economic growth is through the intermediary of productivity. This linkage arises through innovation increasing productivity levels as a result of the introduction of newer and more efficient plant and equipment, manufacturing processes, and a more highly skilled and trained workforce.

Considering the empirical evidence regarding the effect of innovation on economic growth, a 2000 study by the OECD provides some key signposts, especially regarding innovation in the context of currently available ICT tools.

This study considered the effect of economic growth per capita as measured by two variables - the change in labour utilisation and the change in labour productivity. Labour productivity is used as a measure of a broad range of innovative practices, being influenced by:

- Significant technological progress.
- Improved ways of producing goods and services.
- Managerial practices.
- Organisational change.⁶

In this context, increased labour productivity was the sole contributor to growth in Australia's per capita GDP from the period 1990 to 1998, even compensating for a reduction in labour utilisation. This highlights the crucial role of productivity, and behind that, the contribution of innovation to the overall growth of an economy.

This analysis complements the work performed by Bosworth and Loundes, where the relationship between innovation and productivity is explored and measured. These commentators have concluded that in addition to process innovation influencing productivity, "...the introduction of a new product or service in the previous year also has a part to play."⁷

⁶ OECD (2000), p1.

⁷ Bosworth & Loundes "The Dynamic Performance of Australian Enterprises", Melbourne Institute Working Paper No. 3/02, April 2002, p26.

Impediments to Business Investment in R&D

Deloitte has analysed the key business and academic studies on R&D, innovation and associated topics undertaken in Australia. We have used this information to highlight some of the key impediments to business investment in R&D. In addition we have performed a survey (see page 25, The Deloitte Survey, for further analysis of the survey) of companies undertaking R&D activities in Australia in order to better understand the impediments to Australian business investment in R&D.

Deloitte comes to this submission with experience in dealing with a range of R&D clients operating in a range of different industries. In order to build on these experiences and offer a fuller picture of the current R&D landscape in Australia, as part of preparing this submission we conducted a survey of clients that have previously claimed the 125 per cent R&D tax concession.

We have been able to draw from the survey a number of anecdotal conclusions on the state of R&D in Australia, in particular the impediments to business investment in R&D. We believe that our respondents' feedback gives a good insight into business opinion on current government R&D incentives, how R&D investment decisions are made by business (in particular SMEs) and some of the key drivers of R&D investment in Australia.

We asked our survey participants to rate the four factors identified by us as key impediments to R&D investment.

While this is by no means an exhaustive list of impediments, in our experience, these four factors have been observed to impede R&D investment and are viewed by our business client base as important to a greater or lesser extent.

Regulatory Compliance, Excluding R&D Incentives

35 per cent of respondents to the Deloitte survey felt that the regulatory burden placed on individual companies was important, very important or critical to the level of R&D investment by the company. Companies still acknowledge that the overall regulatory compliance regime with which they are forced to comply is an impediment to further R&D investment.

Regulatory Compliance, Including R&D Incentives

The previous category rises to 45 per cent of respondents in the Deloitte survey when the additional R&D compliance burden is taken into account. Our evidence supports the supposition that anecdotally, a large number of companies claiming the R&D tax concession believe that there exists a high compliance burden on them when registering annually for the tax concession.

Regulatory compliance is always an issue, and the R&D compliance requirements are no exception. It is even more the case in SMEs, with fewer resources for managing the R&D tax concession compliance processes.

Revesz and Lattimore confirm this point in their longitudinal study in 2001, which highlights that paperwork compliance costs were a major impediment to the non-participation (impediment) of firms in accessing a range of government business assistance programs.⁸

Access to Appropriate Resources, Including Human Resources

Having access to the appropriate resources to undertake an R&D program was identified as somewhat important by 36 per cent of survey respondents. Only 11 per cent considered this impediment 'not important' to their R&D programs. We see that the majority, 53 per cent, consider this issue as important or 'greater', meaning that resourcing issues are a key management consideration when determining whether an R&D investment will proceed.

We have found that senior management approves R&D budgets in over 80 per cent of cases (at the Chief Executive Officer and Chief Financial Officer level). It indicates that as senior management is buying into the R&D investment process, R&D and innovation is viewed as an important factor in contributing to business sustainability and profitability.

The quality of Australia's skills base and the knowledge systems that support it, will play an important role in how well we, as a country, can grasp and create new opportunities from technology developments and innovation.⁹ Clearly, the documented skills shortage in Australia is impacting on the R&D being undertaken in Australia (see page 25 Talent Pool - Infrastructure, for further discuss on the issue of skills shortage in Australia and its impact on business).

The referenced OECD study similarly identifies a lack of sufficient supply of skilled personnel as a key barrier to the innovation process. This problem needs to be addressed for ideas to flourish.¹⁰

Bosworth and Loundes support this observation when they propose that "R&D expenditure in the previous year and a reported increase in training in the previous year both have a positive and significant impact on profitability."¹¹ Further, the level and quality of the country's investment in education and training will crucially impact on the quality of Australia's skill base.¹² We note that the survey respondents rate highly the importance of appropriate access to high-quality, well-educated staff to support R&D and

⁸ Revesz, J. and Lattimore, R. 2001, Statistical Analysis of Use and Impact of Government Business Programs, Productivity Commission Staff Research Paper, AusInfo, Canberra, November.

⁹ Innovation - Unlocking the Future - Final report of the Innovation Summit Group, p6, August 2000.

¹⁰ OECD (2000), p11.

¹¹ Bosworth & Loundes "The Dynamic Performance of Australian Enterprises", Melbourne Institute Working Paper No. 3/02, April 2002, p29.

¹² Innovation - Unlocking the Future - Final report of the Innovation Summit Group, p14, August 2000.

commercialisation processes. To this end, we support the recommendations contained in the final report of the Innovation Summit Implementation Group on this issue.¹³

Short-term Capital Restrictions

Access to appropriate sources of finance is a clear impediment to investment in R&D in Australia. We submit that access to appropriate sources of funding is usually a factor of company's size, the stage in its business development cycle, the quality of its management team, the nature of its industry and the nature of the technology or innovation.

There has been much analysis of the status and effectiveness of the Australian venture capital market and seed capital markets to support early stage R&D in Australia. It is beyond the scope of this submission to address these issues in detail.

However, the federal government recognised the difficulties experienced by SMEs in accessing venture capital finance. To assist SMEs, the government introduced the Innovation Investment Fund (IIF), which was established to promote an Australian venture capital market for early stage technology based companies. The funds, managed by private sector fund managers, have assisted technology companies grow and develop science to the point of commercialisation, however, we believe that with the immaturity of the venture capital market in Australia, more needs to be done.

Since its inception in 1998 to 30 June 2001 (the latest available figures), IIF funds managers have invested \$104.6 million of federal government and private sector venture capital.¹⁴ Given the need for such funds in the technology sector, this figure could be higher.

The 'freezing' of the R&D Start program (see page 20 R&D Start Program) is also having an impact on the availability of capital to SMEs. The program is well known and funds are highly sought after by applicants. In 2000/01 for example, the Board offered \$231 million of funding assistance to a total of 252 new projects. Additionally, a further \$3.2 million was approved in variations to existing projects.¹⁵ We can only extrapolate, but assuming the Board expected to offer a similar amount of funds in 2001/02 and 2002/03, with these funds now not being available, the R&D programs of many companies within Australia's SME sector are being affected. The lack of funds available within the R&D Start program has been an impediment to business investment in R&D.

¹³ Ibid, p7.

¹⁴ Industry Research and Development Board, Annual Report, 2000/01, p35.

¹⁵ Ibid, p41.

Strategy to Better Demonstrate to Business the Benefits of Higher Private Sector Investment in R&D

AusIndustry Current Activities

We submit that the overarching strategy for AusIndustry should be aimed at ensuring all Australian companies, SMEs and larger companies, are made aware of the commercial benefits of undertaking and successfully commercialising R&D in Australia. Most importantly, that they are made aware of the support that is offered by the federal and state governments to companies which undertake eligible R&D.

We have found that the use of case studies by AusIndustry is particularly helpful in demonstrating the benefits to be gained through investment in R&D. We have found that testimonials from private sector companies often encourage other companies to also invest in R&D as well as positively reinforce the benefits of R&D within the organisation concerned. All companies like to read about successful R&D endeavours of other companies, as it can act as a spur to similarly invest in R&D in their own company.

We believe that the information provided by AusIndustry on the Internet is of a high standard and has improved in content and ease of use over the past 18 months. Deloitte and our clients regularly access the AusIndustry homepage for legislative updates, administrative changes, legislation and guidance. We find that all major documents required by us in our role as third party service providers are available on the AusIndustry homepage. The information is relevant, regularly updated and readily accessible and understandable.

AusIndustry has undertaken a number of recent initiatives aimed at assisting companies and facilitating the dissemination of information. These include:

- The holding of regular Consultative Committees, whereby AusIndustry and Australian Taxation Office staff meet with interested parties (usually service providers) to discuss the R&D tax concession scheme, its implementation, its effectiveness and the need for change. This process has worked well in the past; it provides a feedback mechanism for all parties and has led to better policy outcomes.
- The preparation of the draft Guide to the R&D Tax Concession. This is a good initiative that once finalised, will allow companies and service providers an improved understanding of the views of government on the tax concession.
- The holding by AusIndustry Regional Offices of regular information sessions on other government programs, for example, the R&D Start program. This dialogue is useful and allows further understanding of the imperatives of government, and where industry sees problems and concerns.

- The TaxRED program has proved another good initiative. An AusIndustry officer will nearly always visit all first-time registrants of the R&D tax concession to discuss their claim and offer advice on any other assistance that may be available from the government. These visits have proved very valuable to companies, which are only beginning a relationship with government.

There is however, an opportunity for AusIndustry to increase its client base through a sustained, nationwide campaign. Notwithstanding the existing AusIndustry advertising campaign, we believe there is a need to increase the awareness of Australian business to the benefits that can accrue to companies by investing in R&D.

We make these comments from a qualitative perspective. We often meet new and prospective clients, primarily from the SME sector, that appear to satisfy the definitional requirements of the R&D tax concession, but which have not applied for the tax concession due to lack of awareness of the scheme. With the introduction of the R&D tax offset, it will be even more important that the SME sector is kept informed of developments within the tax concession program.

Revesz and Lattimore reinforce this point in their 2001 study assessing the impact of government business programs.¹⁶ They highlight the lack of knowledge of a range of government programs as a key reason for the non-participation in government programs. This point is particularly pertinent to SMEs.

This fact can be attributed to a number of factors. SMEs, in particular, are often too concerned with the daily conduct of their businesses to know or care about the nitty gritty of taxation benefits for which their company may be eligible. SMEs usually rely on smaller accounting practices to provide any accounting and financial advice. Sometimes, specialist R&D information and the tax incentives available to businesses that conduct R&D have not permeated these professional practices. Subsequently, opportunities are often lost.

SMEs that are aware of the tax benefits that accrue through undertaking eligible R&D usually undertake a cost-benefit calculation to determine whether the tax benefit of claiming the tax concession substantially outweighs the costs incurred in compiling the documentation needed to fulfil R&D registration requirements. These costs can be internal or external. Sometimes, the benefit to the company is not sufficient, and so even though the company has undertaken eligible R&D in the year of income, it does not register to claim the R&D concession.

¹⁶ Revesz, J. and Lattimore, R. 2001, Statistical Analysis of Use and Impact of Government Business Programs, Productivity Commission Staff Research Paper, AusInfo, Canberra, November, pX.

Future Options

Notwithstanding AusIndustry budgetary considerations, we believe that the marketing campaigns previously undertaken by AusIndustry were very effective and should be reintroduced, or if they still exist, reinvigorated. These campaigns have included targeted sponsorships, and advertising in selected media.

The addition of the R&D tax offset to the R&D tax concession scheme is a great piece of news that has not been sufficiently advertised. As the new scheme has as its centrepiece a cash rebate, which is highly attractive to SMEs, this could have been the subject of a specific marketing campaign to advertise this change. SMEs in particular are often not aware of specialist governmental programs, and often miss out on tangible benefits through this lack of awareness.

While we think the AusIndustry website is a very good source of information, this too could have made more of the positive changes to the tax concession. This approach can only act to encourage firms to either start or continue to undertake eligible R&D projects.



Assessment of Australian Support Measures for Private Sector R&D

There have been a number of studies undertaken and papers written over the last few years commenting on the level of private business expenditure on R&D (BERD) in Australia. One of the most prominent, the Miles Report,¹⁷ clearly shows that Australia's BERD has steadily declined post-1996.

We acknowledge the government significantly contributes to the advancement of national R&D through numerous other support mechanisms, not least of which, for example, are the CSIRO and the CRC program. However, for the purpose of this submission, we will limit our comments on the effectiveness of the support to and the benefits that accrue to companies from claiming the R&D tax concession, the R&D tax offset and the R&D Start scheme.

Historical Perspective

The 125 per cent R&D tax concession is a key part of the federal government's innovation program. The R&D tax concession was introduced from 1 July 1985 and is designed to make eligible companies more internationally competitive by:

- Encouraging the development by eligible companies of innovative products, processes and services
- Increasing investment by eligible companies in defined R&D activities
- Promoting the technological advancement of eligible companies
- Encourage the use of strategic R&D planning
- Creating an environment that is conducive to increased commercialisation of new processes and product technologies.¹⁸

Further, the tax concession proposes to increase the amount of R&D undertaken in Australia by offering a tax concession relative to the amount of eligible R&D expenditure undertaken by an applicant company in a particular financial year. By reducing the after-tax cost of undertaking R&D, the tax concession provides a valuable stimulus to companies to increase their level of R&D investment.¹⁹

¹⁷ Miles Report - Innovation Summit Implementation Group (ISIG), August 2000 - 'Innovation: Unlocking the Future', p12.

¹⁸ Taxation Laws Amendment (Research and Development) Act 2001, p3.

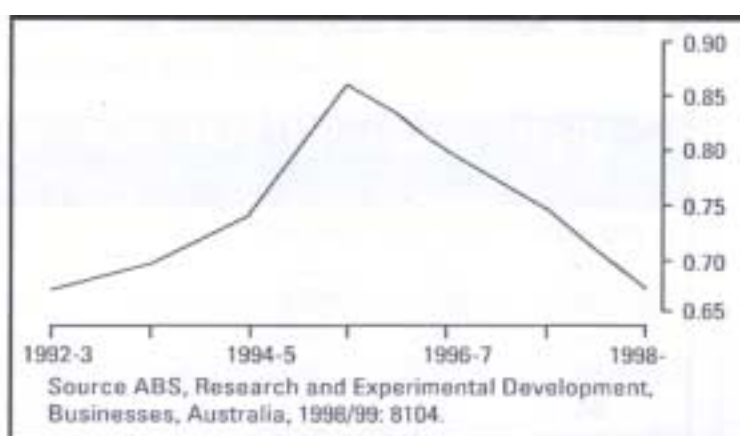
¹⁹ Department of Industry, Technology and Regional Development "Guide to Benefits - 150% R&D Tax Incentive" Revised Edition - 1994, p11.

Research indicates that compared to its OECD peers, Australia ranks only mid-table in the level of investment in R&D. A 1998 study indicates that Australia ranks 15th out of 24²⁰ OECD nations for investment in knowledge (defined as investment in research and development, education and software).²¹ The study indicates that Australia invested 1.5 per cent of GDP in R&D, compared to 3.8 per cent in Sweden, 3 per cent in Japan, 2.6 per cent in Korea and 1.9 per cent in the UK. Clearly, Australia's R&D investment performance can improve in relation to the quantum of R&D investment of other OECD member countries.

Further, Maddock indicates that Australia's R&D performance has weakened considerably since 1996, having experienced strong growth for the decade through to 1996. It grew from just 0.39 per cent of GDP in 1985/86 to a peak of 0.86 per cent in 1995/96. After the fall in the tax concession from 150 per cent to 125 per cent in 1995/96, business expenditure in R&D fell to just 0.67 per cent in 1998/99.²²

These figures are highlighted graphically below:

BERD as a percentage of GDP²³



Perhaps with these figures in mind, and in response to advice received and conclusions reached from the Innovation Summit and subsequent reports, the federal government introduced a number of new changes to the tax concession that offer additional opportunities and benefits to Australian companies in an effort to increase the amount of R&D undertaken in Australia.

Some of the proposed changes to the 125 per cent R&D tax concession announced by the Prime Minister in the Innovation Statement on 29 January 2001 were passed into law in September 2001. These changes include an increase in the tax concession for defined R&D expenditure to 175 per cent (Incremental R&D), and the introduction of an R&D Tax Offset (Cash Rebate) equivalent to their entitlements under the R&D tax concession.

²⁰ At the time of the study, there were only 24 OECD member nations. There are now 30.

²¹ *Investment in Knowledge*, Mosahid Khan, Science Technology Industry Review, No. 27, OECD 2001.

²² Maddock, R., "Social costs and benefits from public investment in innovation," Business Council of Australia, p93.

²³ *Ibid*, p89.

Current Support Measures

The two major support mechanisms available to companies undertaking R&D in Australia are the R&D tax concession (including the R&D tax offset discussed on page 17 R&D tax offset) and the R&D Start Program. These programs offer tangible incentives for companies to commence or continue their internal R&D programs. Both programs will be discussed briefly below.

125 Per Cent R&D Tax Concession

The 125 per cent tax concession is available to a company that in a year of income has undertaken eligible R&D activities and incurred eligible R&D expenditure. Eligible R&D activities are those that are “systematic, investigative and experimental, involve innovation or high levels of technical risk, and are carried on for the purpose of acquiring new knowledge or creating new or improved materials, products, devices, processes or services.”²⁴

As the R&D tax concession is based on the principles of self-assessment as contained in the Income Tax Assessment Act, on the basis a company can finance its R&D program, meets the designated eligibility requirements and incurs eligible expenditure; *prima facie* it can register annually and claim an increased tax deduction.

Critical to any self-assessment regime is the need for the governing provisions to be written in clear and concise terms, which support the intended objectives of the provisions. Unfortunately, in the context of the definition of ‘research and development activities’ as contained in section 73B (1) of the Act, there has been considerable change since their introduction in 1985, which we believe have led to a continual raising of the eligibility bar.

In addition, AusIndustry’s own interpretation of the key eligibility criteria contained in section 73B of the Act has also altered over this period. We suggest that the statutory changes in definition and AusIndustry’s own interpretation has contributed to the view expressed by many SMEs that given the uncertainty of eligibility, in addition to the compliance requirements, that registration for the concession is often not cost effective.

With the corporate tax rate at 30 per cent, the 125 per cent R&D tax concession provides a benefit of 7.5 cents for every \$1 of eligible R&D. By international comparisons (see page 21 International Comparison), this is not significant. We submit that at the current 30 per cent corporate rate, coupled with the existing compliance requirements, the 125 per cent R&D concession does not adequately provide the support and incentive to Australian companies to undertake R&D in Australia.

²⁴ Guide to R&D Tax Concession December 2001, v 1.1, p52.

We submit that companies accessing the R&D tax concession scheme require policy stability in order to plan their R&D programs with confidence; they need to know the potential tax benefits of undertaking a certain course of action. Continued changes to the concession only detract from this certainty.

175 Per Cent R&D Incremental Tax Concession

The government introduced the 175 per cent tax concession for incremental R&D expenditure applying from the first year of income after 30 June 2001. This additional concession allows companies to claim a tax deduction of 175 per cent on labour-related expenditure on R&D. Companies must have a three-year history of registering for the R&D tax concession before being eligible to access the 175 per cent Incremental deduction.

Whilst we acknowledge that the 175 per cent Incremental tax concession is a step in the right direction, the current eligibility criteria, in particular the exclusion of certain non-labour related expenditure, the requirement of a continuous registration history with AusIndustry and the complex grouping provisions will severely limit the effectiveness of this initiative.

The effective limitation of the 175 per cent Incremental tax concession to deliver financial support to Australian companies undertaking R&D is confirmed by Treasury's own estimate of cost of this program contained in the Innovation Statement at only \$115 million over 5 years or \$23 million per annum. This is far from a considerable investment in what the Final Report of the Innovation Summit Implementation Group refers to as "...the government's principal support mechanism to increase the amount of R&D in Australia".²⁵

In addition, we submit that the current design of the 175 per cent Incremental tax concession will be of most benefit to companies with high labour costs - the software industry is one group that comes to mind. Capital-intensive industries and companies with low labour expenditure will not benefit greatly from this change to the concession due to the exclusion of non-labour expenditure.

Interestingly, and in no way conclusively, the Deloitte survey indicates that the introduction of the 175 per cent incremental R&D tax concession will only have a minimal effect on inducing companies to actually increase their R&D expenditure in 2001/02 and 2002/03 years of income. We have reproduced our survey questions and responses below.

We do, however, acknowledge that it is premature to form a solid opinion on the effectiveness of the 175 per cent incremental R&D concession to stimulate and support R&D in Australia.

²⁵ Miles Report - Innovation Summit Implementation Group (ISIG), August 2000 - 'Innovation: Unlocking the Future', p14.

12. To what extent did the introduction of the 175% R&D incremental tax concession on 1 July 2001 influence the:

Percentage indicates total respondent ratio and parenthesis indicate actual number.

	1 Substantially decrease budget	2 Decrease budget	3 No effect	4 Increase budget	5 Substantially increase budget
1. 2001/02 R&D Budget	0% (0)	0% (0)	90% (18)	10% (2)	0% (0)
2. 2002/03 R&D Budget	0% (0)	0% (0)	80% (16)	15% (3)	0% (0)

We also point out that a recent study has shown a result that suggests a statistically significant positive association between R&D subsidies like the 125 per cent R&D tax concession and R&D expenditure growth.²⁶ Clearly, the R&D tax concession in all its guises is a vital piece of R&D jigsaw that is relied upon by Australian business.

The complexity of the 175 per cent tax concession is an issue, particularly in relation to the administration of the grouping rules that apply to companies wishing to access this benefit. There is some consternation in industry about the complexity around the rules concerning companies entering or leaving a group within the three year registration period, and the difficulties in determining which R&D expenditure either leaves with the divested company or arrives with the company being acquired.

It is also interesting to note that companies are grouped if one company controls more than 50 per cent of any right to the distribution of income or capital of the other company, or exercises more than 50 per cent of the voting power in that company. This 'control' test for R&D grouping adds another layer of complexity, given that it differs from the current grouping rules for income tax purposes, and GST purposes. These different grouping thresholds add an element of complexity to the management of the 175 per cent Incremental tax concession.

Impact of Dividend Imputation

Under both the 125 per cent and 175 per cent tax concession, the permanent differences attributable to the R&D tax concession are effective to defer corporate tax and this deferral assist funding a program of R&D by retaining cash in the company. However, with dividend imputation, this cost to revenue is only a timing difference, as when dividends are ultimately paid to the extent they are not franked (as a consequence of the R&D tax concession), the shareholders pay the tax.

We submit that the implications of dividend imputation need to be costed into the federal government's support for R&D via the R&D tax concession. The true budgetary cost of the R&D tax concession needs to reflect the implications of dividend imputation.

²⁶ Revesz, J. and Lattimore, R. 2001, Statistical Analysis of Use and Impact of Government Business Programs, Productivity Commission Staff Research Paper, AusInfo, Canberra, November, p57.

R&D Tax Offset (Cash Rebate)

We acknowledge that the introduction of an R&D tax offset (cash rebate) is a positive contribution by the federal government in supporting eligible R&D by SMEs.

The R&D tax offset is available in relation to eligible expenditure incurred in income years commencing after 30 June 2001. However, the R&D tax offset is only available to companies with:

- A group turnover under \$5 million
- Group expenditure on eligible R&D of up to \$1 million

The exception to these two criteria is where a company (nominally eligible by the above criteria) is not eligible to choose the tax offset if a tax-exempt entity (for example, a university) controls at least 25 per cent of the voting power in the company, or where interests in the company carry between them the right to receive at least 25 per cent of any distribution of income or capital by the company.²⁷

We submit that this exemption is unduly restrictive and limits the ability of newly created entities emerging from Australia's universities to fund their R&D activities. The ownership structure outlined above is not unusual and so currently, the new company would not be eligible to claim the tax offset due to this exemption. We suggest that this exclusion be raised to the same level of ownership attributable to a controlling interest (ie. more than 50 per cent).

There are a few key points to note regarding this new R&D tax offset. Firstly, we submit that the two eligibility requirements described above are quite restrictive, and will eliminate companies that otherwise would be eligible to claim the tax rebate other than for the arbitrary upper limits. Secondly, the exemption appears overly restrictive to companies spun off from tax-exempt bodies. This is a further discouragement for innovative people to take their new technologies and breakthroughs to commercialisation. Thirdly, companies must first register their activities with the Industry, Research and Development Board as per the normal R&D registration process and, once they have received a confirmation of their registration, complete the new Australian Taxation Office R&D tax concession schedule, finalise their corporate tax return and lodge their company tax return with the ATO.

A company elects to receive the R&D tax offset on the initial company tax return. There is no provision to elect to receive the R&D tax offset in an amendment to the company tax return. We submit that this limitation is not warranted, and an entity should be able to elect the R&D tax offset in an amended tax return. This is of course, subject to the 10-month after the year of income registration requirement that is currently in place.

²⁷ Taxation Laws Amendment (Research and Development) Act 2001, p64.

This requirement means that the 10-month window of opportunity to register for the tax concession after the end of the financial year is effectively negated, as R&D tax registrations must be submitted pre-submission of the corporate tax return.

The point is that for every additional incentive offered by the government to companies to increase their level of R&D expenditure, administrative and compliance burdens are inevitably and continually placed in their way.

Case Study - Biotechnology Firm

A Melbourne biotechnology firm believes that the R&D Tax Offset (Cash Rebate), while a positive initiative, is targeted incorrectly and of little assistance to many companies that would most benefit from a cash injection.

The company has indicated that the second eligibility criteria of the tax offset, group expenditure on eligible R&D of up to \$1 million, is a restrictive hurdle that many in the biotechnology industry will not satisfy.

In this company's opinion and experience, expenditure on eligible R&D by start-up biotechnology companies will nearly always exceed \$1 million, thereby excluding the company from accessing the R&D tax offset. Subsequently, the policy setting seems unduly restrictive to this particular industry. It is evidence that the "one size" policy mix is restrictive, prescriptive and discriminates against certain industries.

In this company's opinion, the government should continue with its reluctance to pick individual company winners, but 'get over' its fear of picking industry winners. The contrast was drawn over the Commonwealth's backing of the biotechnology industry compared to the Victorian and Queensland governments' overt support for the biotechnology industry.

In this the company is supported by Mr Bill Ferris, a venture-capital investor, who is on record as saying about the biotechnology sector: "Policy makers should unapologetically back this sector as a winner for Australia."²⁸

AusIndustry's R&D Tax Concession Information Bulletin (No. 36, Special Edition)²⁹ quotes a case study on Adelaide-based company Thermo Gamma-Metrics, which provides a range of on-line and in-stream analysis equipment for the mineral processing industry. The company "believes the R&D tax concession has been an integral part of its success, particularly in the early years."

The early years of a company's existence, and particularly in a biotechnology firm, are the most dangerous time for survival, especially as cash flows may be either non-existent or immature. This phase in a company's lifecycle is where the R&D Tax Offset (Cash Rebate) should make its most impact and assist the company with additional cash flow instead of a tax concession, which in many cases only assists in carrying forward losses.

To quantify this opinion, according to the Australian Biotechnology Report 2001, the average R&D spend for private and unlisted core biotechnology companies for 2000/01 is estimated to be \$3.3 million and projected to increase to \$4.4 million in 2001/02.³⁰ Clearly, the \$1 million R&D eligibility threshold appears misplaced, especially in the biotechnology industry.

²⁸ David Charles, *Rush into Biotechnology may turn up Fool's Gold*, Australian Financial Review 09 September 2002, p63.

²⁹ The R&D Tax Concession Information Bulletin, July 2002, is copyrighted © Commonwealth of Australia (2002).

³⁰ Ernst and Young, Committee for Melbourne, BioMelbourne Network, Growing our Knowledge Economy - Proposals for further reform, Ernst and Young Australia 2002, p42.

R&D Start Program

The second major plank of the federal government's innovation program is the R&D Start Program. The R&D Start Program plays a major role in maintaining the international competitiveness of Australian business by encouraging firms to undertake innovative R&D projects, successfully complete them and commercialise the results of the R&D project.

The main arm of the program is a competitive grants program, whereby a company applies to the Industry Research and Development Board for matching funding to undertake an R&D project. Usually R&D Start grants provide assistance of up to 50 per cent of R&D project costs required to complete the project.

The program has been extremely successful in encouraging firms to undertake marginal R&D projects. In 2000/01, funding totalling \$230.9 million was approved for 252 new projects, a \$54 million increase on the previous year.³¹

Of course, we all know that the program is currently not accepting any new R&D Start applications. AusIndustry has indicated that this is due to an unprecedented surge in demand for program funds in the 2000/01 financial year. The main reason for the change in demand for funds is because recipients of R&D Start funding had accelerated their expenditure on R&D in the first year of the project. Basically, too much money was allocated in too short a timeframe, leaving little money to allocate in the latter part of the financial year.

Notwithstanding this current administrative issue, the program remains well known within the industrial, scientific, academic and commercial worlds. Subsequently, 'freezing' of R&D Start funds to new applicants is effecting Australia's knowledge base and practical R&D effort.

Anecdotally, we know that the current unavailability of R&D Start funding is putting great stress on companies needing funds to undertake vital R&D, particularly combined with the difficulty of obtaining additional funds from Australian capital markets. Our experience indicates that companies are disappointed that the scheme has had to be 'frozen' for such a length of time. Clearly, the 'freezing' of the program has created an impediment to the further conduct of R&D in the latter half of 2000/01 and in 2001/02.

We have attached at Appendix 2 some qualitative comments concerning the R&D START program from our survey respondents.

³¹ Industry Research and Development Board, Annual Report, 2000/01, p8.

International Comparison

Deloitte has undertaken a global analysis of R&D tax incentives in 27 countries.³² It should be noted that this is an analysis of one dimension only that has an influence on R&D ie. direct government assistance. It is also an analysis of the financial incentives only and does not include the 'administrative issues' associated with obtaining the benefits ie. we are not expressing any opinion on the 'efficiency' or otherwise of the respective programs.

The Deloitte Global R&D Matrix highlights that Australia's current accelerated rate of 125 per cent is at the lower end of the scale of countries providing an R&D incentive and is not as beneficial as the rate in other countries (for example, the UK provides 150 per cent deduction for SMEs, Singapore has a rate of 200 per cent while the Chinese offer rates between 110 per cent and 150 per cent). Further, when assessing the after-tax benefit of the R&D tax concession to claimant companies, Australia is also at the lower end of the scale.

The following table highlights some of the countries in the Deloitte Global R&D Matrix and their relative R&D uplift factor. The after-tax benefit (cents) is based on \$1 of expenditure on eligible R&D.

Country	Effective Corporate tax rate ³³	R&D Uplift	After-tax benefit (cents)
Australia	30%	125%	7.5
China	33%	130%*	9.9
Singapore	35%	200%	35.0
UK	25%	150%	12.5

* - average

We submit that the federal government consider reintroducing the 150 per cent R&D tax concession for base level eligible R&D on that basis that at this rate the after-tax benefit for claimant companies is 15 cents per \$1 of eligible R&D (assuming a 30 per cent corporate tax rate). At this rate of benefit Australia will move towards the mid point on a global analysis of R&D incentives provided by governments. In addition, we submit that the reintroduction of the 150 per cent R&D tax concession will greatly assist the reinvigoration of business investment in R&D, which has steadily decreased since the removal of this level of R&D assistance in 1996.

³² Countries analysed in the Deloitte global R&D matrix are: Argentina, Australia, Belgium, Brazil, Canada, China, Czech Republic, France, Germany, Greece, India, Ireland, Israel, Italy, Japan, Korea, Malaysia, Mexico, Netherlands, Poland, Russia, Singapore, Spain, Sweden, Switzerland, Taiwan and the UK.

³³ Internal Deloitte database - as at 31 December 2001.



Key Drivers of Small to Medium Business Investment in R&D

This section of the submission is an analysis of published economic literature on the issue of innovation and its key drivers. In conjunction with the results from the survey conducted by Deloitte, we seek to discuss any key trends and drivers in the current Australian climate.

In “Understanding Innovative Firms: An Empirical Analysis of the GAPS”³⁴ Mark Rogers provides a summary of recent thinking around the key factors that contribute to the level of innovation undertaken within a firm. These fall in the categories that follow.

Firm Size and Innovation

Traditionally, the literature around R&D drivers suggests that larger firms are more likely to undertake innovative activities. This is predicated on larger firms having:

- Stronger cash flows to fund innovation, and a greater asset base on which to arrange debt finance if required.
- Larger sales volumes, which result in the fixed costs of innovation being spread across a larger sales base.
- Access to a wider range of knowledge and human capital to support the innovation process.

Since the 1990s particularly, there has been increasing support for the notion that smaller firms have certain attributes that support them undertaking innovative activities, especially in high-tech industries. This support is based around the ability of smaller firms to be quicker in recognising opportunities, and more agile in adjusting research plans.

The OECD study highlights a role for certain SMEs as key deliverers of the economic benefits of innovation. In certain industry sectors, it sees smaller “start-up” companies as “...important sources of new ideas and innovation (that) may have an advantage over larger established firms in emerging areas where demand patterns are unclear, risks are large, and the technology has yet to be worked out”.³⁵

Overall, while Rogers highlights some UK and US literature that suggests that smaller firms have a higher level of innovation per employee based on the absolute number of innovative projects that are being undertaken, this is not the case when innovation per

³⁴ Rogers, Mark., “Understanding Innovative Firms: An Empirical Analysis of the GAPS”, Melbourne Institute of Applied Economic and Social Research Working Paper No. 8/00, May 2000.

³⁵ OECD (2000), p5.

employee is measured by value. This reflects the higher value of innovative projects being undertaken by larger companies.

There are also some interesting distinctions in the research around what drives innovation in larger and smaller firms. Two threads from the research that are highlighted by Rogers are:

- Larger firms have a tendency to fund innovation through equity, while smaller firms are more likely to use debt (this is supported by research performed in the US in the late 80s and early 90s).³⁶
- Market growth is only likely to drive innovation for larger firms, not smaller companies. This may reflect the influence of the factors highlighted above (this finding is drawn from Dutch research in the late '90s).³⁷

Public Policy Implications

There are significant implications for public policy arising from these forces. Policy formulation should take into account the distinction between the influencers of innovation in large and small companies. One key inference is that the effect of a given government incentive may be different for large and small companies. An aspect of this extension is whether the presence of a government incentive is, of itself, enough to encourage a company to undertake innovation at the margin. On this basis, the support provided to smaller Australian companies through the R&D tax offset, for example, could be effective in encouraging companies to undertake innovative projects for the first time.

Networks and Innovation

Existing theory suggests that external knowledge networks influence the R&D activities of smaller companies.

There are a number of well-established initiatives running internationally around the concept of an "Innovation Insights" program. These involve the basic model of (typically) smaller companies attending regular workshops held at the premises of companies, which display excellence in a particular area of manufacturing technique or innovation.

The impact of some of these programs has been important not only in the skills transfer that takes place at the seminars, but also through the collegial nature of the networking that takes place at and beyond the sessions.³⁸

³⁶ Work performed by Acs and Andretsch, as quoted in Rogers (2000), p9.

³⁷ Work performed by Dijk, as quoted in Rogers (2000), p10.

³⁸ For a summary of two programs, see www.tvp-ii.org and www.iuke.co.uk

Public Policy Implications

An implication for public policy is the need for government to stimulate or support networks (particularly among SMEs) to promote and support innovation.

Export Performance

The literature suggests interdependence between innovation levels and export activity within a firm. Some empirical studies suggest innovative firms will seek to maximise the return for this investment in R&D by seeking markets internationally.³⁹ In the other direction, it is likely that firms which export (and therefore build contacts and networks in other countries) will have greater access to knowledge flows.

Public Policy Implications

The importance of export in the innovation process highlights the need for policy responses to be integrated, with government support for companies seeking to enter export markets likely to have a long term, positive impact on innovation levels.

Training

There is also discussion around the theory that innovation builds on itself, with a level of innovative activity perpetuating further growth. One mechanism by which this happens is through training, with firms that have a focus on training and education within their workforce creating a bank of skilled and knowledgeable individuals who will learn faster, and introduce and embrace new ideas and practices more readily.

In 1995, the Productivity Commission considered a raft of factors behind firm innovation levels. Quoting Bureau of Industry Economic (BIE) data from a survey of 847 companies, which perform R&D activities, the top 5 factors influencing R&D expenditure across the entire sample were:

- The creation of a competitive advantage
- The exploitation of technological strengths
- Changes in market opportunities
- Changes in technological opportunities
- The Tax Concession for R&D.

³⁹ Work performed by Lefebvre, as reported in Rogers (1999), p11.

Interestingly, when this data was cut by firm size, this top five for smaller companies (defined as having less than 100 employees) was different, with cash flow position highlighted as an influencer of R&D expenditure. This reflected the ability of larger firms to more easily finance R&D activities, where the timing and level of innovative projects in smaller companies being somewhat determined by a given cash flow position.

Talent Pool - Infrastructure

The National Innovation Summit's report "Innovation - Unlocking the Future" identifies that Australia operates increasingly in a globalised economy, and its skills need to be competitive internationally. Further, the quality of its skill base will significantly influence the perceptions of the international community - foreign investors, skilled migrants and currency markets alike - as to Australia's standing as an advanced economy and innovative society.⁴⁰

The skill base of Australia labour is clearly a key issue concerning the country's overall R&D performance. This point was highlighted in a question in our survey.

In contrast to some of the perceived negatives of conducting R&D in Australia, or the nominated benefits of conducting R&D offshore, there are parallel reasons why companies decide to locate a designated R&D technical centre in Australia as opposed to overseas. These include:

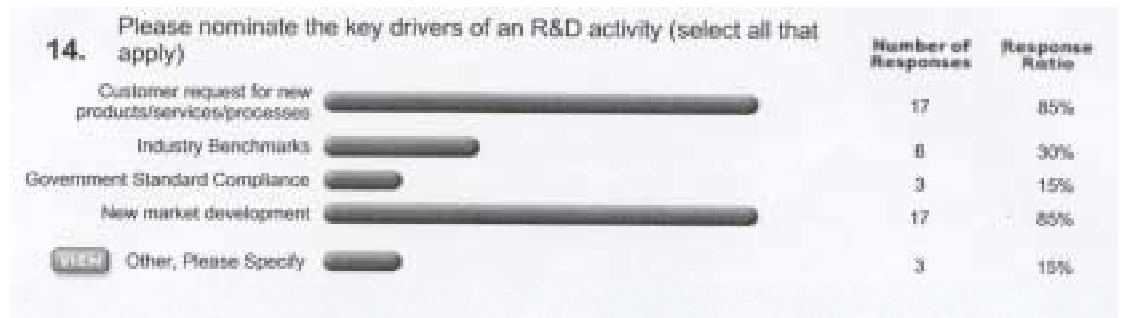
- Availability of a sophisticated and accessible telecommunications system.
- Availability of a highly educated labour force.
- Superior uptake of the latest technology.
- The need to develop and commercialise local products initially in the domestic market.
- The need to test new products and processes first hand.

The Deloitte Survey

Deloitte's survey in support of this submission provides some insight concerning the drivers of R&D. The responses to the survey indicate that the role of "Customer requests for new products, services or processes", and "New market development" loomed large in the cross-section of companies surveyed.

⁴⁰ Miles Report - Innovation Summit Implementation Group (ISIG), August 2000 - 'Innovation: Unlocking the Future'.

As part of our survey, we asked the following question:



We nominated the above four categories that in our experience were the major drivers of R&D activity in Australia. We offered respondents the option of specifying other key drivers and three were nominated - staying ahead of competitors, new research opportunities, and a third that we have not included as it is company specific and falls into the 'Government Standard Compliance' category in any case. It should be noted that, for the purposes of this section, the terms "innovation" and "research and development" are considered interchangeably.

The key observations are summarised below:

- The importance of "Customer requests" suggests a significant cascading effect through the supply chain, highlighting a scenario where companies at the consumer-end of the supply chain ultimately drive R&D. This supports further use of networks as part of the technology diffusion process, with collaboration between companies in vertical supply chains important in the process of generating R&D activity.
- The "New market development" driver is more consistent with the existing literature, as companies seek to establish, maintain or expand an advantage in the areas of competition or market share.
- One of the key requirements of the R&D tax concession is that an R&D activity is carried on for the purpose of creating new or improved materials, products, devices, processes or services so the first driver outlined above comes as no surprise. This demand driven R&D is quite prevalent among our client base, with companies responding to customer requests for new product development.
- There was strong evidence of the presence of R&D activity based around collaboration or networking, with 40 per cent of respondents collaborating with other companies, and 60 per cent with universities in support of innovative activities. CRCs and the CSIRO also figured prominently as partners in collaborative activities.

Another aspect of the drivers of R&D activity that is addressed in the survey is associated with firm responses regarding the factors that impede R&D investment. Here, two factors were seen as significant, with 58 per cent of firms citing “Short term capital restrictions”, and 53 per cent citing “Access to appropriate resources, including human resources” as being an “important to critical” impediment to R&D investment. These results provide a guide for government policy makers, and are consistent with the factors commonly referenced in the literature as being key determinants of R&D.

Further findings included:

- An area of concern around future R&D planning was highlighted, with only 22 per cent of respondents having a budget that extended out three years or more. With 39 per cent of companies responding having budgets that only covered the current year, these results provide some evidence of companies’ R&D horizons being far too short-term.
- 68 per cent of respondents had a facility established that they define as an “R&D Technical Centre”. Of these, 92 per cent were headquartered locally, which is a positive indicator given the broader evidence in the literature that the presence and development of an R&D infrastructure in a country is likely to create a critical foundation to which further R&D activity will be attracted. Of those companies with technical centres located in Australia, the reasons supporting this included matters such as the ICT infrastructure, and the need to develop products close to the market in which they will be sold.

While this survey only provides a snapshot of some of the key R&D influencers in the Australian context, it does provide the basis for some insights into an appropriate policy framework for the Australian context. These include:

- The importance of networks and collaboration to levels of R&D (which would be expected in a market the size of Australia’s).
- The importance of long-term policy settings that create an environment in which levels of innovation can become self-perpetuating.
- The need to create an environment in which companies are expected to plan their R&D spend over an extended period.
- The need to continue to develop Australia as an R&D precinct, which will create a focus to which new projects can be drawn.



Needs of Fast Growing Companies

Access to Benefits - Cash vs Deductions

The business requirements and needs of SMEs usually depend on the maturity of the company and its stage in its growth cycle. Start-up companies have different financial, capital, labour, debt, R&D and fiscal requirements than their more mature counterparts, and are by definition members of the SME sector.

It appears obvious that a company establishing itself in the commercial world with little or no income to speak of but considerable expenditure on R&D will find little incentive to claim the R&D tax concession if a tax deduction is all that is available.

Carried forward losses may bring future benefits of course, but only once a company can offset other tax liabilities. Deloitte has experience of companies not bothering to claim the R&D tax concession because the company was already in losses, with additional losses gained from registering for the tax concession being of no real incentive.

This anomaly saw the introduction of a new policy initiative, the R&D tax offset, whereby companies meeting certain criteria can elect to claim a cash rebate instead of a tax deduction.

We view this initiative as extremely positive, as it gives eligible SMEs the potential of a cash injection instead of a tax deduction exactly when the company needs it most - in the start up phase of its growth cycle.

There are a range of factors that limit a company's ability to maximise the benefits available under the R&D tax concession. We have already mentioned some of the limitations of the 175 per cent tax concession (need for a three year registration history; complex grouping rules; only labour-related expenditure eligible) and the R&D tax offset (restrictive R&D threshold; ownership implications for tax exempt entities). Other factors include:

- The interpretation of the definition of innovation.
- The belief that the paperwork required to register for the tax concession scheme is biased towards larger companies, not SMEs.

Policy Stability

It is a truism to say that companies of all sizes look for consistency in their dealings with government. Companies liaise with governments at all levels on a daily basis - whether it is the taxation manager talking to the Australian Taxation Office or the engineering manager liaising with AusIndustry - and are looking for policy that is stable and consistent so that companies can confidently undertake forward planning.

The R&D tax concession has been a central part of the federal government's innovation strategy since 1985, but in that time, has been subject to some major policy alterations. The most significant of these, of course, was when the new Coalition government reduced the rate of the concession from 150 per cent to 125 per cent in the 1996 federal budget. This simple legislative change has had an impact on the quantum of R&D conducted in Australia.

We contend that the introduction of an increased tax concession rate of 175 per cent for certain R&D expenditure is an implicit acknowledgement by the federal government that the benefits of the 125 per cent concessional rate were progressively diminishing due to the gradual reduction in the corporate tax rate. The example was cited earlier, but in summary, in two years the after-tax benefit to a company of claiming the concession was reduced from 9 to 7.5 cents in the dollar.

The introduction of the 175 per cent concessional rate will no doubt improve the outcome described above, but of course, this rate is only applicable to certain types of expenditure and companies are required to have a continuous three-year registration history before they are eligible.

This example highlights why many corporate claimants, and potential R&D claimants, have expressed a degree of complacency and indifference to the benefits attached to claiming the concession. We have detected a general feeling within industry that the benefit accruing to a company as a result of claiming the R&D tax concession is at best marginal and at worst, ensures that an eligible company does not actually make an R&D claim due to burdensome compliance costs.



Recommendations

Having reviewed a range of current and past literature on the issue of innovation, investment and R&D, and conducted a 30-question survey of our clients on the same issues, we offer the House of Representatives Science and Innovation Committee the following recommendations:

- Minimise the compliance burden on companies seeking registration for the R&D tax concession where possible.
- Align the current R&D plan requirements for companies with R&D projects with less than \$1million in eligible expenditure with the current short form Schedule 2 requirements.
- Increase the R&D expenditure maximum threshold for the R&D tax offset from \$1 million to \$5 million p.a.
- Increase the tax-exempt ownership threshold in entities seeking to claim the R&D tax offset from 25 per cent to more than 50 per cent.
- Allow companies to claim the R&D Tax rebate in an amended income tax return, so long as this claim is made with the '10-month post end of year of income AusIndustry registration requirement'.
- Simplify the calculation of the 175 per cent component of the R&D tax concession, by adopting the same threshold for grouping as contained in the Income Tax Assessment Act.
- Remove the exclusion of non-labour related components in the calculation of the 175 per cent incremental premium.
- Allow companies access to the 175 per cent Incremental tax concession immediately on incorporation without the need to wait 3 years.
- Replace current requirement to have a consecutive three-year registration history with simply having been registered previously for any three year period.
- Reintroduce the 150 per cent R&D tax concession for base level R&D activities in Australia.
- Re-open the R&D START program as soon as possible.
- We support the recommendations contained in the final report of the Innovation Summit Implementation Group of August 2000 concerning skills training.



Appendices

Appendix 1

Corporate Signature

Name and Address of Signatory

Signature

<p>Mr Richard Woods Director and Company Secretary Australian Arrow Pty Ltd 65 Lathams Road CARRUM DOWNS VIC 3201</p>	<p><i>Signed hard copy to follow.</i></p>
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Corporate Signature

Name and Address of Signatory

Signature

Mr Domenic Romanelli Group Financial Controller Smorgon Steel Group Ltd 650 Lorimer Street PORT MELBOURNE VIC 3207	<i>Signed hard copy to follow.</i>
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Corporate Signature

Name and Address of Signatory

Signature

Mr Jack Christou General Manager - Finance RLM Systems Pty Ltd 23 Lakeside Drive BURWOOD EAST VIC 3151	<i>Signed hard copy to follow.</i>
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Corporate Signature

Name and Address of Signatory

Signature

Mr Ray Moran Finance Manager Waste Service NSW 821 Pacific Highway CHATSWOOD NSW 2067	<i>Signed hard copy to follow.</i>
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Corporate Signature

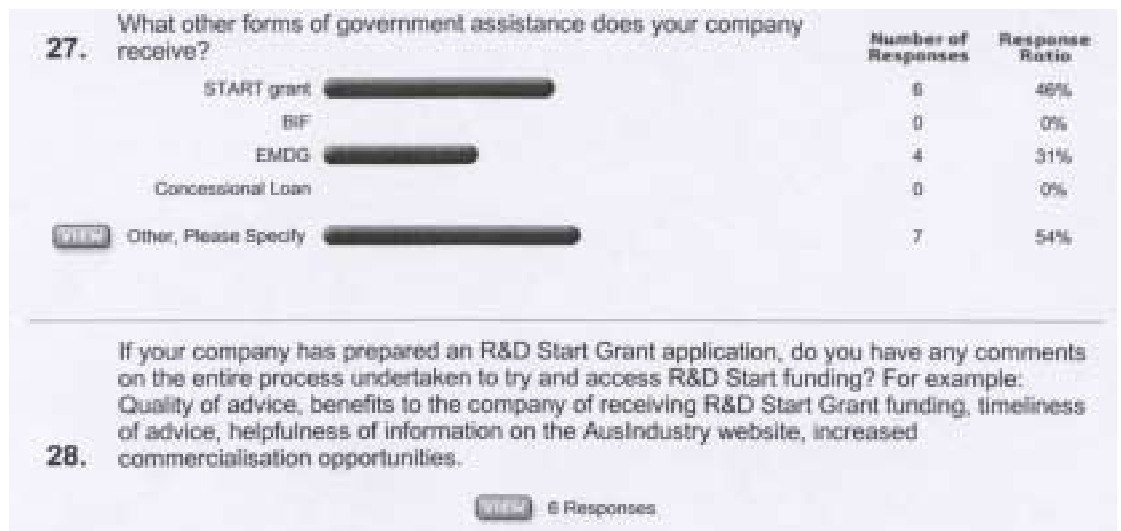
Name and Address of Signatory

Signature

Mr Chris Grundy Chief Financial Officer Pan Pharmaceuticals Limited 10-12 Church Road MOOREBANK NSW 2170	<i>Signed hard copy to follow.</i>
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Appendix 2

Survey Results Concerning R&D START Program



#	Response
1	Never been able to get any applications past the Case Workers.
2	Process was far too complex for the amount of money being requested.
3	AusIndustry staff have been very helpful. Problems arise because of the cycle of the START grant which is three years versus the research cycle which might be 5-10 years before a product is available.
4	Not Applicable
5	Because of the size of some of the projects undertaken by the company access to the Start Grant is critical. We will not undertake larger projects without Grant funding as the risk to the financial viability of the company is too great. The requirements to access Start Grants is becoming increasingly onerous and accordingly expensive to comply with. The Government's rhetoric with regards to R & D funding is at variance with their actions - on the one hand they crow about the funding methods available while on the other they stop Start funding on the argument that the budget has been overspent.
6	The process is long and cumbersome. At no stage is there any opportunity to meet with the decision makers and discuss the merits of your case.

Recommendations with Regards Government Policy

30 Do you have any recommendations for government policy in relation to R&D incentives?	
#	Response
1	Concessions to continue to be made available but widen the rules to allow for genuine R&D on product development.
2	SEE #26. MUST BE CHEAP AND EASY TO APPLY. POSSIBLY IT SHOULD NOT BE SELF ASSE
3	Need to revamp what is eligible R&D so it is easier to access assistance, otherwise you start to wonder why you are taking the risks when you can import the knowledge from overseas at a cheaper cost than developing it yourself.
4	Increase R&D Tax Concession to 150%. More flexibility in relation to R&D activities.
5	Make it easier for companies to undertake R&D.
6	If the Govt wants to be in the space it needs to establish a means of getting cash into early stage research companies and not just providing a tax break. It should lift the cash levels that it currently provides for small biotech to cash out the concessions.
7	Concern with interaction with Dividend Imputation System.
8	*We export our R&D, so a favorable export climate is a strong incentive. *The commercial exploitation of new ideas here in Australia needs to be encouraged. *A quick uptake of new technologies and a highly educated workforce create a favorable climate for R&D.
9	Certainty of funding availability is essential for a commercial enterprise to operate a viable R & D program. As long as the Government has the attitude that they can turn the tap off without warning the AusIndustry programs will remain ineffective.
10	Streamline the recording process for Companies which have developed a reliable history of lodgement and compliance with the R&D program.
11	Other than increase the incentive, none.
12	Addition of a Statute of limitations on the R&D Tax Concession
13	Continue ACIS scheme post 2005 in Automotive Industry -or another scheme which makes producing automotive components in Aust more favourable than overseas.
14	Have the decision makers visit the sites where the R & D is undertaken. They may then have a better insite before they finalise their decision.
15	Australia has a small population and needs to encourage R&D for its future development. The R&D concession needs to be both attractive to management and relatively easy to administer, without the ATO considering it to be a revenue drain.

Appendix 3

Deloitte R&D Survey

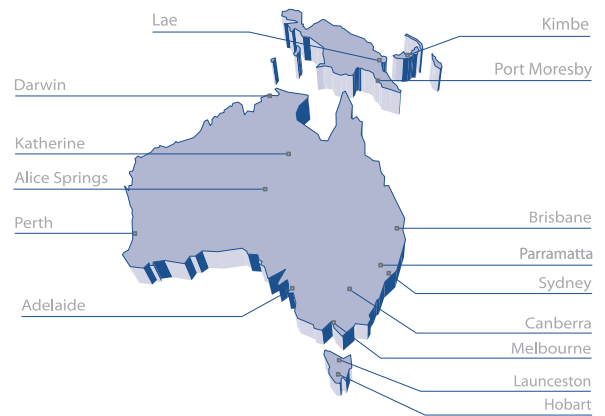
Deloitte undertook a small survey of its client base to elicit their responses to a range of questions concerning business commitment to R&D in Australia.

The survey comprised 30 questions and was electronically delivered to over 180 clients in NSW and Victoria. We received 20 responses.

A copy of the survey will be at Appendix 3 in a hard version of this report that will be sent to the Science and Innovation Committee.

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- voted #1 accounting services firm of the year by national magazine, CFO (2001)
- voted 'star performer' of the Big 5 in terms of growth by BRW (2001)
- ranked #3 in the most recent Hewitt and Associates 'Best 25 Employers to Work for in Australia' survey (2000)
- recognised by the Equal Opportunity for Women in the Workplace Agency for our efforts in recruiting and retaining women – 2001. They have bestowed Deloitte with the title 'Employer of Choice for Women'
- net revenue of \$563 million (2000-01)
- 12 offices around Australia with 252 partners and a national team approaching 2,900.

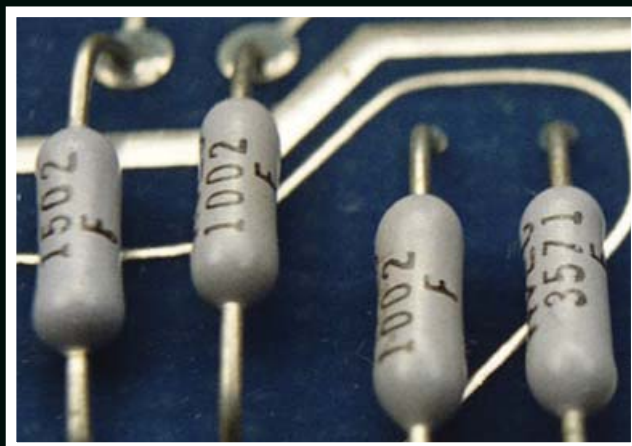


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