

Australian Vice-Chancellors' Committee*the council of Australia's university presidents*

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Mr Gary Nairn MP
Chair, Standing Committee on Science and Innovation
House of Representatives
R1 Suite 116
Parliament House
CANBERRA ACT 2600

Dear Mr Nairn

The Australian Vice-Chancellors' Committee (AVCC) welcomes the opportunity for input to the Standing Committee on Science and Innovation inquiry into business commitment to research and development in Australia.

Investment by Australian businesses in research and development has been relatively low, compared to our major trading partners and competitors, for at least the past decade. According to information from the Australian Bureau of Statistics, after peaking at 0.87% of GDP in 1995-96, business expenditure on research and development (BERD) has fallen steadily.

A major factor in the fall in Australian BERD after 1996 was the removal during that year of the 150% tax concession for R&D. The subsequent downward trend was reversed in 2000-2001, but at 0.72% of GDP it is still well below the OECD average, and leaves Australia at least eighth in OECD rankings, behind Japan, Korea, the US, the UK, Canada and others.

In 2001 the Government introduced a 175% 'premium' R&D tax rebate, available only to companies which increased their R&D investment. Analysis of the latest ABS data on BERD suggests that this premium rate has had the desired effect on business expenditure and is responsible for at least some of the recorded improvement in BERD.

While it is important to avoid overly simplistic interpretations of either the fall in BERD after 1996, or its recent improvement, the two taken together strongly suggest that Australian businesses are more inclined to undertake research and development when there are appropriate incentives in place. OECD studies show that this is also the case in other countries, although it has been suggested that the business culture in Australia is somewhat more risk averse than is the case overseas.

It is also important to remember that that international comparisons of R&D effort must take into account certain local factors. Australia's innovation system is almost unique in that almost all of the nation's R&D effort takes place in universities and publicly funded research agencies. This can be seen as both a historical cause and an effect of the low level of business R&D in this country. Universities and publicly funded research agencies such as the CSIRO have always undertaken research in a wide range of fields, much of it of direct benefit to

business and industry. Their effectiveness in doing so may be one of the reasons why the private sector has carried out relatively little of its own R&D.

There are increasing expectations that universities and publicly funded research agencies engage more fully with the private sector, provide the required level of commercially oriented research, and commercialise their own intellectual property. These expectations are not, however, properly matched by a corresponding increase in engagement by the private sector: if anything businesses are reducing their level of support for public sector research. For example, business input to the highly successful Cooperative Research Centre (CRC) program has begun to decline: contributions to CRCs from sources other than Government or universities fell by almost 30% over 2000-2001.

The key issue here appears to be whether business believes there to be an direct benefit from research: whether it takes the form of a commercially viable product or technique, a lucrative patent, or a tax rebate, it is clear that the private sector requires at the very least the incentive of a clear and – preferably – immediate advantage before it is willing to commit to research and development. The high levels of support and demand for the R&D Start program are clear evidence of this.

However, many of the benefits of R&D expenditure generally are often long term and difficult to measure. This means that any efforts to increase Australian businesses' investment in research and development must be aimed, in part, at effecting a cultural change: they must address the risk aversion and market failure noted by the Chief Scientist, Dr Robin Batterham, in *A Chance to Change*, his 2000 report on Australia's science and innovation capabilities. Such a cultural change may be effected by means as simple as supporting the description of R&D funding as an investment, rather than an expenditure.

I hope these comments are of assistance to the inquiry. The AVCC looks forward to the inquiry's proposals for improving business investment in research and development.

John Mullarvey
Chief Executive Officer