Australian Private Equity &
Venture Capital Association Limited

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Senate Standing Committees on Economics
PO Box 6100
Parliament House
CANBERRA ACT 2600

By email: economics.sen@aph.gov.au

Dear Sir/Madam,

Submission to Senate Inquiry into Australia's Innovation System

The Australian Private Equity and Venture Capital Association Limited (AVCAL) welcomes the opportunity to provide a submission to the Senate Economics References Committee's (the Committee) Inquiry into Australia's innovation system.

AVCAL represents the venture capital (VC) and private equity (PE) industry in Australia, which has a combined total of over $24 billion in funds under management sourced from domestic and offshore investors, including Australian superannuation funds. VC and PE firms invest billions of dollars in a wide range of companies ranging from startups to large businesses spanning many sectors across the national economy. These investments help to support a total of more than half a million jobs, and contribute over four per cent every year to Australia's national economic output.

VC and PE play an important role in the innovation system. It is critical to recognise that innovation is not just about research, but about the translation of that research into usable outcomes. The Financial System Inquiry's interim report in July 2014 noted that, "venture capital and private equity funds tend to finance more innovative and high-growth firms. These firms are drivers of long-term productivity growth" (p.2-65).

There are a number of areas where we believe policy reforms could help to catalyse economic growth from business investment via PE and VC funds. A number of these areas of policy have been the subject of ongoing discussions between AVCAL and the Government in the past few years. We believe that these issues should be considered during the course of the Committee's deliberations.

The key reform areas fall into the two broad categories set out below:

1. Addressing impediments to private sector investment in Australian innovation
1.1 Introduce a dedicated translational innovation programme with a long-term focus
1.2 Consistent tax treatment for investors in VCLPs
1.3 Improve existing migration policies to better target innovation-building, through:

2. Policy settings to deliver a productive and self-sustaining innovation system
2.1 Introduce R&D quarterly tax credits for early stage companies
2.2 Reform of the Employee Share Schemes tax framework for early stage companies
2.3 Strengthen the nexus between publicly-funded research and economic outcomes

SECTION 1: ADDRESSING IMPEDIMENTS TO PRIVATE SECTOR INVESTMENT IN AUSTRALIAN INNOVATION

1.1 Introduce a dedicated translational innovation programme with a long-term focus

One core element of the innovation system that has historically been significantly underdeveloped in the Australian innovation system is the "D" in R&D.

In previous years the Commonwealth has spent around $9 billion annually supporting research and innovation, but with a heavy emphasis on research and industry assistance. Less than 1.5% of this budget has been dedicated to research translation into commercial outcomes. Given this disproportionate emphasis, the relatively poor commercialisation rates from otherwise-valuable publicly-funded research in Australia are not surprising.

Programmes such as the Innovation Investment Fund (IIF) were originally introduced to address this need to bridge the gap between the science lab and the market. Third party evidence shows that the public benefits from support through the IIF are clear. The programme has played a key role in providing early stage capital to market leading companies such as www.seek.com.au, which is today the largest online jobs-listings business in the world.

However, the National Commission of Audit's report in May 2014 included the IIF as a "sector-specific grant" under a range of "industry-specific research programmes" (chapter 10.2) that it recommended should be abolished. It is important to note that this is an incorrect characterisation of the programme as it is neither sector-specific nor a research programme. Importantly, it is not a grant or a "handout", but a private-public co-investment programme (with proceeds returned to the Government).

Government co-investment is typically very important at this stage of financing, as a lever and incentive for private investors to share the risk of investing in early, untested high-risk ventures. In addition, as the Financial System Inquiry's interim report noted, "Australia's venture capital and private equity markets are small, and there are barriers to generating significant investor interest".

This market failure can be ascribed to a combination of factors including the onset of the global financial crisis, the withdrawal of superannuation funds from investing in VC, and the intermittent and insufficient distribution of the funds in subsequent rounds of the IIF programme over recent years. These factors have led to a "stop-start" approach (with a bias towards more *'stop'* than *'start'*) to financing Australian start-ups over the years, and the inability of local VCs to scale up to meaningfully participate in later-stage investment rounds in tandem with their investees' rapid growth.

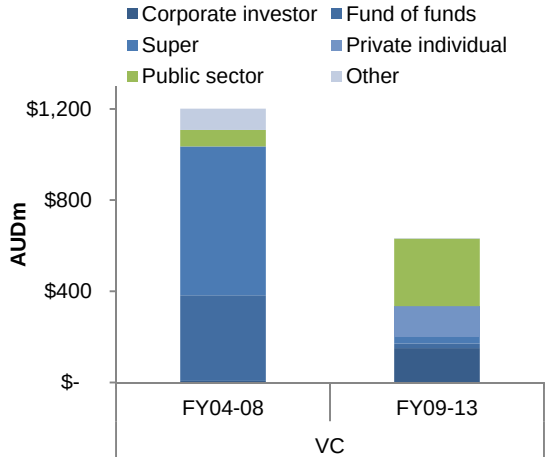
With the abolishment of the IIF and Commercialisation Australia programmes announced in the 2014-15 Federal Budget (replaced with a smaller, more generalist Entrepreneur Infrastructure Programme), this already-small proportion of Government support for commercialisation has gone steadily backwards since 2007, at a time when other countries are boosting public funding for innovation support.

Australia currently lags behind global averages in terms of its VC activity. VC investments represent, on average, 0.03% of GDP internationally, but in Australia it only constitutes 0.02% of GDP. Countries such as Israel (0.4%) and US (0.17%) greatly exceed the OECD average by a significant margin.[1]

The fundraising statistics, compiled by AVCAL across the industry, demonstrate the urgency of addressing this funding gap: total VC funds raised in Australia in the five years from FY2009 to FY2013 amounted to only 65% of the amount raised in the preceding five years (Figure 1). Of the new VC funds raised in the last five years, most would not have been able to be raised without Government co-investment. Similarly, the Government's own 2013 Australian Innovation System Report shows that VC availability has deteriorated steadily since 2006.[2]

[1] OECD, 2012 data.
[2] Department of Industry, *Australian Innovation System Report,* 2013.

Figure 1: VC funds raised FY04-08 vs FY09-13



Source: AVCAL

It can therefore be observed that the full economic benefits of a dynamic VC and PE industry remain largely unfulfilled here in Australia, and private sector investment in this sector is unlikely to see any significant uplift unless there is a strong policy signal of Government support in this regard.

There are both structural and cyclical factors behind the difficulty in attracting sufficient funding allocation into VC and PE. Notwithstanding those factors, AVCAL believes that there is the significant gap in productive capital investment into Australian startups will only continue to grow if steps to arrest the decline in funding are not addressed.

The Government's proposed $1 billion Medical Research Future Fund (MRFF) in the 2014-15 Federal Budget announcement is a step in the right direction, provided a meaningful amount of investment is directed towards actual investment in commercialisation and not just research grants. At this stage, however, the likelihood of the MRFF coming into effect is uncertain.

Fundamentally, Australia needs a stable and consistent approach in building up its commercialisation ecosystem, not just in the medical science industry but also to capitalise on the wealth of research it generates in other areas such as information technology, clean technology and other advanced technologies.

AVCAL therefore recommends the introduction of a dedicated translational innovation funding programme as a key component of our innovation policy agenda that would be most likely to deliver the most meaningful long-term impact.

More specifically, we recommend that the Committee considers the role of the Government in the context of:

- Ensuring that the MRFF's mandate includes a specific and meaningful amount to be invested through a translational medical innovation fund, and
- Creating a new translational innovation fund to co-invest in innovative sectors and technologies.

In terms of budget impact, the administered capital provided through the translational innovation funds should have little to no impact on the Government's fiscal balance. The Government receives an equity share in these investments and has the opportunity to participate in any returns from the funds invested.

This investment, from a Federal perspective, is small when juxtaposed against the vital role it would play in stimulating private investment in Australian-grown innovation, and the long-term benefits of jumpstarting the creation of a vibrant local innovation system.

1.1.1 Ensure the MRFF's mandate includes a translational medical innovation fund

AVCAL recommends that the MRFF's mandate should include a specific and meaningful amount to be invested through a translational medical innovation fund that should:

- Start immediately
- Be funded from the initial $1b endowment of the MRFF, rather than the dividend stream
- Comprise 10% of the total endowment proposed in the Budget
- Incorporate a 'matching' of government funds by the private sector
- Only involve the calling of government funds after private funds have been fully drawn down
- Focus on all stages of translation and commercialisation of medical research, and
- Be invested and managed by professional venture managers, with manager selection based on merit.

In making the announcements relating to the proposed MRFF, the Government has reinforced the central role that the fund could play in helping to identify cures and treatments for ailments and conditions that have a significant social and economic impact across our community.

It should be noted that research breakthroughs alone are not enough to create new cures for cancer or diseases such as Alzheimer's. To bring a product from the science lab to the end-user requires both translation activity (creating practical applications from basic research) and commercialisation (bringing the product to market).

These valuable activities are currently undertaken only to a very limited extent under the auspices of agencies such as the National Health and Medical Research Council (NHMRC), which focuses primarily on research grant funding. And at present, new funding for the translation and commercialisation activities needed to link *upstream* research with *downstream* users is (almost) non-existent.

Australia has the resources and capability to effectively convert research into high-quality products through the translation and commercialisation process. It is for this reason that we must ensure that the economic benefits which can arise from investing in the whole spectrum of medical research activity are realised in Australia, rather than in other jurisdictions. A massive opportunity exists to take advantage of the research infrastructure that was built in in the past, and realise the *development* aspect of R&D.

Australia's capacity to compete for the 'best and brightest' talent from around the world, and our future economic prosperity, will very much depend on our ability to take deliberate and decisive steps in relation to key areas of policy such as this.

There are some standout examples from around the world that are instructive in considering how Australia can best meet the commercialisation challenge. These include:

- The Wellcome Trust, a UK-based charitable foundation that funds biomedical research, has total assets of £17.3b (A$31.2b) and is extensively invested in the translation and commercialisation of medical research by:
    - Investing 7.8% of total assets into VC, including £200m in its dedicated healthcare-focused fund, Syncona Partners, as well as allocations to external healthcare fund managers.
    - Funding for basic research and translation/commercialisation, the latter being done through a number of schemes, including a targeted Translation Fund, and the Health Innovation Challenge Fund (parallel funding provided by the UK Department of Health).
- The Howard Hughes Medical Institute, the largest private supporter of academic biomedical research in the US, has a US$16.9b (A$18.3b) endowment which also invests in life sciences and biotech VC funds.

- The US-based Mayo Clinic, a medical research and practice group with investments valued at over US$5b, has a dedicated VC fund that seeks to bridge the gap between research discoveries and the marketplace.

In our view, the translational medical innovation fund should start immediately with an initial amount of at least 10% of the MRFF starting balance (estimated to be at $1b), with a view to reviewing this quantum as the fund grows and federal budgetary conditions improve. This amounts to only $100m p.a., which is likely to be offset to some extent by the annual earnings from the original $1b endowment balance.

The formation of the fund without further delay would help to minimise the gap in translational funding arising from the abolishment of the Commercialisation Australia and IIF programmes.

Government funds would be matched by the private sector, and should be invested and managed by independent professional venture managers with expertise in translation and commercialisation, rather than by a specific Government agency.

The fund should allow investment in all stages of the research and translation cycle, including subsequent (later) rounds. This would especially help mitigate the current gap seen in later stage venture funding, and reduce the likelihood of promising research failing to succeed or achieve its full potential due to lack of funding later on. Allocating funds to both basic research and translation/commercialisation would allow the MRFF to realise its full potential in alleviating the rising level of healthcare and related costs for future governments in Australia over coming decades.

It is important to note that capital provided by government would only be called three to four years after the call on private investor capital, as recommended by the McKeon Review in the design of its proposed Translational Biotech Fund. It is our understanding that there would be no impact on the underlying fiscal balance of the federal budget because the capital outlay would be treated as a financial asset rather than an expense. As recommended by the McKeon Review, the fund should be governed by an investment advisory board, with board members to be appointed by the investors and to include government representatives. The investment advisory board would be able to run a tender process to select the best manager(s) for the fund.

1.1.2 Create a new translational innovation fund to co-invest in innovative sectors and technologies

AVCAL recommends that the Government should create a new generalist translational innovation fund with an initial Government commitment of $500 million to be drawn down over five years, commencing as soon as possible. It should operate in a similar structure to the proposed translational medical innovation fund described above, i.e.:

- Incorporate a ‘matching’ of government funds by the private sector
- Only involve the calling of government funds after private funds have been fully drawn down
- Be open to all stages of commercialisation from startups to later-stage companies, and
- Be invested and managed by professional venture managers, with manager selection based on merit.

The manager's ability to attract matching capital from private sources should be the test of whether the manager is suitably qualified to apply for a license. In addition, the fund manager selection process should be completed in a transparent manner, and within a specified limited timeframe, to minimise uncertainty for private investors while awaiting the outcome of the selection process. The longer the selection process, the higher the opportunity cost incurred by private investors when they could be opting to deploy their capital elsewhere.

In addition:

- All profit, capital and interest returned to the Government from the fund's investments should be recycled into an ongoing and self-sustaining programme of targeted investment into innovative Australian businesses.

- The funding allocation to the programme should be reviewed with a view to being expanded over time to allow the programme objectives to be fulfilled. Even though proceeds are recycled through the Revolving Fund, these returns will take many years to crystallise and it is important that the cycle of supporting innovation remains unbroken so that Australia does not lose the momentum gained by building up the early stage investment sector only to have it falter at later-stage VC investment.

1.2 Consistent tax treatment for investors in VCLPs

The Venture Capital Limited Partnership (VCLP) and Early Stage Venture Capital Limited Partnership (ESVCLP) programmes were introduced in 2002 with the following policy objectives:

- to provide Australia with "a world's best practice investment vehicle for venture capital";
- to encourage new foreign investment into the Australian VC market;
- to attract VC to support the growth of niche or emerging state-of-the-art research and development;
- to address a perceived market failure to attract capital investment to high risk and expanding businesses; and
- to fund the growth of expanding Australian business to facilitate economic growth and job creation, including to encourage high calibre VC managers to move into the sector.

In recent years the use of the VCLP and ESVCLP vehicles to raise new funds has been challenging due to uncertainty over the tax treatment of different classes of domestic and offshore investors into VCLPs. As the legislation currently stands, foreign investors have certainty in respect of capital account tax treatment, but a similar level of certainty does not currently exist for all domestic investors.

Minor legislative reform is needed to remove this uncertainty for investors by clarifying that gains from investments through these vehicles would be classified on capital account for all eligible domestic investors. This was also recommended by the Board of Taxation (BoT) in its 2011 review into the taxation arrangements under the VCLP regime. In this report, the BoT recommended that deemed capital account treatment should apply to eligible domestic partners on gains or profits made by a VCLP on the disposal of eligible investments. This recommendation was made on the basis of the BoT's assessment of how the current VCLP regime could be amended in order to facilitate more direct investment into Australian businesses by PE and VC funds.

Feedback from AVCAL members over many years has consistently highlighted that the present capital/revenue account tax uncertainty is the issue of greatest concern within the VCLP regime, and a significant impediment to domestic fundraising. In AVCAL's assessment, further investment into startups and SMEs is being held back as a direct result of the current inconsistency in the tax rules that apply to different classes of domestic investors in VCLPs.

AVCAL recommends that the Government should implement the BoT's recommended reforms, which will improve the capacity of the current VCLP regime to deliver on the original policy objectives when this structure was first introduced in 2002. To the best of our understanding, AVCAL does not believe that the implementation of these reforms would carry a significant revenue cost to the federal budget position.[3]

A consistent and clearly defined VCLP tax regime will support the broader innovation agenda by encouraging private domestic investors to invest in unlisted Australian startups and SMEs with high growth potential. Removing the current lacuna in the law to give investors the certainty they need will help harness more private capital to go to Australian businesses.

[3] Any perceived risk to the revenue associated with AVCAL's recommendations should be more than offset by increased taxation receipts from bigger and more profitable portfolio companies, and more productive workforces. The assessment of the Deputy Governor of the RBA, Mr Battellino, noted in the Senate Report on the review of private equity in 2007, was that: "[the] conclusion would be that really on a macro scale shifts in the patterns of financing probably do not have a big overall impact on the tax base."

Innovative businesses need the kind of stable capital provided by investors with the expertise and medium- to long-term outlook necessary for this asset class. By providing them with this kind of stability Australian businesses will have sufficient runway to innovate and adapt to global markets. This should ultimately lead to greater employment growth across industry sectors that will give Australia the competitive edge in the future.

1.3 Improve existing migration policies to better target innovation-building

1.3.1 Expansion of complying investments under the Significant Investor Visa (SIV) programme

The current SIV regime requires applicants to invest at least $5 million into one or more 'complying investments'. The current list of eligible 'complying investments' include direct investment into Australian proprietary companies, bonds, and managed funds investing in companies expected to be listed within 12 months on an Australian Stock Exchange. However, the list does not include investment in Australian PE and VC funds.

This inconsistency means that SIV holders do not have the opportunity to invest in Australian businesses through professionally managed PE and VC funds, which are among the most developed and well-regarded in the Asia-Pacific region.

AVCAL believes that the categories of 'complying investments' for the purpose of the SIV should be further expanded to include the PE and VC asset classes. This will give greater flexibility to fund managers to tailor SIV-compliant funds to meet investors' risk-reward appetites, while at the same time boosting unlisted Australian startups' access to capital.

At the time of writing, there is a policy review process that is being carried out by the Department of Immigration and Border Protection to examine the merits of targeted reforms to the existing SIV regime to enhance its effectiveness in attracting offshore investment into Australia. AVCAL has put forward a submission to the Department (as part of that consultation process) setting out the case for a broader list of 'complying investments'.[4]

1.3.2 Improvements to the Business Talent Visa (subclass 132 – Venture Entrepreneur stream)

The Joint Standing Committee on Migration is currently conducting an Inquiry into the Business Innovation and Investment Programme (BIIP). AVCAL is supportive of improvements to the BIIP migration pathway to help attract more overseas entrepreneurs to Australia to generate more jobs and investment. Our specific recommendations in relation to the Business Talent Visa (subclass 132 - Venture Capital Entrepreneur stream) in particular are set out in detail below.

In our view, the effectiveness of the BIIP (subclass 132 – Venture Entrepreneur stream) can be improved in the following ways:

- Broaden the programme to include start-up founders and allow acceptance into a qualifying incubator programme as an alternative eligibility requirement; and
- Reduce the $1 million funding requirement to $100,000; or alternatively if the $1 million funding requirement is maintained then at least allow the $1 million to come from syndicated financing round with $500,000 of this amount from a certified AVCAL VC member.

These recommendations are set out in further detail in our May 2014 submission to the Joint Standing Committee on Migration.[5]

[4] www.avcal.com.au/policyadvocacy/2014/avcal-submission-significant-investor-visa-review
[5] www.avcal.com.au/policyadvocacy/2014/avcal-submission-inquiry-into-the-business-innovation-and-investment-programme

SECTION 2: POLICY SETTINGS TO DELIVER A MORE PRODUCTIVE AND SELF-SUSTAINING INNOVATION SYSTEM

With other countries such as the US, UK, Canada, Singapore, India and New Zealand forging ahead in building their innovation ecosystems, it is important that Australia does not lose this opportunity to send a signal that it truly is 'open for business' and that it is actively seeking to attract and retain the best and the brightest businesses in our economy.

In AVCAL's view, the Australian innovation system cannot achieve its potential unless there is a concerted effort to address barriers to private investment in new ideas, reduce red tape and prohibitive tax policies which are inconsistent with global norms, and through the correction of market failures in capital formation for emerging new ventures.

Above all, there needs to be a focus on consistency and long-term thinking in relation to the nation's innovation policy framework. Investment in new ventures and ideas is inherently high-risk and requires long-term commitment on the part of both the investors and business builders in order to take the venture from inception to maturity. Consistency in the long-term approach to innovation policy settings is therefore a critical ingredient in helping to provide industry participants with the necessary confidence required to support investment in the domestic innovation ecosystem.

2.1 Introduce R&D quarterly tax credits for early stage companies

Early stage companies involved in developing new technologies often face cash-flow constraints because they require significant cash outlays in the early stages of the product life cycle.

Currently, these companies can access a 45% rebate on expenditure related to eligible research and development (R&D). The R&D tax regime has had a very significant positive impact in supporting domestic businesses investing in innovation. It is also an important incentive for offshore investors to put money into Australian companies, and in attracting businesses from offshore to re-locate their R&D operations to Australia. This plays an important role in helping businesses to source adequate levels of capital investment in the knowledge that the regime will deliver long-term certainty to businesses that commit large allocations towards R&D activities.

In some cases, however, accessing the support that can be delivered by the existing R&D regime can effectively be delayed by up to 16 months, as businesses are typically required to wait until the point in time that they lodge their income tax return for the financial year, and then wait a further four months to secure the R&D rebate that they may be eligible for.

In a practical sense, companies seeking to commercialise patents can miss out on the opportunity to derive premium earnings and returns on investment during the exclusive earning period for new patents.

AVCAL recommends a move to quarterly R&D tax credits to alleviate some of the cash-flow constraints that these companies face. The businesses that would gain the most out of this change are small, research-intensive enterprises with annual turnover under $20 million. These businesses typically have limited access to capital, but the R&D tax credit has been one measure that has been widely supported by those small businesses that invest heavily in R&D activities.

The fiscal impact on the federal budget would appear to relate mostly to timing differences, and concerns regarding over or underpayment of credits can be addressed in much the same way as for quarterly GST or PAYG income tax payments. While there is a perceived risk in relation to the difficulty of clawing back overpayment of credit due to the risk profile of these early stage companies, integrity rules similar to those used for the GST and income tax can be put in place to mitigate the risk. More generally, the risk profile of these companies is not dissimilar to many other SMEs, which are a vital part of the Australian business landscape.

In a global marketplace for capital and R&D investment, it is critically important to position Australia as an innovative 21st century economy and a 'knowledge nation'. Australia must continue to improve its policy settings in the R&D area, to ensure that we can continue to compete with other jurisdictions around the world.

AVCAL does not believe that there is a significant fiscal cost associated with the introduction of these reforms to the R&D tax credit regime, but there will almost certainly be a very real and positive impact on the working capital of small innovative companies in Australia.

2.2 Reform of the Employee Share Scheme tax framework for early stage companies

Early stage companies seeking to attract the best talent are often starved of cash, and therefore turn to offering shares or share options in the business as a form of compensation to employees. These schemes also act as powerful incentives to employees to commit to the future success of the venture.

The current legislation on employee share option plans (ESOP) and employee share schemes (ESS) came into effect in July 2009. Under these rules, gains are assessed as ordinary income and can be taxed prior to the gains being realised.

These ESOP and ESS arrangements offer a far less attractive environment in which start-ups can operate and retain highly skilled employees. Valuable human capital continues to move from Australia's tech hubs to the Silicon Valley and other jurisdictions for lack of a best-practice innovation ecosystem (along with the requisite policy settings) in Australia.

AVCAL recommends that employees of start-ups who receive benefits under ESOPs and ESSs should only be taxed when a realisation event occurs, and this should only be on capital account. The approach should also be simple and low cost; and utilise an appropriate definition of 'start-up companies'.

In AVCAL's view such a regime would represent an appropriate balance between protection of the revenue, creating incentives for employees to work in Australian start-ups and reducing cost and complexity. Ultimately, reforming current ESOP and ESS rules would pay dividends to the Australian economy in years to come as more capital and talent is attracted to our shores.

The Government should accelerate the implementation of reforms to un-wind the negative impact of past changes to the tax rules in this area, and to help drive greater investment in start-up businesses in Australia. There is a Government-led inquiry into potential reforms to the employee share scheme rules for start-ups currently underway. Further details are available in AVCAL's submission to the Government's January 2014 consultation paper on 'Employee Share Schemes and Start-Ups' (see http://www.avcal.com.au/documents/item/781).

2.3 Strengthen the nexus between publicly-funded research and economic outcomes

Private capital can be more effectively deployed into early stage companies and innovation if there is a productive, collaborative and aligned relationship between the business and academic sectors in Australia. This will allow Australia to harvest greater economic and productivity benefits from the public funding of R&D in universities and research centres. It will also help reduce the number of missed economic opportunities from viable but non-commercialised research.

To address impediments that limit the amount of collaboration between business, universities and publicly-funded research agencies, some suggestions for further consideration by the Government include:

- Better alignment of publicly funded research with Government initiatives supporting commercialisation;
- Fine-tuning of incentives for publicly-funded researchers to collaborate to commercialise their research; and
- Greater business sector input in the strategic allocation of university research funding.

2.3.1 Better alignment of publicly funded research with Government initiatives supporting commercialisation

The Government currently spends around $9 billion each year in supporting science, research and innovation, of which $2.8 billion (an amount which exceeds the size of the entire domestic VC industry in Australia) is spent on university research funding.[6] To date, very little of this investment has led to a commercialised result. In the ten years to June 2013, the Australian VC industry was able to invest only $154 million per annum (on average) in early stage companies, and this amount has been declining in recent years.

Reflecting the low priority given to the translation of publicly funded research to commercial outcomes, total Government support for commercialisation amounted to only $0.2 billion (or 2% of the federal budget allocation for research and innovation) in 2012.[7]

To this end, the Committee should consider how the Government can better align the national research and commercialisation agendas to ensure that they provide the correct balance between the pipeline of R&D and the capacity of investment to commercialise that research. In particular, the Government ought to examine the optimal size of commercialisation programmes (such as the Innovation Investment Fund programme), and how supporting structures such as the ES/VCLP regime can be improved to facilitate this alignment on a more effective basis going forward.

2.3.2 Fine-tuning of incentives for publicly-funded researchers to collaborate to commercialise their research

Often, working in academia and embarking on the commercialisation journey are treated as mutually exclusive options for researchers in Australia. There are often few economic (or career) incentives for researchers to invest their time and resources in working on high-risk, early stage start-ups with long-dated payoffs.

Commercialisation also typically occupies only a very small place on the list of priorities for many Australian universities. Widely-followed university rankings and key performance indicators typically focus on research citations, teaching quality and research grants obtained, as key drivers of what constitutes a 'top ranking' university.

In addition, the competitive research grants programme tends to focus on publications as a key performance indicator of research outputs, with no clear distinction between the value of publications and conference presentations vis-à-vis more capital-intensive commercialisation outcomes.[8]

To address these structural impediments to taking publicly-funded innovation to the market, it would be helpful in our view for the Government to consider incorporating into the national research agenda a stronger emphasis on a project's potential commercial impact under its selection criteria and reporting process.

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[6] Australian Government, Science, Research and Innovation Budget Tables: 2013-14
[7] Australian Government, 2012 National Research Investment Plan.
[8] The ARC's principles on Performance Evidence classify research outputs as the following: "In addition to standard academic publications, research outputs can include grey literature, consultancy reports or reviews, patents and policy advice, competitive grants and other research support, higher degree student completions, major exhibitions, compositions or performances, plant breeding rights, registered designs, invited keynote and speaker addresses and other professional activities and contributions to the research field."

For example, it may wish to examine fine-tuning the selection criteria, reporting template and funding envelope of existing research grant programmes to better align funding with desired outcomes. The Government may, for example, consider setting aside a predetermined proportion of existing competitive research funding to high-potential, game-changing technologies with a clear commercialisation pathway.

In addition, reform of the ESOP/ESS tax framework will also help to better define the potential upside opportunity to founder/researchers, and remove a significant barrier which currently acts as a disincentive to them investing their time and resources into bringing their innovations to the market.

2.3.3 Greater business sector input in the strategic allocation of university research funding

Currently there are several bodies that oversee the strategic priorities and allocation of higher education research funding in Australia, but the business sector has relatively little direct representation in this process.

For example, the Australian Research Council (ARC) is a statutory agency that advises the Government on research matters, and its mission is to deliver policy and programmes that advance Australian research and innovation globally and benefit the community. The ARC's current Advisory Council comprises seven academic representatives and only two representatives from the non-academic community.

That notwithstanding, there appears to be a notable lack of business representation in the composition of the ARC College of Experts, which assesses and ranks ARC grant applications.

This is anomalous given that an improved level of collaboration between business and academia is widely considered to be an important objective of publicly funded research. There are no business representatives among the 159 members of the ARC College of Experts. For example, the ARC College of Experts in Engineering, Mathematics and Informatics has 41 members, of which 40 are university academics and one from the Defence Science and Technology Organisation. By contrast, the United Kingdom's ARC-equivalent body, the Engineering and Physical Sciences Research Council, comprises 18 members including an independent entrepreneur, and representatives from businesses such as Microsoft, Procter & Gamble, IBM and Arup, to name a few.

While it is recognised that there will always be a number of important areas of research that do not carry a clear commercial motivation, such as areas of work that enrich Australia and its community in a wide variety of other ways, it should be recognised that the current lack of alignment between business and academia will continue to diverge unless we take the opportunity to arrest the decline as a matter of priority.

The Committee should look at the opportunity for the Government to consider modernising the composition of the various committees that oversee research funding in order to ensure that appropriate private sector input is taken into account to facilitate the effective and productive allocation of what is a very significant overall amount of public funding to the academic research sector.

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If you would like to discuss any aspect of this submission, please do not hesitate to contact me or Dr Kar Mei Tang on (02) 8243 7000.

Yours sincerely,

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Chief Executive
AVCAL