AUSTRALIAN INVESTMENT COUNCIL

29 April 2022

Productivity Inquiry Secretariat
Productivity Commission
4 National Circuit
Barton ACT 2600

Lodged via the inquiry portal

Submission – Productivity Inquiry focal areas

Dear Commissioners,

As the industry association for private capital in Australia, the Australian Investment Council is pleased to present a further submission to the Productivity Commission for the next phase of its Inquiry into Australia's productivity performance. The content of this submission builds upon the Council's submission of 31 March 2022.

The Council is supportive of policy initiatives and reforms that help ensure our economy is competitive, productive, innovative and able to support Australia now and into the future.

Private capital investment has played a central role in the innovation, growth and expansion of thousands of businesses and represents a multi-billion-dollar contribution to the Australian economy. Australian Investment Council members are the standard-bearers of professional investment and include private equity (PE), venture capital (VC) corporate venture capital (CVC) and private credit (PC) funds, alongside institutional investors such as superannuation funds, sovereign wealth funds and family offices as well as leading financial, legal and operational advisers. Our members include both Australian domestic and offshore-based firms, who in turn invest capital on behalf of millions of Australian families and attract capital from passive overseas investors.

Private capital fund managers invest billions of dollars into Australian companies across every industry sector of the economy every year. Australian-based PE and VC assets under management reached $42.2 billion in 2021[1] with an additional $10 billion in equity capital available to be invested in the short-term. Companies that partner with private capital fund managers contribute more than 474,000 Australian jobs and provide 2.6% of our nation's GDP.[2] The private capital industry is a significant and growing contributor to, and driver of, Australia's economic recovery and the development of Australia's industries of the future.

Given the impact of the COVID pandemic and the uncertain times that lay ahead, and as a net importer of capital, Australia's economy relies on a dependable and steady flow of foreign capital to drive economic growth and job creation. At this critical juncture, it is vitally important for our economic future, and Australian jobs, that businesses can quickly and efficiently access capital from domestic as well as offshore investors.

The Council looks forward to participating in any future discussion about the themes set out in this submission as part of the Productivity Commission's inquiry process. If you have any questions about specific points made in our submission, please do not hesitate to contact me or our policy team at policy@aic.co.

Yours sincerely,

p.p. *R Tolhurst*

Jonathan Kelly
Interim CEO

[1] *Preqin & Australian Investment Council Private Capital Yearbook, April 2022*
[2] EY independent analysis of the Economic Contribution of Private Capital to the Australian Economy –*Funding a Brighter Future*, April 2022

DYNAMIC FIRMS, FLEXIBLE MARKETS
FUTURE WORKFORCE
LEVERAGING TECHNOLOGY & INNOVATION

AUSTRALIAN INVESTMENT COUNCIL

The voice of private capital

Contents

1. Summary of Recommendations

The Council's recommendations are outlined below:

Dynamic firms, flexible markets

- Fast-track the implementation of the new Limited Partnership Collective Investment Vehicle as the major outstanding component of a globally competitive fund vehicle regime.
- Regularly review the foreign investment framework to ensure it continues to attract investment capital amidst changes to global uncertainty and disruption caused by future pandemics or issues that lead to border closures.
- Consider recommendations for improving the operation of the Foreign Investment Review Board (FIRB) approval regime to improve decision turn-around times.
- Improve existing VCLP and ESVCLP vehicles through adopting and implementing the outstanding technical and interpretative issues in the ESVCLP and VCLP regimes as a priority.

The future workforce

- Further refine migration skills list to address immediate skills and talent gaps aligned to the innovation economy
- Encourage post-graduate students with in-demand skills to remain in Australia either through the Global Business & Talent Acquisition scheme, global talent visas or skilled visas that offer a pathway to permanent residency
- Work with Austrade to promote Australia as a desirable destination for skilled migrants, tourists and students to address current shortages
- Collaborate with universities to fast-track students who are in their penultimate year into the workforce through cadetship and internship programs
- Governments collaborate with the private sector to upskill workers for jobs of the future
- Introduce "returnships" for older or recently retired workers to re-enter the workforce on a trial basis which, if successful, would translate to permanent work
- Work with universities to map skill requirements for the future and to encourage more double degree opportunities
- Further embed STEM skills into the Australian school curriculum, from primary school years through to tertiary education and fast-track the establishment of 'STEM schools'.
- Develop a national education program to fast-track STEM skills development in secondary schools.
- Map skills that can be translated from a tertiary education level to fast-track technology skills development in Australia.
- Look to expand the capability of the Digital Technologies Academy planned for Adelaide to include the secondary education sector.

The innovation economy

- Go narrow and deep in industries that will support Australia's future employment and economic growth.
- Focus on technology and innovation as an enabler for building employment and growth across the economy
- Focus on developing the industries where Australia has a competitive advantage
- Build more robust collaboration between the university and the private capital sectors

2. Overview

The role of private capital in Australia's economy cannot be underestimated. It provides stable, resilient capital in times of downturn, and powers the entrepreneurship and innovation that drives economic growth. Its ability to spot trends ahead of the broader market means private capital acts as a powerful catalyst for change, while its commitment to patient, long-term funding nurtures this change as markets emerge and evolve.

Private capital encourages more evenly distributed access to funding, offering alternative non-bank sources of financing and organises the more efficient allocation of capital across the economy. It is the platform that allows good businesses to become great ones, all while providing stable, consistent employment to thousands of Australians today and helping create the high-growth sectors that will deliver the jobs of the future. The growth of Australia's private capital sector is testament to the value it brings to our economy and society. The industry is thriving, with Australian private capital assets under management (AUM) totalling $90 billion in 2021, an increase of 11 per cent in the six months from December 2020.

Figure 1: Private Capital's Contribution to the Economy [3]

[3] EY, Building a brighter future, May 2022

The Australian Investment Council represents 90% of Australia's private capital sector, a dynamic industry spanning private equity, venture capital, corporate venture capital and private credit. Together these funds invest billions into the Australian economy each year, powering growth and employment in diverse businesses from start-ups to multinationals.

A recent study commissioned by the Council and conducted by EY shows private capital contributes $54 billion to the economy, equivalent to 2.6% of GDP, and creates more than 474,000 FTE jobs (Figure 1).

Australian Investment Council members play a significant role in economic growth and building a more complex economy. Investment by the Council's members has supported the inception, growth, and development of 856 Australian businesses, ranging in size from just a few employees to multi-billion-dollar firms. Council members include venture capital firms, private equity investors, as well as private credit, which together provide diverse sources of alternate funding, to meet the needs of different types of businesses at varying stages of the growth life cycle. The businesses supported by Australian Investment Council members span all industries, illustrating the scope of private capital investment across the economy.

There is a compelling case to shift the dial away from a reliance on mining to a knowledge-based economy that is underpinned by technology. Private Capital is a driver of change and innovation and is now a well-developed sector within the Australian economy. With the right levers and economic drivers in place, private capital can continue to support new industries and productivity growth that will recalibrate industries, enhance Australia's economic complexity, and ultimately, increase living standards.

Building on our submission of 31 March, 2022, the Australian Investment Council has put forward recommendations for this phase of the Inquiry that focus on this phase of the Inquiry's themes of:

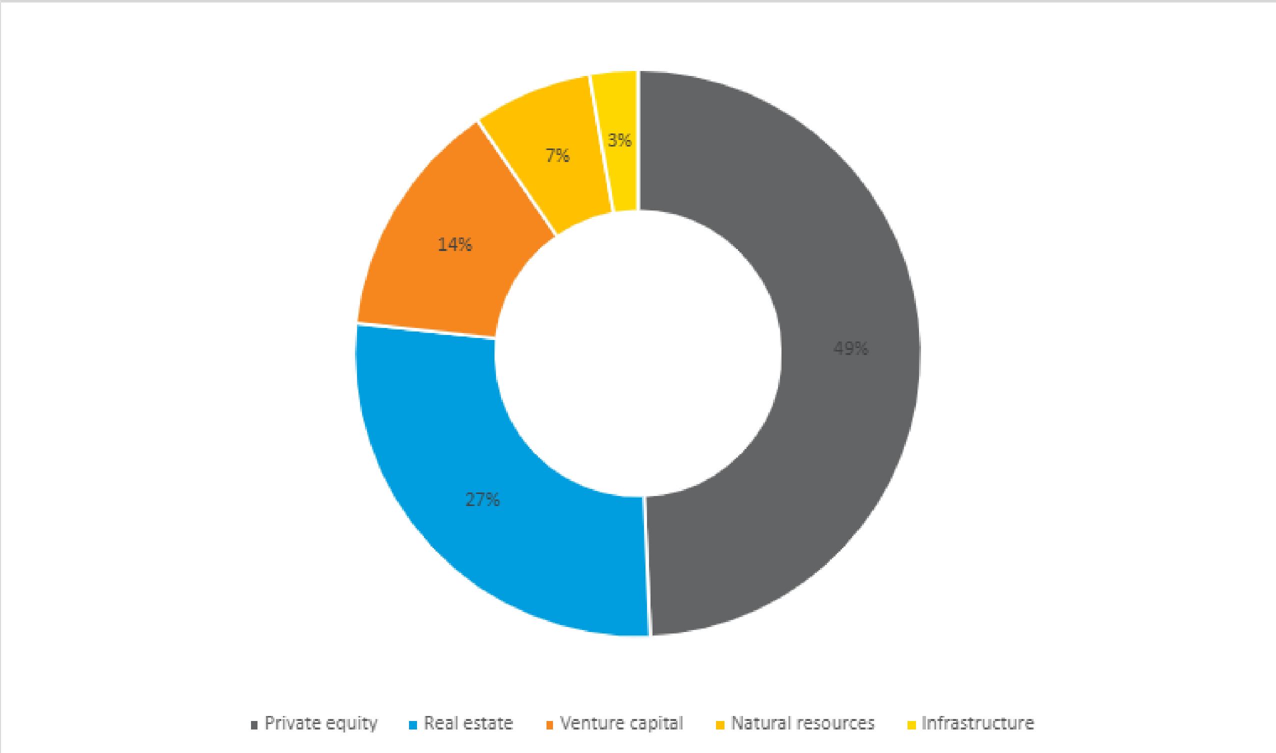
1. Dynamic firms, flexible markets
2. The future workforce
3. Leveraging new technologies and innovation.

3. Dynamic firms, flexible markets

As outlined in our earlier submission, foreign investment into Australia has grown over the years from just 18% of investors into Australian private capital funds two decades ago to almost half (49%) in the past five years. Australia is appealing to foreign investors for its relatively stable political environment, strong economy, robust governance, and dynamic market conditions. However, there is no room for complacency as Australia continues to compete head to head with more mature jurisdictions like the USA, UK and Canada who have more established track records in fundraising and larger scale due to a range of factors including bigger populations and economies and private capital ecosystems which have been operating much longer than Australia's.

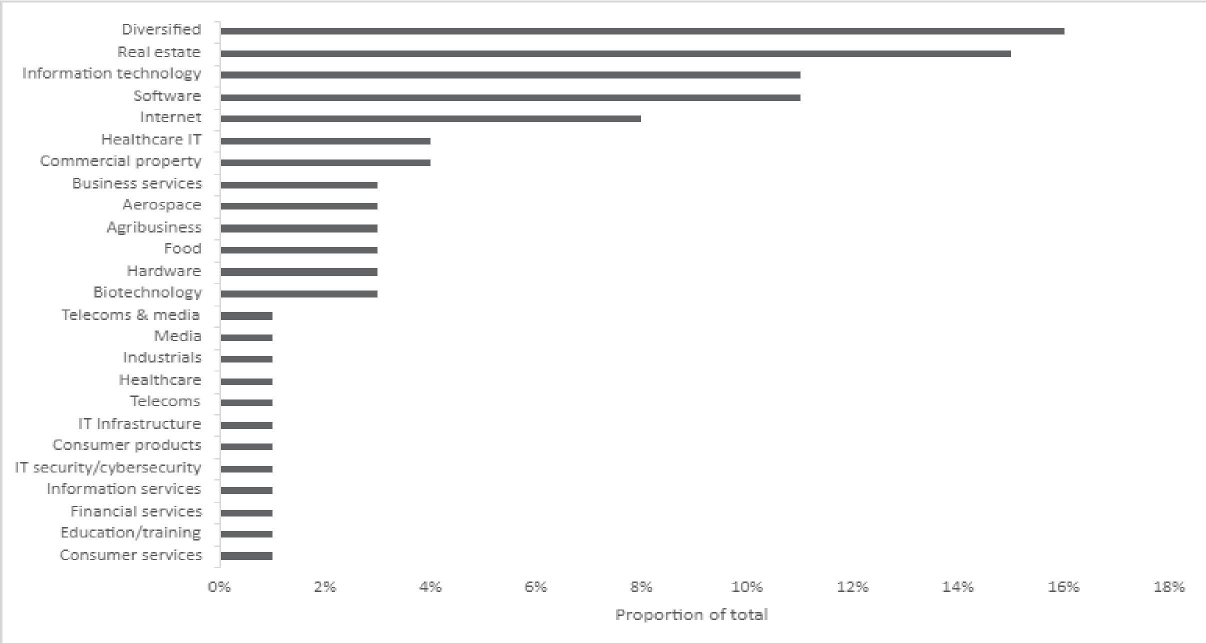
Private equity is the most attractive asset class to foreign investors, making up almost half of known commitments to Australian private capital funds from 2017 to January 2022. With aggregate deal value hitting a record $20 billion last year – up 32% on 2020 and 20% on 2019[4] – the growing size and sophistication of Australian private equity managers is certainly a factor in the increased interest offshore. Regulatory changes in the Australian financial landscape also benefit investors. These changes are increasingly pro-innovation and pro-competition, boosting fundraising and deal-making. Private equity in Australia is expected to continue to mature and attract foreign capital, aided by a strong wave of digital disruption in the post-COVID environment that can help make these firms more competitive on the global stage.

Figure 2: Proportion of foreign funding in Australian-focused funds by Private Capital sector, 2017-2022 YTD [5]



[4] Preqin & Australian Investment Council Yearbook, May 2022
[5] Ibid

Figure 3: Foreign Investment in Australia by industry, 2020-2022 [6] (Private Capital)



The Australian Investment Council is supportive of a comprehensive clear, predictable and efficient foreign investment framework which continues to facilitate the flow of foreign capital that supports the growth of businesses and jobs in the innovation economy.

It is the Council's view that a continuous review of the foreign investment review framework is essential to ensure Australia's policy settings are globally competitive and do not deter foreign investment in light of global geopolitical uncertainty and economic recovery from the health impacts and lockdowns as a result of COVID-19.

3.1. Australia needs a more globally competitive investment regime

As noted above, the flow of investment capital into Australian private markets has continued to grow over the past decade. However, Australia is facing headwinds as the competition for investment capital has intensified in recent years and the Council's members are now facing more competition from nearby jurisdictions in Singapore and New Zealand which are perceived by investors as having more favourable tax and regulatory settings which are well-understood in the global investment market.

One outstanding regulatory setting that would bring Australia onto a level playing field with other jurisdictions is the need for a flow through Limited Partnership Collective Investment Vehicle (LPCIV). This was a key recommendation in the Johnson Report – *Australia as a Financial Centre: Building on our Strengths* – of 2009 and was a Federal Budget announcement in 2016 with a proposed implementation date of 1 July 2018.

The Johnson Report highlighted that if Australia had access to a broader set of Collective Investment Vehicles (CIVs) which were taxed on a flow-through basis, more capital could be attracted from the Asian region into Australian managed and administered funds. Any CIV regime offered in Australia would benefit greatly from adopting, where possible, attributes that are more attractive to global investors. While legislation for the Corporate Collective Investment Vehicles has now been passed, the private capital industry is still waiting for the LPCIV.

Currently private capital investment structures are reliant on Managed Investment Trusts which are complex and not widely understood outside of the domestic economy. This is a significant deterrent for foreign investors who tend to gravitate towards

[6] Ibid

regimes they are familiar with, such as those in Singapore and New Zealand, which have implemented global best practice Limited Partnership vehicles into their suite of vehicles on offer, rather than having to understand a completely new concept such as a trust – which is only used in Australia on a significant scale. As a result, Australia is losing billions of dollars of potential investment revenue.

The mechanisms are already in place within the states to implement LPCIVs with relatively little effort involved as no major legislative changes would be required. Yet the rewards in having a regime that can compete with nearby jurisdictions would be significant for the domestic economy and the investment into businesses and jobs of the future.

The Council has previously identified the proposed new LP CIV regime as an area of policy focus for private capital. A globally competitive LP CIV would have a significant and profound impact on the capacity of our industry to invest billions of dollars into great Australian businesses spanning all corners of the economy, and at all stages of development – small, medium and large scale – to help them realise their growth and expansion plans, and create new employment and new industries for the future.

Unlike the CCIV regime, the LP CIV regime does not require any extensive changes to the Corporations Act 2002 as it is governed by state-based legislation which has already been successfully legislated for this type of structure for nearly 20 years.

We acknowledge that State Governments will play a critical role in providing supporting legislation, consistent with what they have done with the Venture Capital Limited Partnership (VCLP), Early-Stage Venture Capital Limited Partnership (ESVCLP) and Australian Fund of Funds (AFOF) regimes. Accordingly, all that is necessary is to enact supporting tax legislation to switch-off the current deeming of Limited Partnerships as being companies under Division 5A of the Income Tax Assessment Act 1936 and enactment of qualification measures – which we would anticipate may be similar to MIT regime with appropriate modifications such as not having a control test - as this is a legacy trust law issue.

Recommendation

- Fast-track the implementation of the new Limited Partnership Collective Investment Vehicle as the major outstanding component of a globally competitive fund vehicle regime.

3.2. Foreign Investment Framework

Ensuring that the policy environment around foreign investment remains stable is one of the key ways in which the government can help maintain Australia's reputation as an attractive investment destination.

Uncertainty or perceived instability in policy structure around the foreign investment regime risks additional pressure in the already challenging current environment. The potential impact of this drag on investment and growth should not be downplayed, nor should the impact on dampening collaboration and cross-pollination within Australia's economy. It is imperative that the Government carefully balances the current and future needs of Australian businesses against need to maintain confidence in the system from domestic and foreign investors.

Recommendations

- Regularly review the foreign investment framework to ensure it continues to attract investment capital amidst changes to global uncertainty and disruption caused by future pandemics or issues that lead to border closures.
- Consider recommendations for improving the operation of the Foreign Investment Review Board approval regime to improve decision turnaround times.

3.3. Venture Capital Limited Partnerships (VCLPs) and Early Stage Venture Capital Limited Partnerships (ESVCLPs)

The VC Tax Concessions regime plays a pivotal role in providing domestic and foreign capital and supporting the growth of Australia's innovation and growth capital ecosystem. To date, the regime has attracted around $16.99 billion in committed capital, and supported investment into 1,703 businesses.[7]

[7] Venture Capital Dashboard FY2019/20, Department of Industry, Science Energy and Resources

The VC Tax Concession framework is supporting fast growth businesses through domestic and foreign investment and is estimated to have added at least $1.4 billion to Australia's GDP in 2021 and to have created 2,514 full-time equivalent (FTE) jobs according to data modelling by EY.

In fact, 10 FTE jobs are created for every investment made through the ESVCLP and VCLP programs.[8] Specific modelling in this area has been established on a conversative basis – in actual fact, the impact of the regime from both an economic and job creation perspective is almost certain to be significantly higher than the numbers identified in our analysis.

However there are a number of technical interpretive issues in relation to the VCLP and ESVCLP regimes which are preventing these vehicles from operating at peak efficiency.

The Council notes that when ESVCLPs and VCLPs were made effective on 1 July 2016 as part of the National Innovation and Science Agenda (NISA) reforms, these were strongly supported by the private capital industry. Most of the reforms were in fact aimed at supporting early stage investment, which continued to be the subject of perceived market failure, because of their increased risk and poor financial performance in the preceding decade and half.

In a move supporting investment into Australian businesses, the government implemented changes to ESVCLPs and VCLPs on 1 July 2016. However, due to the speed with which they were introduced, there are a number of areas where technical and interpretative amendments and clarifications regarding these investment vehicles are necessary.

There are some significant issues which are giving rise to uncertainty, both in practice and technically, which we have previously raised and have shared with the Treasury, and other government departments and which we believe could be efficiently and expeditiously resolved in in order to further encourage investment using VCLP and ESVCLP vehicles. In particular, Australian investors require assurance that their investments are taxed on capital gains tax account – consistent with other fund vehicles in Australia and overseas.

Providing clarity and certainty on the framework for VCLPs and ESVCLPs and making them competitive with other jurisdictions will be attractive to investors considering medium and long-term investments into Australian businesses across a range of new and emerging sectors of the economy.

Recommendation

- Improve existing VCLP and ESVCLP vehicles through adopting and implementing the outstanding technical and interpretative issues in the regimes as a priority.

4. The future workforce

In addressing the skills and capabilities of the workforce of the future there are a number of key considerations to take into account which fall into three main categories of:

1. Addressing current skills and talent gaps
2. Redeploying skills within the current domestic economy
3. Building a pipeline of talent.

4.1. Addressing current skills and talent gaps

As pointed out in our previous submission, Australia is a net importer of human capital and relies on immigration to fill skills and talent gaps. Skilled migration has been a key feature of Australia's migration system, playing an important role in generating economic growth for successive decades. Australia has had a long history of supportive policies to attract business entrepreneurs. However, the rising global mobility of workers and heightened competition for talent means that it is important for Australia to have policy settings that are effective in attracting a critical mass of "new economy" skilled workers.

The Council's own research[9] shows that job vacancies are continuing to grow in the innovation sectors with 5331 advertised job vacancies in the portfolio companies of eight of Australia's most active VC firms at 31 December 2022, up from 3952 in the previous six months.

[8] An overview of the impact of the ESVCLP and VCLP investments, EY, September 2021
[9] *Future Jobs Barometer*, Australian Investment Council, March 2022

The growth of jobs in VC-backed businesses is a reliable indicator of where the demand for skills will be coming from into the future with the latest analysis highlighting the need for software engineers with cloud-based experience which accounted for 1446 of job vacancies, a 27% increase from 939 in the previous six months. However, more traditional roles in finance, law, risk and compliance should not be overlooked and still have significant demand within the innovation ecosystem.

Recommendations

- Further refine migration skills list to address immediate skills and talent gaps aligned to the innovation economy
- Encourage post-graduate students with in-demand skills to remain in Australia either through the Global Business & Talent Acquisition scheme, global talent visas or skilled visas that offer a pathway to permanent residency
- Work with Austrade to promote Australia as a desirable destination for skilled migrants, tourists and students to address current shortages
- Collaborate with universities to fast-track students who are in their penultimate year into the workforce through cadetship and internship programs

4.2. Redeploying skills within the domestic economy

In additional to the programs already in place, there is a substantial opportunity to redeploy the skills of Australia's current workforce so they are relevant for the future economy. One area that has been overlooked is for recent retirees or older workers who may have built significant experience and skills through their working careers and would like to continue contributing to the workforce.

One private capital-backed company, Forte, is working with governments around the world to upskill unemployed workers by matching skills to job demand. The company recently signed an agreement with the South Australian government to help redeploy people into the workforce.

Recommendations

- Governments collaborate with the private sector to upskill workers for jobs of the future
- Introduce "returnships" i.e., internships for older or recently retired workers to re-enter the workforce on a trial basis which, if successful, would translate to permanent work

4.3. Building a pipeline of talent

Through this research, the Council has noted that the innovation sector seems to require multiple skills, for example, a software engineering role may also require marketing or web design capabilities.

As noted in earlier submission, a world-class innovation ecosystem needs to be supported by a world-class education system. The nature of work itself is evolving, driven by technological transformation. A leading education system should encompass skills that aren't traditionally taught in schools and universities, such as entrepreneurship, and provide the infrastructure to effectively deliver student outcomes starting from primary through to the tertiary phase of education. Australia is a net importer of not only capital but talent.

This extends further to the tertiary sector to consider expanding opportunities for double degrees to enable students to become more marketable in the workforce of the future.

Recommendations

- Work with universities to map skill requirements for the future and to encourage more double degree opportunities
- Further embed STEM skills into the Australian school curriculum, from primary school years through to tertiary education and fast-track the establishment of 'STEM schools'.
- Develop a national education program to fast-track STEM skills development in secondary schools.
- Map skills that can be translated from a tertiary education level to fast-track technology skills development in Australia.
- Look to expand the capability of the Digital Technologies Academy planned for Adelaide to include the secondary education sector.

5. Leveraging new technologies and innovation

Investments within private capital are closely aligned to key government priorities, such as advanced manufacturing, medical technologies and pharmaceuticals, space, clean energy, food and agribusiness and cybersecurity. Funds and strategic guidance from private capital investors are driving growth in the areas forecast to help secure Australia's economic future.

Businesses backed by private capital are often at the forefront of innovation, supporting jobs of the future in sectors such as advanced manufacturing, IT, and health. Throughout the pandemic, it was private capital that continued to invest in ground-breaking ideas, with more than 70% of private capital backed businesses progressing innovation in the last 12 months.

The provision of patient capital, strategic guidance and the courage to take calculated risks means VC brings a particularly powerful formula of support to early-growth business – and research suggests it is 3-4 times more effective than corporate research and development at fostering innovation.[10] The Australian government's recognition of the benefits of VC investment is highlighted through programs including the Early-Stage Venture Capital Limited Partnerships (ESVCLP) and Venture Capital Limited Partnerships (VCLP) programs which have helped Australian businesses lead the world in sectors including AgTech, MedTech, fintech, cybersecurity, mining and resources technologies, and digital technologies. Deals involving IT represented 38% of VC investment in 2020, while the year also saw increased funding in some of Australia's most high-profile fintech companies including Airwallex and Valiant Finance.

5.1. Technology

Technology businesses backed by Australian Investment Council members directly or indirectly supported 91,906 jobs in Australia in 2020. Investment into the sector is expected to continue to increase, as digitisation becomes a critical enabler across our economy. Over half of the 20 most in-demand jobs and skills for the future are technology roles.[11]

As more businesses require digital skills and look to incorporate emerging technologies, growing the Australian technology industry will be key to our nation's future. Over 80% of businesses said they were looking to adopt key technological innovations in the next five years (including cloud computing, big data analytics, connected devices and artificial intelligence).

To help make its shift to a world-leading digital economy, the government has developed the Digital Economy Strategy with priorities including digital government, tech start-ups and advanced manufacturing. Private capital is ready to play a critical role in realising these ambitions. Already about half of the Australian Investment Council members we surveyed say their portfolio companies are involved in advanced manufacturing, while 42% are aligned with Australia's aim to build a technology-backed economy, working in fields as diverse as fintech and quantum computing. As private capital flows into these sectors, its impact goes beyond direct funding, sending signals to the business community that drive innovation and growth.

The future workforce will be heavily reliant on digital skills and technology. One company that has demonstrated innovation through technology is Swoop Aero.

Case Study

Folklore Ventures gives Swoop Aero the confidence to soar to new heights

When Eric Peck and Josh Tepper launched Swoop Aero in 2018, they had already raised a small amount of capital for their innovative drone services business. But they were scaling fast and needed more funding, as well as the insight into how to achieve their ambitions to "make access to the skies seamless".

Investment from venture capital firm Folklore Ventures came at a critical time, giving Swoop access to the capital and business advice, guidance and mentorship that helped it develop its growth plans. From their initial garage base, Swoop

[10] The Venture Capital Effect, Australian Investment Council, 2017
[11] Australia grows a new export sector, 30 August 2021. Australian Trade and Investment Commission.

expanded fast, now leasing the former GE head office in Port Melbourne and building aircraft using advanced manufacturing systems and cloud-based digital twins.

Swoop is now a world-leading drone logistics service, working in partnership with leading donors and healthcare agencies including the Gates Foundation and UNICEF to deliver life-saving medical supplies and vaccines across Africa, as well as in remote areas of Australia, England, and Scotland.

Team members from Folklore, as well as Right Click Capital, sit on Swoop's board, sharing strategic and planning advice and assisting with key hiring decisions. Their guidance is ongoing and hands-on, and fortnightly progress calls with Eric offer opportunities to review progress, discuss issues such as capital allocation, capex and decision-making discipline, and develop and support efficient and agile governance processes.

Eric says the backing of venture capital gave the company the confidence to keep going and meet its goal of reaching 100 million people by 2025. "The technology and long-term vision alignment we saw in venture capital is what drove us down that path," Eric explains. "It wasn't about what the return on capital was going to be in a five-year period. It was how to build the next big company of the future."

5.2. Healthcare

As Australia's healthcare sector positions for the future, private capital is helping drive a transformation. Once considered a slow-mover in the adoption of technology, healthcare is accelerating digitalisation, driven largely by the pandemic's forced shift to digital solutions and telehealth.

Investment from Australian Investment Council members is helping build a healthcare model of the future that will include an increased focus on mental health, at-home or community-based services and preventative care. Already we see a global surge in private capital activity in healthcare – the sector attracted US$151 billion of private capital investment in 2021, more than double the previous year. We expect to see similar growth trends in Australia. Private capital's role in nurturing and commercialising digital innovation will prove a critical enabler in progressing federal government strategic growth priorities in areas such as medical technologies and pharmaceuticals, while strengthening retail health, at-home and community-based services.

Private capital's ability to efficiently allocate capital, provide strategic advice and act as an incubator will also help ensure state-of-the-art care is economically sustainable, affordable and inclusive for all Australians.

Case Study

Brandon Capital and OneVentures help Vaxxas redefine vaccine technology

Imagine a world of needle-free vaccines. That's the ambition of Brisbane-based Vaxxas, which, with the support of Brandon Capital and OneVentures, is pioneering a high-density microarray-patch (HD-MAP) with the potential to dramatically enhance the performance of existing and next-generation vaccines. Vaxxas is based on technology developed at the University of Queensland.

Instead of using traditional needles, the Vaxxas patch is covered in tiny micro projections coated with vaccine that is applied to the skin. The proprietary dry-coating technology eliminates or significantly reduces the need for vaccine refrigeration during storage and transportation, easing the resources and logistics burden of maintaining the vaccine "cold chain" to potentially increase vaccine access. In 2011, Vaxxas received Series A round financing led by OneVentures with co-investment from Brandon Capital, and Boston-based Healthcare Ventures, and $36 million of Series B financing predominately from OneVentures managed funds in 2015.

This support allowed the company to expand trials and attract a further $15 million Series C investment from global pharma company Merck in 2020.It was the initial willingness of venture capital to invest in the novel thinking behind Vaxxas that allowed the company to take its MAP technology from a Brisbane lab to the human clinical studies that have proven its ability to improve the efficiency and effectiveness of a vaccine's immune response.

From its first applications in infectious disease and oncology, Vaxxas has now forged collaborations with leading global organisations to develop and commercialise vaccines for some of the world's most devastating illnesses, including the flu, measles, rubella and, most recently, COVID-19 (in collaboration with the University of Texas at Austin in the United States). Vaxxas has a growing workforce of more than 95 and has begun work on its first manufacturing facility in Northshore Brisbane.

5.3. Climate-related innovation

The trend towards socially responsible and sustainable investment has moved from the sidelines to centre stage, with ESG issues becoming central to investors' decision-making. In 2020, responsible investment in Australia grew 30% to almost $1.3b — 15 times the rate of the overall investment market (30% to 2%).16 This growth is in line with that of global sustainable investment which reached US$35.3 trillion in five major markets in 2020, a 15% increase in the past two years (2018 — 2020).[12]

Case Study

Climate Friendly

Climate Friendly is a leading Australian carbon farming project services provider, partnering with landholders to create carbon abatement projects that increase the amount of carbon their land removes from the atmosphere. Typically, this involves a land manager changing their land management practices to, for example, re-grow native vegetation or selectively plant native trees to improve their land, storing carbon and qualifying for the issue of Australian Carbon Credit Units (ACCUs).

Climate Friendly's portfolio of over 130 projects spans more than 10 million hectares across Australia, and has delivered over 20 million tonnes of carbon abatement. In this way, Climate Friendly and its partners play a key role in developing a sustainable land sector and supporting Australia to achieve net zero by 2050.Private equity firm Adamantem found

Climate Friendly an attractive investment as it expects demand for ACCUs to increase. The Australian government's long-term emissions reduction plan, released in October 2021, assumes 10-20% of the emissions reduction required to achieve net zero by 2050 will be provided by offsets. Climate Friendly's strong market position, attractive project pipeline and industry leading technical capability makes it the ideal platform to service growing demand for carbon offsets from government and corporates.

Adamantem's support has helped Climate Friendly significantly scale operations, including increasing its rate of new project commencement, expanding the team by more than 20 people, building out the technology platform, increasing the sophistication of its ACCU portfolio trading and sales strategy, and developing new methodologies for carbon offset projects. Now Adamantem is working with the Climate Friendly team to help them deliver on their ambitious target to abate 100 million tonnes of carbon emissions by 2025, believing that the Sydney-based company demonstrates how private capital can help support the transition of the economy towards net zero.

5.4. Achieving Net Zero

As outlined in the 2020 Intergenerational Report, the likely physical effects of the transition to a lower carbon emissions economy will mean that some sectors will need to adjust to falling demand for some exports while new opportunities will be created in other sectors. In many respects, these factors will be outside of Australia's sovereign ability to control, and ultimately these costs will be passed on to Australian consumers and other businesses.

There are a number of areas where Australia has a comparative advantage such as in solar and wind energy and in regenerative farming transformation and can be a world-leader in the export of clean-tech solutions that will underwrite the global shift towards more sustainable economies. Beyond the more traditional alternative energies, businesses will play a pivotal role in driving innovation and in developing new technologies that will reduce carbon emissions and will also lead the way through policies that commit to and ensuring actions that reduce carbon emissions and in leading new business practices and investment decisions.

5.5. Leveraging Innovation

Australia has an opportunity to emerge from the COVID-19 pandemic as a more competitive nation in the global marketplace. The key elements to our success will be prioritising industries where we already are – or could be – world leaders, and 'going narrow and deep' in developing these industries. Most of these elements can be achieved by focussing on a small but targeted range of the policy reforms.

In addition, growing industry sectors across and the Australian economy will require a reliable flow of inbound investment capital. As a net importer of capital, Australia must implement policy settings that not only support, but encourage foreign investment into Australian businesses. This can be further enhanced through aligning manufacturing with science and

[12] Global Sustainable Investment Review 2020, 2021. Global Sustainable Investment Alliance.

research efforts in areas where Australia is best placed to excel, such as: biomedical technology and therapeutics, as well as FinTech, to support the commercialisation of good ideas, and to improve access to export markets. This points to building a strong foundation to enhance our domestic capability. This will help build an economy that will make Australia internationally competitive.

The expertise of private capital fund managers could be used to partner with university research arms for the selection and commercialisation of research and investment into start-up and early stage companies which have good potential to provide employment and growth opportunities within Australia.

Recommendations

- Go narrow and deep in industries that will support Australia's future employment and economic growth.
- Focus on technology and innovation as an enabler for building employment and growth across the economy
- Focus on developing the industries where Australia has a competitive advantage
- Build more robust collaboration between the university and the private capital sectors