Ai GROUP SUBMISSION

2020-21 FEDERAL BUDGET SUBMISSION

DECEMBER 2019



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About Australian Industry Group

The Australian Industry Group (Ai Group) is a peak industry association in Australia which along with its affiliates represents the interests of more than 60,000 businesses in an expanding range of sectors including: manufacturing; engineering; construction; automotive; food; transport; information technology; telecommunications; call centres; labour hire; printing; defence; mining equipment and supplies; airlines; and other industries. The businesses which we represent employ more than one million people. Ai Group members operate small, medium and large businesses across a range of industries. Ai Group is closely affiliated with more than 50 other employer groups in Australia alone and directly manages a number of those organisations.

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1. Summary and Recommendations

Australia's economy slowed to a crawl in 2018-19 with weak growth in real GDP and domestic demand in all four quarters of the year. Patchy results were evident across business activity, sales, profitability, investment and employment growth, with a notable slowing in non-mining industries. This pattern of uneven, patchy growth has continued into 2019-20. Of even greater concern is the recent trend toward weaker national productivity culminating with an outright fall in 2019.

Looking ahead, Australian businesses face an extremely challenging local and global environment as we move into the next decade. The RBA expects Australia's real GDP growth to remain well below 3% until the end of 2020 (and rising to just 3.1% in 2021) and no discernible improvement in consumer and wage inflation from their current weak (below-target) rates of around 1.9% and 2.3% respectively.

Ai Group's recent observations of business intentions align with this flat outlook from the RBA. Australian businesses are certainly not expecting the next decade to start with a growth spurt. Ai Group's latest annual survey of business expectations indicates that 34% of businesses expect a deterioration in their business conditions in 2020 and 40% expect no material change. On balance, more businesses are expecting a deterioration in their trading conditions in 2020 (relative to 2019) than an improvement, indicating 2020 will be the first 'net negative' year for Australian business expectations since 2015 (that is, more businesses are expecting a fall than a rise in conditions).

This year's Mid-Year Economic and Fiscal Outlook (MYEFO) further confirms this sombre outlook. Although structural budget surpluses are anticipated for 2019-20 and coming years, they are much diminished. It seems likely that further fiscal consolidation will be required to repay the stock of public-sector debt and rebuild a fiscal buffer that would restore our fiscal resilience. This task becomes more challenging in a context of slower growth in output, jobs, incomes and productivity.

These forecasts and expectations all pre-date the devastation and disruption of fires across eastern Australia through late 2019. These are compounding losses due to drought and extreme heat.

In these circumstances, while there is still a substantial medium-term task of fiscal consolidation ahead, Ai Group favours further fiscal stimulus and a slower pace of fiscal consolidation in the 2020-21 year to avoid a further exacerbation of the significant frailties across the economy. In recognition of Australia's challenging economic context and outlook, the top economic objectives for Government policies and programs must be to promote balanced and inclusive growth; business investment for to boost productivity; and global competitiveness.

Ai Group recommends that these objectives be pursued through a clear and direct policy focus on:

- 1. Stimulating business investment;
- 2. **Developing our people**, through skills, education and training. This must include addressing the structural barriers to employment for young people and others; and
- 3. **Building our business capabilities** and the infrastructure that supports them.

1.1 Policy recommendations: Fiscal Policy and Taxation

Introduce a generous investment allowance to bring forward deductions against business income tax liabilities for new investments. The allowance should operate for a finite period (we suggest until the end of the 2021-22 financial year) and very strong consideration should be given to it taking effect early in the 2020 calendar year to avoid businesses delaying investing until the 2020-21 financial year.

Initiate a strategy aimed at addressing widespread opposition to a fundamental remodeling of Australia's taxation arrangements. This could build on the steps the New South Wales Government is taking to open discussion of Australia's approaches to taxation and federal financial relations.

Withdraw the *Treasury Laws Amendment (Research and Development Tax Incentive) Bill 2019* which would slash public recognition for the value of business research and development and leave Australia with a fundamentally flawed Research and Development Tax Incentive.

1.2 Policy recommendations: Skills, Education and Training

Ensure the National Skills Commission has a strong industry and policy leadership role, as well as labour market and skills shortage research analysis.

Enable the National Skills Commission to auspice the National Careers Institute.

Establish the National Skills Commission as a ministerial company to be jointly governed by the Australian Government and states and territories, reporting to the COAG Skills Council, and with a board drawn from industry.

Provide the National Skills Commission with oversight for VET investment across Australia according to a jointly agreed policy directive, including the role of establishing nationally consistent benchmark pricing.

The Commonwealth, in collaboration with the states and territories, refer all apprenticeship and traineeship legislation to the National Skills Commission, with the view of consolidating and progressing genuinely consistent, nationally applicable arrangements.

Continue to support all apprenticeship pathways through the National Skills Needs List.

Promote the uptake of higher apprenticeship initiatives through addressing systemic challenges to their implementation.

Make available apprentice supervisor workshops for employers of apprentices eligible for Commonwealth incentives.

Provide targeted funding to GTOs to support their activities to help disadvantaged groups, and to help SMEs participate in the apprenticeship system, similar to the previous Joint Group Training Program.

The Productivity Commission review into the National Skills and Workforce Development Agreement, and the COAG Skills Council as part of its VET Reform Roadmap, should:

- address declining investment in VET and establish equitable funding arrangements across the tertiary sector; and
- establish a universal tertiary education student loan scheme, initially for diploma and above courses, to create a more equitable and cost-effective system.

Include a national and regional skills forecasting system that is independent and evidence-based, through the National Skills Commission, with regular reporting and assessment against sets of skills that can be mobilised to perform tasks related to a job, occupation and industry.

The National Skills Commission should implement a national workforce strategy.

Raise the profile of the VET sector in the development of STEM skills through higher apprenticeships and traineeships relevant to STEM, which could be funded as part of an expanded National Science and Innovation Agenda.

Provide incentives for industry, focussing on small and medium enterprises, to assist with workforce planning to continue re-skilling its transitioning workforce.

Build capability for continuous learning in individuals through the curricula frameworks and teaching and learning practices of all education and training sectors.

A national foundation skills strategy needs to be provided with a sufficient budget to support workforce language, literacy, numeracy and digital literacy programs.

The Government commence discussions with industry and other appropriate stakeholders about the development of a new workplace LLN program.

The COAG Education and Skills councils to explore funding arrangements through a National Partnership Agreement that bolsters VET participation in school delivered programs, and supports industry, especially SMEs, to offer work-based learning opportunities.

Fund pilots that implement a range of innovative work integrated learning models connecting industry and higher education providers, with the view to establishing new models of learning suited to industry.

Implement incentives to assist SMEs provide opportunities for higher education students to experience the workforce and develop enterprise-focussed capabilities.

1.3 Policy recommendations: Developing Business Capabilities

Australian industry is diverse, strong and poised to pursue new opportunities through digitalization, innovation, participation in global markets and supply chains, and responses to the challenges of emissions reduction and reducing waste. At the same time, there is a clear role for public policy in developing our businesses - particularly our small and medium-sized businesses

whether in new or traditional sectors and equipping them in raising their horizons and their competitiveness.

Ai Group maintains that Australian industry policy should have a positive, 21st century orientation. It should work, together with policy in education and training, to support a confident, dynamic and resilient private sector that not only builds on existing competitive advantages but is equipped to meet both the challenges and the opportunities presented by the transformational forces of globalisation, technological development and environmental protection.

The Federal Government can play valuable roles including:

- In coordinating a broad and inclusive discussion of the future of industry;
- Providing well-designed policies to improve business capabilities including in relation to the digitisation of commercial activity;
- Facilitating greater opportunities and increased involvement in international trade by Australian businesses;
- Ensuring that, in meeting Australia's Defence needs, full advantage is taken of the unique opportunity to grow competitive Australian industries and further connect them to global markets and supply chains;
- Ensuring that Australia's innovation system is stable and effective in supporting business research and development, collaboration between business and Australia's research capabilities and supportive of the emergence of deeper markets for early-stage capital.
- In cooperation with the states and territories, give particular attention to addressing the ongoing crisis facing our waste and recycling systems due, most immediately, to China's clampdown on the contaminated plastics we previously exported for processing; and
- Incorporating the latest evidence and analysis into evolving strategies for growth and successful transitions of Australia's industry through a period of immense change.

1.4 Policy recommendations: Energy and Environment

Extend the Australian Renewable Energy Agency with at least a further \$3.6b over ten years, and update its scope of action to address transition in industry and other sectors.

Increase funding to energy efficiency in industry and low-income households.

Ensure any public funding for electricity investments is predictable and does not increase uncertainty.

Invest alongside the States, local government and industry in building sustainable markets for recovered materials.

1.5 Policy recommendations: Migration

The permanent migration planning level should be restored to the previous cap of 190,000 places per year.

Within this total, greater priority should be given to the skilled migration stream and especially to the demand-driven components of skilled migration.

2. Economic Priorities for Australian Business

Australia's economy slowed to a crawl in 2018-19, with weak growth in real GDP and domestic demand in all four quarters of the year. Patchy results were also evident across Australian business activity, sales, profitability and employment growth. Aggregate expenditure, employment and incomes growth are heavily reliant on the roll-out of large, labour-intensive public-sector programs (such as the NDIS), transport infrastructure investment projects, and mining sector exports.

This pattern of uneven, patchy growth in activity, employment, incomes and investment has continued into 2019-20. Of even greater concern, so too has the recent trend toward weaker national productivity. The latest available estimates indicate that national productivity growth went backwards in 2018-19 and continued to decline into 2019-20. This appears to be wrapped up in global productivity trends (with weak productivity growth apparent across developed economies) that imply some underlying global factors. The solutions will, nevertheless, need to be found locally.

Looking ahead, Australian businesses face an extremely challenging environment, locally and globally, as we move into the next decade. The RBA expects Australia's real GDP growth to remain well below 3% until the end of 2020 (and rising to just 3.1% in 2021) and no discernible improvement in consumer and wage inflation from their current weak (below-target) rates of around 1.9% and 2.3% respectively. It expects employment growth to slow to around 2% p.a., with a slight fall in the unemployment and participation rates. This combination implies the real prospect of no lift in growth rates for wage-earning households but no rise in inflation (and the cash rate) either.

Ai Group's recent observations of business intentions accord with this flat outlook from the RBA. In short, Australian businesses are not expecting the next decade to start with a (much needed) growth spurt. Ai Group's latest annual survey of business expectations indicate 40% of businesses expect no material change in their business conditions in 2020 and 34% expect a deterioration. On balance, more businesses are expecting a deterioration in their trading conditions in 2020 (relative to 2019) than an improvement, indicating 2020 will be the first 'net negative' year for Australian business expectations since 2015 (that is, more businesses expecting a fall than a rise in conditions). On a 'net balance' basis, business expectations for turnover, profit margins and productivity are all lower for 2020 than for any year since 2015. Although more positively, expected employment is edging higher. In response, the proportion of businesses who plan to increase their spending on physical CAPEX, R&D, new technologies and staff training is lower for 2020 than it was for 2019 or 2018.

These forecasts and expectations all pre-date the devastation and disruption of fires across eastern Australia through late 2019, which are compounding the losses due to drought and extreme heat.

In recognition of this challenging economic context and outlook, the top priorities for all Government policies and programs that touch on the economy in 2020-21 must be to promote:

- 1. Balanced, inclusive economic growth;
- 2. Business investment and productivity growth; and
- 3. Global competitiveness.

2.1 Balanced, inclusive economic growth

Australia's output growth is slow and narrowly based in 2019-20

2019 marked 28 years since Australia last experienced an outright recession (1991), setting a modern record among OECD countries. From 1992 to 2007, real GDP grew by an annual average of 3.8%. Since the GFC period of disruption however (2008-09), Australia's real GDP growth has averaged just 2.7% p.a., marking a step change in the pace of activity, output and incomes growth.

Even compared to this recent average, Australian economic growth was extremely slow in 2018-19 at just 1.4% over the year to June 2019. 2019-20 started no better, with GDP growing by just 0.4% q/q (1.7% p.a.) in Q3 of 2019 (chart 2.1 and table 2.1). This dip is on par with the GFC period of 2008-09. It has occurred for a range of global and local reasons including: trade disruptions and a slower China; drought; reluctant business investment; reluctant consumer spending; and a downturn in residential dwelling construction.

Domestic demand grew by just 0.2% q/q and 0.9% p.a., which was the weakest annual growth rate since 2015 and a fourth quarter of local demand growing by less than 2%. Demand growth in 2019 has been heavily reliant on government consumption and investment. Government spending on services other than defence has been an especially important source of local growth in 2019, with total government consumption (recurrent spending) on services other than defence rising to a record high of 17.5% of nominal GDP in Q3 2019.

Domestic demand remains problematic outside the government sector, with slow household consumption despite stimulus from two cash rate cuts and larger taxation rebates in 2019. Household consumption growth (1.2% p.a.) is significantly slower than population growth (about 1.6% p.a.) which suggests falling consumption on a per capita basis. The sharp rise in the household savings ratio in Q3 (up to 4.8% from 2.7% in Q2 and the highest since Q1 of 2017) indicates householders are saving any additional after-tax income rather than spending it. This was confirmed by zero growth in nominal retail sales in October, after a rise of just 0.2% m/m in September.

Q3 also saw further falls in dwelling investment and most types of business investment (table 2.1). Total business investment was down by 1.1% p.a. in real terms in Q3. This included worrying falls in new engineering construction (-12.2% p.a.) and new machinery and equipment purchases (-2.2% p.a. and the first fall since mid-2016). Private-sector investment in 'intellectual property' grew by 7.1% p.a. in Q3, but this was primarily due to solid rises in mineral and petroleum exploration (+20.6%) and purchases of computer software (+11.7%). These rises masked a further drop in private-sector business R&D spending (-1.0%), which fell (in annual real growth terms) in every quarter of 2018-19. This negative trend in R&D investment is of grave concern, since this element of business investment is a necessary step towards stronger productivity, output and incomes.

CHART 2.1 Real GDP, annual and quarterly growth, 1980 to Q3 2019

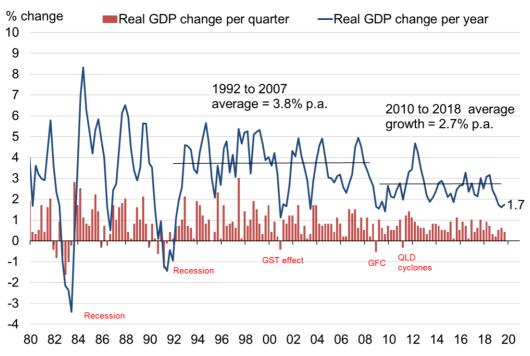


Table 2.1: Key components of GDP, Q3 2019

seasonally adjusted	% q/q	% p.a.	ppt contribution to growth
Real GDP	0.4	1.7	0.4
Household consumption	0.1	1.2	0.1
General government consumption	0.9	6.0	0.2
Total investment	-0.2	-3.8	0.0
Dwelling investment	-1.7	-9.6	-0.1
Private business investment	-0.9	-1.1	-0.1
New building	3.0	4.2	0.1
New engineering construction	-5.9	-12.2	-0.2
New machinery and equipment	-4.5	-2.2	-0.2
Intellectual property investment	1.7	7.1	0.0
Public (government) investment	1.9	0.2	0.1
Domestic final demand	0.2	0.9	0.2
Exports	0.7	3.3	0.2
Imports	-0.2	-1.5	0.1
Net exports	-	-	0.3
Terms of trade	0.4	7.8	
Real gross domestic income	0.5	3.6	
Real net national disposable income	0.9	4.8	
Real net national disposable income per capita	0.5	3.3	
Real GDP per capita	0.0	0.2	
Real GDP per hour worked, market sector	-0.1	-0.2	
Nominal GDP	1.1	5.5	
Compensation of employees (wages & incomes)	1.1	5.0	
Compensation per employee	0.7	2.9	
Private profits - total	1.5	10.3	
Private profits financial corporations	0.5	4.7	
Private profits non-financial corporations	2.0	13.2	

Source: ABS, National Accounts, Sep 2019.

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This uneven pattern of growth was also evident on the production side of the National Accounts, with significant contributions to growth coming from only mining, healthcare, public administration and professional services in Q3. Of the 19 major industry groups counted in the National Accounts, eight industries suffered falls in real output volumes in the quarter and/or over the year to Q3 (chart 2.2), indicating a very fragile economy that will be more vulnerable to shocks in 2020.

While agricultural output is clearly being affected by drought (-2.1% q/q/ and -6.1% p.a.), a range of other factors are also playing out. Ongoing reluctance by households to spend on discretionary goods (and, to a lesser extent, services) is affecting industries such as non-food manufacturing, wholesale trade, retail, transport and personal services. Meanwhile, the cyclical decline in dwelling construction activity is most directly evident in construction industry growth (+0.5% q/q but -3.3% p.a.) but it is also affecting demand and output volumes in related industries such as building materials, furniture manufacturing, real estate, insurance and transport services.



CHART 2.2 Real output size and growth, by industry, Q3 2019

Source: ABS, National Accounts, Sep 2019.

Ai Group's monthly business activity indexes all indicated slow growth persisting into Q4 of 2019, even before the impact of widespread, long-running fires across the east coast had hit the economy. The Ai Group Australian Performance of Manufacturing, Services and Construction indices (released this week) all indicated deteriorating conditions in November compared to October. The Ai Group Australian PMI® fell by 3.5 points to 48.1 in November, which is the lowest reading since August 2016 (seasonally adjusted). Manufacturers in the large food and beverage sector continue to report buoyant conditions, but the faster rate of contraction of the new orders index in November suggests a weak Christmas period ahead for many Australian manufacturers.

The Australian Industry Group Australian Performance of Services Index (Australian PSI®) fell by 1.5 points to 53.7 points in November 2019 (seasonally adjusted). This marked four months of positive

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but moderating conditions. The Australian PSI® indicated expansion in three out of six sectors (trend), namely 'finance & insurance', 'retail trade & hospitality' and 'personal, recreational and other services'. Most positively for the months ahead, new orders strengthened significantly, while the activity indices for employment and sales decelerated but remained positive.

The Australian Industry Group/Housing Industry Association Australian Performance of Construction Index (Australian PCI®) fell by 3.9 points to 40.0 points (seasonally adjusted) in November, indicating a 15th consecutive month of contraction in the Australian PCI®. New orders fell more sharply, as did the activity indices for employment and deliveries from suppliers.

Ai Group's aggregate Performance of Business Index (a weighted composite of these three series) fell by 1.9 points to 51.8 points in November, indicating mildly positive – but weaker – conditions on average across Australia's non-mining business sectors (chart 2.3). This business index shows a reasonably close historical relationship to growth in business sales (aggregate real volumes). This index is currently suggesting a modest lift in business sales growth to above 2% p.a. in Q4. If this improvement eventuates in Q4, it will provide some welcome relief from the near-zero annual growth rates in aggregate business sales recorded in each of the last three quarters (chart 2.3).

These results are, however, based on Ai Group's business surveys that were conducted before the outbreak of widespread prolonged bushfires in NSW and Queensland in late November. It is likely that business sales, output and production have been negatively affected by these fires throughout the latter half of Q4 of 2019 in NSW and Queensland and possibly flowing on to affect other states.

PBI, diffusion index % p.a. Australian PBI, seasonally adjusted (left) Australian PBI, 3 month average (left) ABS real business sales* (right) -2 Australian mining investment boom Global financial crisis

CHART 2.3 Australian business conditions: Ai Group business index*, to Nov 2019

Ai Group's Business Index is a weighted composite of Ai Group's Australian PMI, PSI and PCI surveys. It includes businesses operating in all industries except agriculture, mining and public administration. Source: Ai Group.

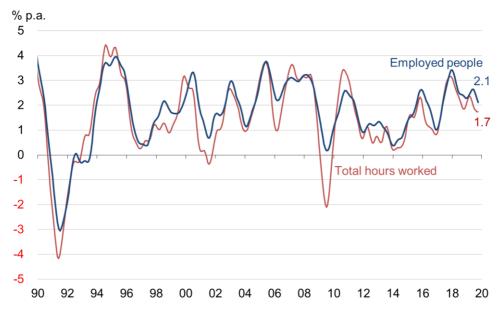
Australia's employment growth is slowing and narrowing in 2019-20

Australia's labour market is presenting somewhat mixed – and at times contradictory – messages. The key labour market trends in 2019 are:

- **Growth in employment has slowed** from a recent peak of 32,000 employed people per month (+3.4% p.a.) in Q3 of 2018 to 12,000 per month (2.1% p.a.) in Q3 of 2019. Growth in total hours worked across the economy has slowed to an even greater degree (trend, chart 2.4). This slower pace of employment growth in 2019 has also become more concentrated into the big services industries that are directly or indirectly supported by public sector activity and programs, including healthcare, education, professional services and administrative services (chart 2.5). In total, the ABS estimate that around 300,000 workers were added to the public sector workforce over the year to August 2019, but only 11,000 to the total private sector workforce.
- Unemployment is gently rising (to 5.3% of the labour force in Oct 2019 and well above the RBA's current estimate of 'full employment' at 4.5%) while underemployment and underutilisation rates are persistently high (8.5% and 13.8% respectively in Oct 2019, with total underutilisation over 13% of the labour force since 2013, chart 2.6). Rates are higher again for younger Australians (under 25 years). This indicates a significant degree of spare capacity. High underemployment persists despite rising reports of skill shortages because under-employment is primarily located in lower-skill services industries with high rates of part-time work (e.g. retail, hospitality, recreational services and administrative services) while the skill shortages are concentrated in the higher-skill industrial sectors with longer hours (chart 2.7). This contradiction neatly illustrates the urgent need to address workforce skills deficiencies;
- Labour force participation has risen to a record high in 2019, with especially strong rises in participation by women of all ages and by people aged 55 years and over. As of July 2019, 2.5 million workers (19.4% of workforce) were aged 55 years or older, including 610,000 workers (4.7%) aged 65 years or older. This is a big step up from one decade earlier, when 16.3% of workers were aged 55 or over and 2.8% were aged 65 or over. The ageing of Australia's population means this age group (55 years and over) is growing rapidly, but the recent jumps in participation by older Australians are significant and are probably larger than were expected:
 - o 75% of people aged 55-59 years were participating in July 2019, up from 70% in 2009;
 - o 60% of people aged 60-64 years were participating in July 2019, up from 50% in 2009;
 - 32% of people aged 65-69 years were participating in July 2019, up from 25% in 2009;
 - 15% of people aged 70-74 years were participating in July 2019, up from 9% in 2009;
 - o 7% of people aged 75-79 years were participating in July 2019, up from 3% in 2009.

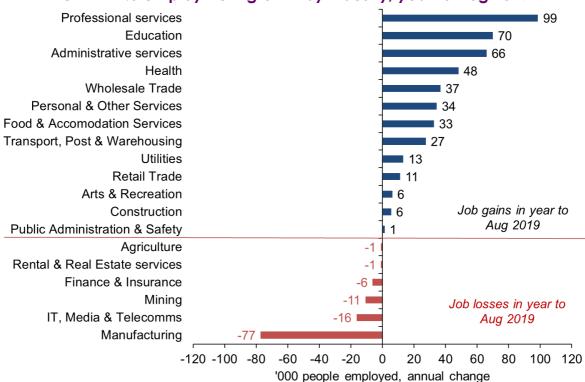
Higher workforce participation among older Australians is especially good news for the economy, for society and for the individuals who are able to enjoy longer, healthier and more productive working lives. It is, however, changing the face of the workforce, with implications for future job seeking, skills, technologies and preferred work arrangements, among other policy considerations.

CHART 2.4 Australian employment and hours worked, annual growth, to Oct 2019



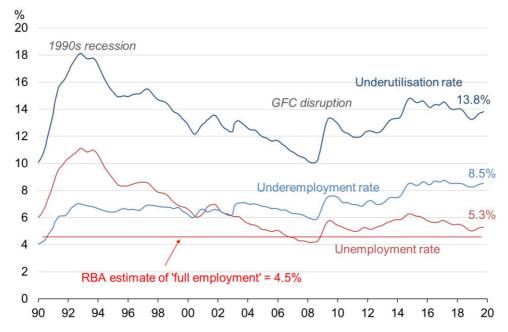
Source: ABS, Labour force Australia, Oct 2019.

CHART 2.5 employment growth by industry, year to Aug 2019



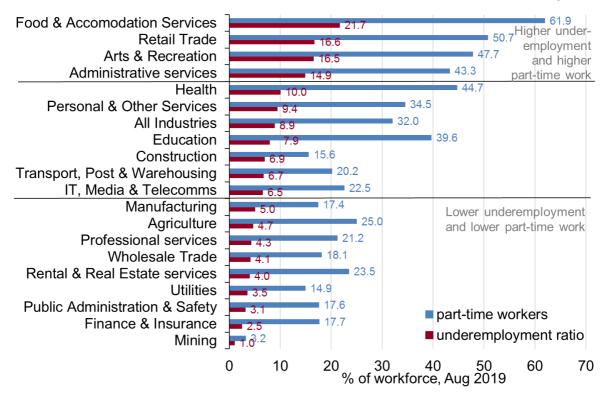
Source: ABS, Labour force Australia, quarterly detailed data, Aug 2019.

CHART 2.6 unemployment, underemployment and underutilisation, to Oct 2019



Source: ABS, Labour force Australia, Oct 2019.

CHART 2.7 underemployment and part-time work rates, by industry, Aug 2019



Source: ABS, Labour force Australia, quarterly detailed data, Aug 2019.

Australia's income growth is slow and narrowly based in 2019-20

National income is influenced by more than just output volumes, jobs and wage levels. The terms of trade is also a key factor. As of September 2018, real net national disposable income (RNNDI, the ABS' preferred measure of national income) increased by a further 0.9% q/q and 4.8% p.a. in Q3 of 2019. This was mainly due to stronger export earnings as a result of another rise in the terms of trade, which were 7.8% higher in Q3 than one year earlier. Export volumes increased as well in Q3, with especially strong growth in export volumes for resources (e.g. iron ore, LNG, coal and other metals) and services (mainly tourism and education services), offsetting falls in agricultural export volumes. As a result, RNNDI per capita rose by 0.5% q/q and 3.3% p.a. in Q3, even though real output (GDP) per capita was flat in the quarter and up by just 0.2% over the year (table 2.1).

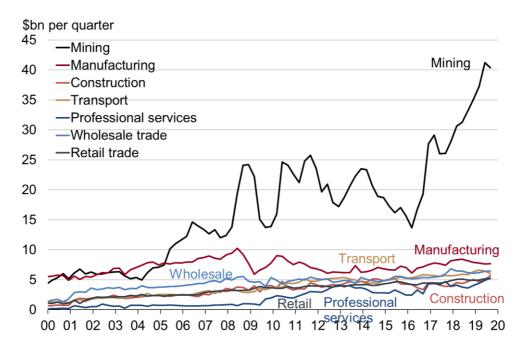
Since national incomes growth was largely due to higher export volumes and prices for resources in 2019, the benefits flowed mainly to the mining sector. The mining industry's aggregate corporate gross operating profits rose by 21.5% p.a. to Q3, while all other industries' aggregate corporate profits rose by just 2.2% p.a. in nominal terms (chart 2.8). This performance gap was replicated in nominal business sales, which showed the nominal value of mining industry sales rising by 19.9% in the year to Q3 of 2019. In contrast, aggregate nominal sales grew by just 1.7% p.a. for all non-mining industries included in the ABS *Business Indicators* dataset and fell by 0.4% p.a. for manufacturing. After adjusting for inflation (1.7% p.a. in 2018-19), this implies that sales revenue for non-mining companies was flat at best in the year to Q3 2019 and fell in manufacturing in real terms.

This continues a pattern in mining profit growth that emerged in the early 2000's and pre-dates the GFC disruptions that signaled a change in many other key macroeconomic variables, and it has become more pronounced over the past decade (chart 2.8). In the decade from 2009 to 2018, mining industry gross operating profits (aggregate nominal dollars) grew by an annual average of 10.4%, off the back of rapid growth in output volumes and global prices.

In contrast, manufacturing gross operating profits grew by an annual average of just 0.3% (implying a drop in profits in real terms) while profits for all non-mining industries included in the ABS *Business Indicators* series rose by an annual average of 3.4% (implying real growth of 1% or lower, after adjusting for inflation). The mining industry now accounts for 41% of all profits included in the ABS *Business Indicators* estimates of company gross operating profits, up from 26% in 2009. This lack of balance in earnings growth over an extended period does not lend itself to stronger or more widespread growth in private sector incomes, employment and investment in the future.

Despite the poor performance of sales and income growth in non-mining industries, nominal wages and salaries rose by 5% p.a. in aggregate and 2.9% p.a. per employee across the whole economy in Q3 of 2019 (table 2.1). The mining industry pays higher average wages than any other industry in Australia, but it directly employs just 2% of the workforce. Thus the general wage income growth is not directly related to the mining industry's success. Instead, this employee income growth is more likely to be related to the solid employment growth and wage rises in industries supported by the public-sector including healthcare, education, welfare services and public administration during 2019 (see chart 2.5 above). 52% of total factor income was earned by employees in Q3 2019. The income share earned by wages has hovered at around 52% since 2016.

CHART 2.8 Nominal aggregate company profits in selected industries, 2000 to 2019



Source: ABS, Business Indicators, Sep 2019.

There is much debate about the causes and consequences of long-term slow wages growth in Australia and internationally. This trend toward slower wage and price inflation has been apparent since the GFC disruptions commenced in 2007-08. In Australia, various measures of nominal wage growth have shown a mild acceleration since 2018, but they remain historically slow (chart 2.9). Australia's Wage Price Index (WPI) grew by 0.5% q/q and 2.2% p.a. in the September quarter (Q3) of 2019. Annual wage growth has been treading water at around 2.2 to 2.3% p.a. since 2018 but has lifted from its recent low of 1.9% p.a. in 2016. This extended period of slow wage growth has been accompanied by even slower inflation rates. Headline CPI rose by just 1.7% p.a. in Q3 of 2019 (see chart 1). Wage inflation has been stronger than inflation in most quarters since the GFC, with the gap indicating a (very modest) improvement in average real wages over this period commensurate with the very weak changes in national labour productivity over the same period.

Local factors contributing to historically slow wages growth in Australia are known to include:

- Weak background inflation with headline CPI running at just 1.7% in 2019 and lower rates for core inflation and the employee-household living cost indexes;
- Weak productivity growth, with the OECD estimating Australia's labour productivity at around 1% from 2014-18 and ABS data showing an outright fall in labour productivity in 2018-19 (see section 2.2 below);
- Spare capacity in the labour market, with rising unemployment and underemployment (to 5.3% and 8.5% in late 2019) and significantly higher rates for young people and those with fewer skills.
 As noted above, underemployment is heavily concentrated in the lower-skill services industries, indicating a great deal of spare capacity at the lower-wage end of the labour market; and

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• Long-term low inflation that leads to entrenched or 'baked-in' low inflation expectations, which in turn help to entrench slower wage growth more widely and over longer periods of time.

For these reasons – and especially due to the sticky effect of entrenched inflation expectations – the RBA expects national wages to continue to grow at around the current pace of 2.2% p.a. until at least the end of 2021 (see chart 2.10 and table 2.2 below). This is a notch slower than the Treasury's expectation of wage growth accelerating to 2.5% by 2021 and 3.0% by 2023 (chart 2.10). The slower wage growth forecasts of the RBA align more closely with current evidence of business employment and wage negotiation intentions than does the Treasury's view.

With wages growth expected to remain at around its current modest rate for the forseeable future, after-tax disposable household income may need to be boosted from other sources, including from taxation and welfare transfers. Recent analysis of aggregate household taxation and welfare transfers indicates a rise in the share of household income paid as income tax but no growth in aggregate welfare transfer payments (despite Australia's rapidly growing and ageing population) since 2014 (chart 2.11). At the same, time, the marginal gains to household income as a result of successive interest rate reductions by the RBA appear to be flatlining. This suggests a more effective path from here will require Government to move on both the taxation and revenue sides of the budget, in order to boost after-tax disposable household income across a range of household types.

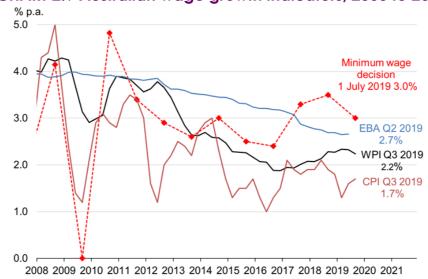


CHART 2.9 Australian wage growth indicators, 2000 to 2019

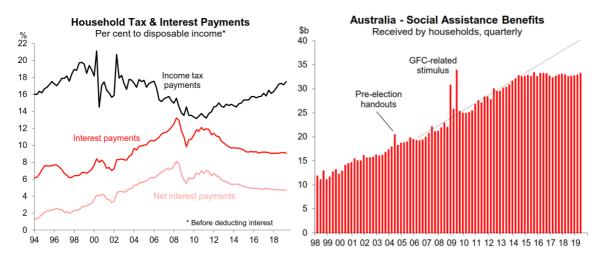
Sources: ABS, Wage Price Index, Sep 2019; Fair Work Commission; Department of Jobs and Small Business, *Trends in Federal Enterprise Bargaining*, June 2019.

CHART 2.10 Wage price index annual change and RBA and Treasury forecasts



Sources: ABS, Wage Price Index, Sep 2019; RBA, Statement on Monetary Policy, Nov 2019, Treasury, Mid Year Economic and Financial Outlook 2019-20, Dec 2019.

CHART 2.11 Aggregate household income tax payments and welfare transfers



Source: Macquarie Macro Strategy, analysis of ABS data, Nov 2019.

Australia's growth outlook is modest for 2020 and 2021

The Reserve Bank of Australia (RBA) cut the cash rate twice during 2019, to a record low of 0.75%. The RBA's most recent statements express cautious optimism about the outlook because "after a soft patch in the second half of last year, a gentle turning point appears to have been reached." As of the end of 2019, labour demand is still mildly positive but there have been little inroads into spare capacity (i.e. unemployment and underemployment). Meanwhile, consumer spending remains lacklustre, with households preferring to save rather than spend any additional income they receive, and business investment remains problematic for a range of reasons. Low inflation expectations appear to have set in, further containing the prospect of more widespread rises in wages and prices. In these circumstances, the RBA says "an extended period of low interest rate will be required in Australia to reach full employment [of around 4.5%] and achieve the inflation target [of 2 to 3%]".

Looking ahead, in November the RBA again revised down its forecasts for calendar year 2019, with GDP now expected to grow by 2.3% this year (down from 2.5% expected in August). The RBA's forecast for 2020 remains unchanged at around 2.8% growth in GDP (table 2.2). The downward revision for 2019 reflects unexpectedly weak activity in the first half of 2019. More positively, improvement is already evident and the labour market has remained relatively resilient (probably due to strong growth in public sector employment). The unemployment rate has risen only slightly, to 5.2%. On the pricing side, the RBA's detailed forecasts explicitly concede that headline inflation (CPI) is likely to remain below the target band of 2 to 3% p.a. until at least the end of 2021, with wage inflation (WPI) remaining at around its current rate of 2.3% p.a. until at least the end of 2020. The unemployment rate is expected to remain at 5% or higher until mid-2021, which the RBA says is not low enough to generate more widespread wage and income rises.

The OECD's latest outlook for the Australian economy is slower than the RBA's with GDP expected to grow by 2.3% p.a. in 2020 and remain unchanged at a rate of 2.3% p.a. in 2021. Market economists' forecasts are generally closer to the low end of these forecasts due to concerns about local and global risks and ongoing aversion to stronger consumer spending or business investment.

TABLE 2.2 Australian Economy: Latest Annual Growth Rates and RBA Forecasts

% change over the year	Jun 2019 (actual)	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
Gross domestic product (GDP)	1.4	2.3	2.6	2.8	3.0	3.1
Household consumption	1.4	1.4	1.9	2.4	2.6	2.7
Dwelling investment	-9.1	-11.3	-7.4	-2.6	3.6	9.2
Business investment	-1.6	3.2	6.9	6.2	5.7	4.8
Public sector	5.2	3.7	2.9	2.9	2.8	2.7
Gross national expenditure	0.2	0.8	2.3	2.8	3.1	3.3
Imports	-2.8	-0.8	2.2	3.2	3.4	3.5
Exports	2.9	5.2	3.7	3.3	2.9	2.6
Real household disposable income	0.6	1.6	1.8	2.3	2.9	3.0
Terms of trade	8.9	-0.7	-8.8	-6.7	-4.6	-2.9
Major trading partner (export-weighted) GDP	3.6	3.4	3.4	3.6	3.7	3.7
Unemployment rate (quarterly average, %)	5.2	5.2	5.2	5.2	5.1	4.9
Employment growth	2.5	2.3	2.0	1.9	2.0	2.0
Wage price index (WPI)	2.2	2.2	2.3	2.3	2.3	2.3
Nominal (non-farm) average earnings per hour	3.1	2.6	2.3	2.4	2.5	2.6
Trimmed mean inflation	1.6	1.6	1.8	1.8	1.9	1.9
Consumer price index (CPI)	1.7	1.9	1.9	1.8	1.9	1.9

Sources: ABS various data; RBA Nov 2019 Statement on Monetary Policy (SoMP).

Outside Australia, the IMF confirms that global growth slowed markedly in 2019. Indeed, the IMF estimates 2019 was the slowest year of output and trade growth since the GFC. This is mainly due to trade disruptions that are multiplying in number and severity, between the USA and China, between the UK and the European Union and between Japan and South Korea. Geopolitical conflicts in the Middle East and elsewhere are also dampening growth.

These trade and other disputes are materially reducing trade volumes and increasing global uncertainty and risk aversion, with negative consequences for investment, activity and spending. The IMF estimates that "the US-China trade tensions will cumulatively reduce the level of global GDP by 0.8 percent by 2020", with other conflicts also shaving back global growth.

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Compounding these trade tensions, the IMF notes a sharp downturn in global manufacturing activity and especially automotive production activity in 2019, due to recent changes to vehicle emissions standards and regulations in Europe and China, plus structural changes in China.

The IMF reiterated the urgency of addressing the trade disputes (and other widespread problems including low productivity growth, ageing populations and climate risks) at a multilateral level:

"The global outlook remains precarious with a synchronized slowdown and uncertain recovery. At 3% growth, there is no room for policy mistakes and an urgent need for policymakers to support growth. The global trading system needs to be improved, not abandoned. Countries need to work together because multilateralism remains the only solution to tackling major issues, such as risks from climate change, cybersecurity risks, tax avoidance and tax evasion, and the opportunities and challenges of emerging financial technologies."

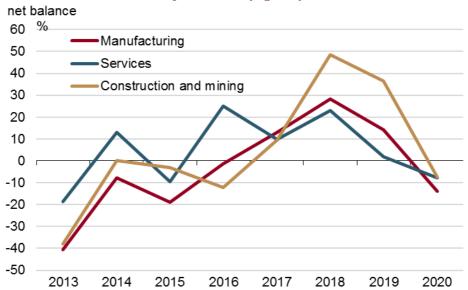
Australia is not immune to these global risks. The IMF also slashed its forecast for GDP growth in Australia to just 1.7% p.a. in 2019. This reflects the weak rate of growth already evident at the time of this release (GDP growth of just 1.4% p.a. in the year to Q2 2019) and is a full percentage point slower than in 2018. It was also significantly slower than previous forecasts for Australian GDP from either the RBA (as of August) or the Australian Treasury (as of May). These latest forecasts for Australian growth from the RBA, OECD and IMF are all somewhat weaker than Treasury's latest assessment, as published in the MYEFO in December 2019. The RBA's expectations for consumer and wage inflation are materially weaker than Treasury's over the forward period.

Ai Group's recent observations of business intentions align with this flat outlook from the RBA, OECD and IMF. In short, Australian businesses are not expecting the next decade to start with a growth spurt. Ai Group's latest annual survey of business expectations indicate 40% of businesses expect no material change in their business conditions in 2020 and 34% expect a deterioration. 26% of businesses expect conditions to improve through 2020. This is the highest proportion giving a negative assessment since 2015. And, on balance, more businesses are expecting a deterioration in trading conditions in 2020 (relative to 2019) than an improvement, indicating 2020 will be the first 'net negative' year for Australian business expectations since 2015 (that is, more businesses will go into 2020 expecting deteriorating conditions). This expectation is widespread, with 'net negative' expectations across all three major industry groupings included in this year's survey (chart 2.12).

The reasons for this outlook relate to the fundamental economic environment, with 41% of businesses nominating 'lack of customer demand' as their number one business concern for 2020 (up from 31% for 2019). A further 20% of businesses list 'skill shortages' as their key growth concern for 2020, which is about the same proportion as for 2019 (chart 2.13). Business concerns about skill shortages and wage pressures have risen sharply in 2019 and 2020 compared to five years ago, despite ongoing spare capacity in the labour market and weak background inflation. This indicates that policy must focus on better skills development and skills matching to address these shortfalls.

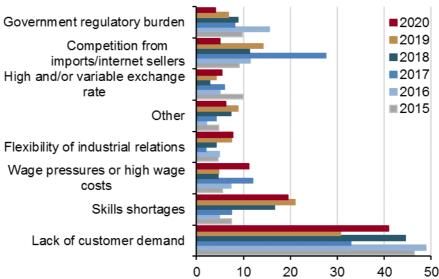
On a 'net balance' basis, business expectations for turnover, profit margins and productivity are all lower for 2020 than for any year since 2015. In response, the proportion of businesses who plan to increase their spending on physical CAPEX, R&D, new technologies and staff training is smaller for 2020 than it was for 2019 or 2018. More positively, expected employment is edging higher again.

CHART 2.12 Expectations for general business conditions ('net balance' basis), major industry groups,



Source: Ai Group, 2020 (forthcoming).

CHART 2.13 Expected inhibitors to business growth



^{*} Percentage of respondents who ranked each factor first in each year, out of a list of possible inhibitors. Source: Ai Group, 2020 (forthcoming).

2.2 Business investment and productivity growth

The latest *National Accounts* confirms that productivity growth remains problematic across the economy. In Q3 of 2019, GDP growth approximately matched population growth and so real GDP per capita was flat in the quarter and up by just 0.2% p.a. GDP per hour worked in the market sectors shrank by 0.2% p.a. in Q3, which marked a third quarter of negative growth for this key measure of productivity. This measure of productivity has now averaged zero annual growth since 2017.

Separate estimates of national productivity growth published by the ABS this week indicate that national productivity (output volumes per hour worked in market sectors) went backwards in 2018 19, after trending lower for many years (chart 2.14). Across the market-sector industries for which the ABS estimates productivity, labour productivity (output per unit of labour per hour worked) declined by 0.2% in 2018-19 or by 0.8% on a quality-adjusted basis, while multifactor productivity (output per total inputs per hour worked) declined by 0.3% or by 0.7% on a quality-adjusted basis. These were the first declines since 2010-11 and the biggest annual drop in labour productivity since at least 1994 when the current data of national productivity growth estimates commenced.

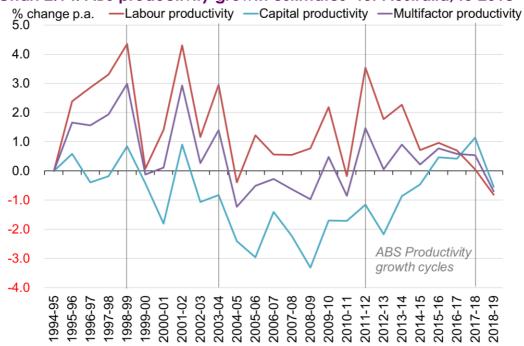


Chart 2.14: ABS productivity growth estimates* for Australia, to 2018-19

The OECD estimates of Australia's productivity growth rates from 1994 to 2018 show a similar trend, even before these latest evidence of an outright drop in productivity in 2018-19 are added to the story. The OECD estimates that Australia's labour productivity (market sector) grew by an average of 1.1% from 2014 to 2018, which was the weakest period of growth since 1995 (chart 2.15). Both the ABS and the OECD estimates show a clear trend toward decelerating productivity growth since the 1990s, some of which is attributable to normal cyclical variation, since productivity growth tends to slow as an economy moves further away from the 'catch-up' period that typically follows a recession (which Australia has not experienced since the 1990s). The OECD notes that this trend is common to many other advanced countries over the same period, to varying degrees.

^{*} Market sector industries aggregate productivity growth. Quality-adjusted hours worked basis. Source: ABS, *Estimates of multifactor productivity*, Nov 2019.

2.5% 2.0% 1.5% 1.0% 0.5%

Chart 2.15: OECD labour productivity growth estimates for Australia, 1995 to 2018

Source: OECD, Productivity Compendium, 2019.

0.0%

1995-2000

The trends in Australia's productivity growth are clear; they indicate deep structural problems in the Australian economy. The solutions are not so simple however. Productivity policy requires a multifaceted approach that goes beyond monetary or fiscal stimulus. This deterioration in productivity. Stronger productivity growth requires investment and policy changes from both the private and public sectors; stronger non-mining business investment in skills and technologies is needed, but so too is national and local physical infrastructure (telecommunications, transport) and conducive microeconomic policy settings (taxation, investment settings, innovation, trade, technologies).

2005-2010

2010-2014

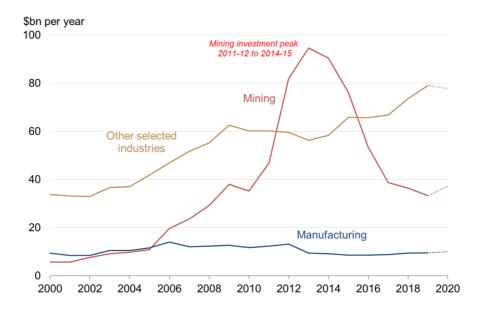
2014-2018

2000-2005

Non-mining business investment trends continue to look problematic for future productivity improvement. The ABS estimate of private business capital expenditure (CAPEX) fell by 0.2% g/g to \$29.4 billion in Q3 of 2019. Mining and manufacturing CAPEX were higher in Q3, but 'other selected industries' (mainly the large services industries) declined for a third consecutive quarter.

Looking ahead, global uncertainties and a subdued domestic economy continue to weigh on the investment plans of Australian businesses. The fourth estimate of CAPEX plans for 2019-20 indicate that total CAPEX could fall by 2.1% p.a. compared to 2018-19, due to a decline in CAPEX for the large 'other selected industries' (mainly the large services industries) in 2019-20 (see chart 2.16). After adjusting for recent realization ratios and inflation, this would (if realised) represent a decrease in real terms of around 4.3% p.a.. The investment outlook is more positive for manufacturing, with the CAPEX plans of manufacturers suggesting a nominal increase of 4.8% in 2019-20. Mining investment is also likely to recover further from recent lows in 2019-20, with expected growth of +11.4% p.a.

CHART 2.16: CAPEX, Actual Annual Value and Expected Annual Value for 2019-20*



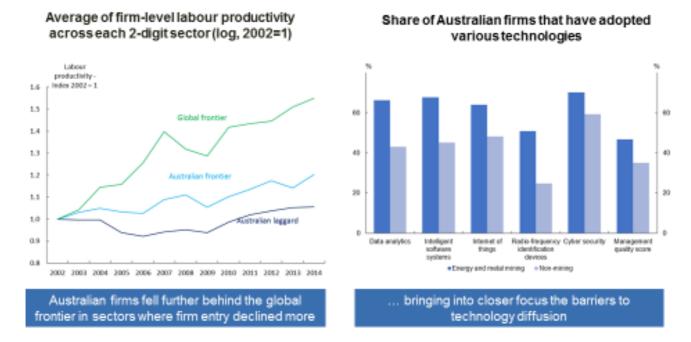
^{*} five year average realisation ratio applied. Source: ABS, *Private New Capital Expenditure and Expected Expenditure*, Sep 2019.

In addition to the total level of expenditure on business investment, the composition of expenditure must also be considered, in terms of the types of businesses that invest, and the types of investments being made. Recent analysis by the OECD, Treasury, the Department of Industry and others indicate a wide gap between Australia's best-performing businesses (those close to the productivity or technology frontier in their industry) and the majority of Australian businesses, with another sizeable gap apparent in the technologies adopted by mining versus non-mining businesses (chart 2.17). Australia ranks particularly poorly for ICT infrastructure and adoption rates, at just 29th best performing economy on each of these in the World Economic Forum's Global Competiveness Indexes in 2019 (see section 2.3 below). Australia also ranks low on specific metrics such as adoption of robotics, digital technologies and gross expenditure on R&D (GERD) as a share of GDP (chart 2.18).

Taken together, this research indicates that the most effective and appropriate government policy response to Australia's productivity problem is to focus on encouraging more widespread, rapid adoption of new technologies among Australian businesses, particularly with regard to digital, AI and related technologies. As noted by Treasurer Frydenberg in a recent speech on this subject:

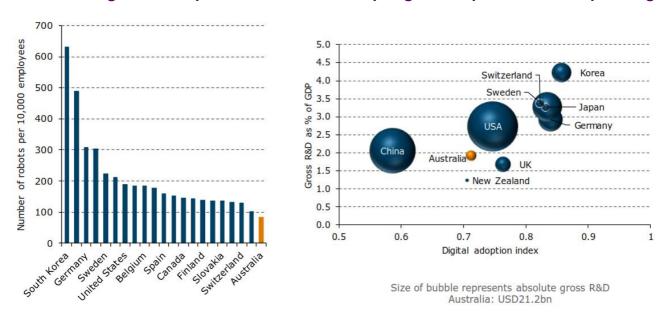
"while innovations are clearly occurring, giving benefit to some firms, they have not spread as widely to other firms across the economy as one would hope. On this point, Treasury analysis shows that the top five per cent of firms in Australia, account for almost all of our productivity growth. There is a clear gap between those at the frontier and the rest. Many firms appear to be waiting for technologies like artificial intelligence, autonomous vehicles or the 'internet of things' to mature before they adopt them. Sectors like mining where they have embraced cutting edge technology like driverless trucks and trains are seeing reduced costs, better metrics and increased output. Second, even when technologies are both proven and in place for some technologies it takes time for the full benefits to be seen." (Frydenburg, Making our own luck – Australia's productivity challenge, Address to the BCA, 26 Aug 2019)

CHART 2.17: Estimates of Australian productivity and technology adoption to 2015



Source: Andrews, D and Wheeler, A. 2019, *Reaching for the stars: Australian firms and the global productivity frontier,* Treasury working Paper, cited in Quinn M. 2019, *Keeping pace with technological change: the role of capabilities and dynamism,* presentation to OECD Global Forum on Productivity, Sydney.

CHART 2.18: global comparisons: robotic density, digital adoption and R&D spending



Source: World Bank *Gross R&D Expenditure* (2015), UIS UNESCO *Digital Adoption Index* (2016) and International Federation of Robotics *Robot Density* (2016), cited in ANZ Dec 2019, *Australia's Techiness: A Snapshot*.

2.3 Global competitiveness

The price competitiveness of Australian exports (and import replacements) received a solid boost through 2018 and 2019 from a sustained drop in the Australian dollar against the US dollar and most other major global currencies, to levels well below its long-run average of US 75 cents (chart 2.19). At the same time, non-rural commodity prices have risen again, taking the terms of trade higher. Higher commodity prices normally take the Australian dollar higher as well, but this time the lift has been outweighed by negative external factors including rising risk aversion, market volatility and interest rate differentials. In 2020, recovering commodity prices could push the Australian dollar higher once more, but this upward influence is likely to be countered (again) by other global factors.

200 1.25 Terms of Trade index (left) Non-rural commodities index, USD (left) 1.15 Terms of trade and non-rural commodities indexes UD/USD (right) 160 1.05 AUD/USD parity = 1.00 0.95 140 0.85 120 (end 100 0.75 AUD/USD 80 0.65 0.55 40 0.45 AUD/USD long-run average = 0.750.35 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

CHART 2.19 Australian Dollar, Commodity Prices and Terms of Trade, to Nov 2019

Sources: RBA, end of month exchange rates, to end of Nov 2018; RBA, end of month commodity price indexes, to end of Nov 2019; ABS, *National Accounts*, to Sep 2019.

A lower dollar always helps to boost competitiveness, but Australia's labour and other business costs are (and have always been) high by global standards. Cost comparisons can change markedly over time due to fluctuations in exchange rates, purchasing power and relative living costs across countries. To address this, the OECD compares wage rates using 'purchasing power parity' (PPP) rates instead of current or average exchange rates to compare labour costs across countries.

On a PPP basis, the OECD estimates that Australia remains at the highest end of global labour costs. As of 2018 (and prior to the latest annual rise in the minimum wage of another 3.0%), Australia's minimum wage was the highest globally, among countries that have a national minimum wage (chart 2.20). The minimum wage affects working arrangements for significant numbers of Australian workers. The FWC estimates that in 2019, 180,200 employees are paid at the adult minimum wage rate (1.7% of all employees), with another 2.2 million employees working under an award that is linked to the minimum wage (20% of employees). Employees whose pay rates are set by an enterprise or collective agreement (40% of employees) are affected by the minimum wage (and the annual changes to it) if their agreed pay rates are linked to an award rate or the minimum wage.

2018 \$US PPP per hour 2018 Rank Australia 12 Luxembourg France 11 Germany Netherlands 10 Belgium New Zealand 9 UK 8 -----Ireland ----- Canada ----Japan Korea 6 USA 5 Spain 4 2 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18

CHART 2.20 Real Minimum Wages, 2018 Constant Dollars (USD PPP), 2001 to 2018

Source: OECD Employment and Labour Market Statistics database, www.oecd-ilibrary.org/

Looking past the influences of movements in the dollar, the terms of trade and high labour costs, the World Economic Forum (WEF) ranked Australia as the 16th most competitive business environment globally in 2019, down two places (14th place) from 2018. This fall in Australia's global competitiveness in 2019 was largely due to improvements in other countries while Australia failed to improve. Australia's score was largely unchanged in 2019, at 78.7 points out of a possible 100 points in 2019, compared to 78.8 points in 2018 (out of a possible 100 points, which is the maximum or 'frontier' score).

Australia ranked inside the top 10 in only two of the twelve 'pillars' that make up the WEF Global Competitiveness Index (chart 2.21). These were 'macroeconomic stability' and 'product markets'. Australia shared the top score (100 points) for 'macroeconomic stability' with 33 other countries. Australia also obtained reasonable rankings for skills (13th) and financial system stability (13th).

Australia's weakest 'pillars' were for:

- labour market flexibility (a score of just 69 out of 100 and ranked 23rd of 141 economies);
- market size (25th);
- infrastructure (29th); and
- ICT adoption (29th) (chart 2.21).

These are all policy areas in which Government regulations, programs and investments play a key role in facilitating growth and improvement, through our industrial relations system, public infrastructure investments (e.g. in transport) and infrastructure networks (e.g. the NBN).

CHART 2.21 Australia's Competitiveness in 2019: WEF Global Competitiveness Index Performance Overview 2019 Key ◇ Previous edition △ High-income group average □ East Asia and Pacific average



Source: WEF October 2019, Global Competitiveness Report 2019.

Australia ranked better in the World Bank's Doing Business Index for 2020 than in these latest WEF results and showed some improvement on recent years. Based on a (narrower base) of 10 topics that compare business regulations and costs, the World Bank ranked Australia as the 14th best place to do business out of 190 economies, up from 18th place in 2019. Australia scored well on 'starting a business' (time and cost), 'getting credit' and 'enforcing contracts', but relatively poorly on 'getting electricity' (time and cost) and 'trading across borders' (time, cost and complexity) (chart 2.22).

CHART 2.22 Australia's Competitiveness In 2020: World Bank 'Doing Business' ranks



Source: World Bank 2018, Doing Business 2020: Australia.

3. Fiscal position

Ai Group supports a highly disciplined approach to fiscal policy that includes:

- Rigorously assessing and prioritising spending;
- Raising taxation revenue as efficiently as possible;
- Ensuring that recurrent spending is comfortably covered by recurrent revenue over the course of the business cycle;
- Having a sufficiently strong balance between public sector assets and liabilities to permit the use
 of public-sector borrowing to finance rigorously and transparently assessed public sector
 investment in productivity-enhancing, intergenerational infrastructure where this is the
 optimum approach to funding; and
- Rebuilding a fiscal buffer against the possibility of another crisis that will again call for expansionary fiscal measures to avoid a rapid deterioration of the economy and sharp increase in unemployment.

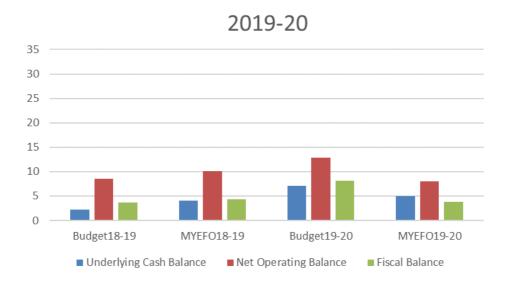
This year's MYEFO has acknowledged our slower domestic economy (from the middle of 2018) and outlook in its estimates and projections of budget outcomes. Both for the current financial year and for later years across the forward estimates, slower growth in output and incomes (other than mining sector revenues) are reflected in downgraded anticipated budget outcomes.

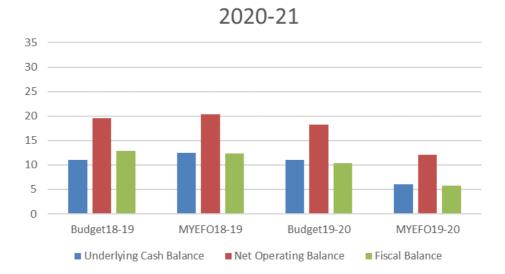
Even though prices for mineral exports and mining sector profits have been robust, these downgrades were not surprising, given the overly optimistic nature of the current and near-term economic outlook that were presented in the 2019-20 Budget and in the Pre-Election Economic and Fiscal Outlook, relative to other forecasts published at the same time such as those of the RBA.

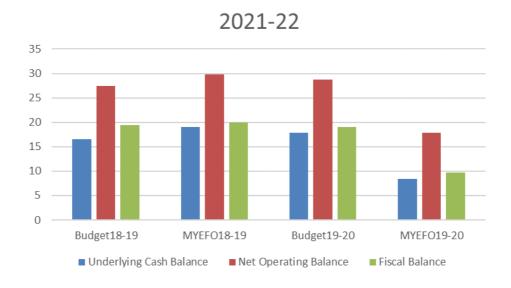
These latest downgrades are extensive when compared to the forecasts in the previous year's MYEFO and Budgets (chart 3.1). According to the MYEFO, the Budget is still anticipated to move into, and remain in surplus, but the expected magnitudes are significantly lower than previously anticipated – particularly for the 2020-21 and 2021-22 years.

This downgrade illustrates the sensitivity of the budget position to domestic output and incomes growth - a sensitivity that would be compounded were commodity prices to diverge from current assumptions. While the paths for commodity prices assumed in MYEFO appear to be prudently conservative, with revisions to expected budget outcomes now showing considerably slimmer surpluses, there is clearly a larger chance that further downgrades to the economic outlook could wipe out the anticipated budget surpluses for the current or following years.

CHART 3.1 revisions to Forecast and Projected Budget Outcomes for 2019-20; 2020-21; and 2021-22 (\$B)







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The key questions for fiscal policy in the lead up to the Budget are whether, in addition to measures already announced, further stimulus is warranted; and to what extent should the retention of budgeted surpluses weigh on this consideration?

The course of the economy over the next few months is critical to the first of these questions. On the indications available to Ai Group, businesses expecting conditions to deteriorate during 2020 outnumber those expecting conditions to improve. This raises a real and immediate risk that growth, investment and employment could turn down in the first months of 2020, fuelling further deteriorations.

The human and economic costs of a self-reinforcing downturn are high. The historical evidence indicates that when unemployment rises under these conditions it does so very quickly and that it takes many years to recover the lost ground.

In our view these costs are greater than the costs of taking early stimulatory action to avoid a more widespread downturn, even if it means delaying the important task of fiscal consolidation relative to the current trajectory. Of course, the trajectory towards fiscal consolidation set out in the 2019-20 MEEFO would itself be undermined in the event of a further downturn in activity and relative to the alternative trajectory, there would be a fiscal return from an effective fiscal stimulus.

For reasons set out in the next section we favour fiscal stimulus in the form of a generous Investment allowance with consideration given to the option of its introduction from early in the 2020 calendar year.

4. Taxation Measures

4.1 Towards a fundamental remodelling of Australia's taxation arrangements

Ai Group strongly supports a phased overhaul of Australia's taxation arrangements both at the Commonwealth and State/Territory levels and we continue to see considerable merit in many of the directions canvassed in the 2010 Australia's Future Tax System Report.

OECD comparisons indicate that relative to other OECD countries, Australia is heavily reliant on the taxation of income and especially the taxation of investment income, with a much lower reliance on taxes on goods and services than is generally found in OECD countries (chart 4.1).

Taxes on personal income, profits...

Taxes on corporate income and gains

Social security contributions

Payroll taxes

Taxes on property

Value added taxes (GST)

Other taxes on goods and services

Other taxes

CHART 4.1 Sources of tax revenue: Australia and OECD Average (% of total taxation)

Source: OECD, *Revenue Statistics* 2019. (2017 data, which is the most recent year for which the complete data set is available).

While these differences are stark, they do not capture the full extent of the variations between Australia's pattern of taxation and other OECD countries. This is better captured in Table 4.1 below which shows the polarised nature of Australia's taxation with our reliance on different revenue sources sitting either at the top or at the bottom end of the OECD rankings.

The differences between taxation in Australia and other OECD countries would not be particularly telling were it not for the fact that the taxes we rely most heavily on (particularly taxes on corporate income) are among the least efficient and the taxes on which we draw most lightly are among the least inefficient. This implies there is considerable room to reduce the costs our tax systems impose on the economy.

Table 4.1 Australia's Tax Structure (ranking among OECD Countries)

	Position in OECD
Taxes on income profits and capital gains	2nd
personal income, profits and gains	2nd
corporate income and gains	3rd
Social security contributions	36th
Payroll taxes	3rd
Taxes on property	5th
Taxes on goods and services	29th
VAT/GST	34th
Other	34th

Source: OECD, *Revenue Statistics* 2019. (2017 data, which is the most recent year for which the complete data set is available).

Ai Group has argued for the development of a comprehensive approach to remodelling Australia's taxation arrangements aimed at delivering not only improved business competitiveness but also greater resilience, higher efficiency of taxation and greater confidence in the fairness of our approach to raising tax revenue. While the current interest of the New South Wales Government in taking a fundamental view of taxation and federal financial relations is setting important directions, greater national leadership is needed.

Greater national leadership is particularly needed given the absence of more widespread support for significant changes to Australia's taxation arrangements and Ai Group maintains that the ambition of reform should be rekindled and that the federal Government and indeed others in the community should foster a dispassionate and informed discussion about the need to improve our tax arrangements and the range of options for improving their efficiency, fairness and resilience. The 2020-21 Budget provides an opportunity to initiate a patient yet persistent effort to lay the groundwork to raise this national ambition.

4.2 Current stimulus measures

To date, the response to further interest rate cuts and the income tax relief available from the start of the 2019-20 year has not manifested in a pick-up in household spending or business investment. Given the cautious mood of the household sector there is a clear risk that stimulus in the form of personal income tax cuts or transfer payments to households would be used to reduce indebtedness or increase savings balances rather than to boost current consumption.

Instead, Ai Group proposes the introduction of a generous investment allowance that would bring forward deductions against business income tax liabilities. The allowance would only apply to new investment and could be made available for a limited period – say until the end of the 2021-22 financial year. The advantages are a stimulus to near term spending by businesses; a boost to the

pace of addition to the capital stock; an overall increase in investment and a lasting increase in capital per employee and productivity.

To address the risk that businesses would delay making investments until the start of the 2020-21 year, consideration should be given to the measures being announced prior to the delivery of the budget and taking effect from the date of announcement.

4.3 Research and Development Tax Incentive

The introduction early in December of *Treasury Laws Amendment (Research and Development Tax Incentive) Bill 2019* was a major disappointment for the vast majority of Australian businesses that undertake research and development or who are contemplating undertaking research and development. If enacted, the measures set out in the Bill would not only slash the material recognition of the widespread benefits of business research and development activity but would also put in place a new approach to the tax incentive that is deeply flawed.

While Ai Group will make more detailed representations in relation to the Bill, we urge the Government to withdraw the Bill.

5. Skills, Education and Training Policies

Industry needs a ready workforce capable of participating at the right skills levels, in the right jobs and with the capacity to adapt and reskill. An uplift in the skills and capability of the Australian workforce is an imperative if Australia is to realise its potential. Critical actions are needed in a number of areas:

- Essential investment in cohesive VET reform
- Supporting Australia's apprenticeship system
- Better connecting the tertiary education sectors
- Adjusting to changing workforce needs
- Developing Australia's workplace literacy, numeracy and digital literacy capabilities
- Addressing youth unemployment, transitions and pathways
- Linking higher education with industry.

5.1 Essential Investment in Cohesive VET Reform

Within a setting of flagging economic and productivity growth, escalating skills gaps and disappointing apprenticeship numbers, it is essential the Australian Government's broad ranging program of VET reform results in a markedly improved system. The extent of reform, resulting in the current dynamic environment, is welcomed. However, each piece of reform must be carefully shaped and be considered within the context of other reform across the VET ecosystem.

At this time, the long-held key desirable features of a national training system must be renewed and strengthened: industry led and driven, nationally consistent, outcomes focussed, timely and quality assured.

Recommendations from the Expert Review of Australia's Vocational Education and Training System (Joyce Review) have been a catalyst for the extensive reform, with the Australian Government's Skills Package acting on a number of the proposals in the short term to set up longer term reforms. Prioritised were a National Skills Commission, Skills Organisation pilots, a National Careers Institute, VET student loans, and a 'rapid' review of the Australian Skills Quality Authority, addressing governance, policies and culture.

Framing the work, the COAG Skills Council's evolving VET Reform Roadmap provides unified direction and fast tracks key reviews on VET student loans, micro-credentials, Standards for Registered Training Organisations and training packages.

At the same time the Productivity Commission is reviewing the National Agreement for Skills and Workforce Development, focusing on priority areas of concern that Ai Group has identified: nationally consistent government funding and pricing arrangements; coordination and streamlining of support for VET by governments; consistency between VET and higher education funding and

loan arrangements; increased participation in training by all Australians; funding for targeted reforms such as LLND programs; and improved performance indicators.

Additionally, the significant Australian Qualifications Framework report has been delivered recommending a more flexible AQF architecture to reflect the changing nature of work, recognition of micro-credentials, and greater fluidity between VET, higher education and schools.

Adding to the dynamic VET environment, the Joyce Report recommendations and subsequent national reform agenda have prompted parallel state reviews covering aspects of VET, such as Skills for Victoria's Growing Economy (Macklin Review) looking at Victoria's post-secondary education and training system and work by the NSW Productivity Commission positioning human capital as a key element for state development.

A key reform for VET must involve the shared funding arrangements between the Commonwealth, states and territories. Different mixes of federal, state and territory funding and different ways of funding each VET system by jurisdictions are causing confused messages for employers engaging with the system, particularly those operating nationally. In some instances, within individual state systems the needs of industry, businesses and students have not been met.

The Joyce Review acknowledges these inconsistent and complex pricing and subsidy models and the 'variable and varying funding' among jurisdictions, describing these as confusing, duplicative, and problematic. Ai Group welcomes the recommendation of the review to 'develop a simpler, nationally consistent funding policy'.

Recommendations

Ensure the National Skills Commission has a strong industry and policy leadership role, as well as labour market and skills shortage research analysis.

Enable the National Skills Commission to auspice the National Careers Institute.

Establish the National Skills Commission as a ministerial company to be jointly governed by the Australian Government and states and territories, reporting to the COAG Skills Council, and with a board drawn from industry.

Provide the National Skills Commission with oversight for VET investment across Australia according to a jointly agreed policy directive, including the role of establishing nationally consistent benchmark pricing.

5.2 Supporting Australia's Apprenticeship System

The raft of issues within Australia's apprenticeship system represent a sub-set of concerns to be addressed through the current VET reform agenda. Ai Group contends that a national focus is needed to manage the implementation of new apprenticeship measures including overseeing national consistency and ensuring apprenticeship programs and arrangements meet current and future workforce needs. This can be a specific function within the National Skills Commission, including determining which apprenticeships become eligible for financial incentives. A national

apprentice function within the National Skills Commission would enable improved, coordinated strategic decision making.

The level of apprenticeship commencements is an ongoing concern for the nation's industry sector. The most recent data from the NCVER indicates that there were 276,250 apprentices and trainees in-training as at 31 March 2019. This represents a fall of 0.9 per cent compared to the March 2018 level. Overall commencements fell by 2.7 per cent during the period. Trade commencements decreased by 0.6 per cent and non-trade commencements fell by 4.5 per cent1.

The review of the National Skills Needs List is timely, but the outcomes of this review may impact on the slight improvement in commencements for trade occupations. If, as the issues paper suggests, the revised list is targeted more at occupations in skills shortage, apprenticeships in those occupations not currently in shortage may see declines in numbers if incentives are reduced.

The NCVER data also shows that commencements in higher level qualifications have declined markedly since 2015. Diploma and Advanced Diploma apprenticeship and traineeship commencements have declined by 38.9 per cent between 2015 and 2019, and Certificate IV commencements have declined by 50.8 per cent for the same period. The extension of apprenticeship incentives to Diploma and Advanced Diploma qualifications from 1 July 2020 is welcome and it is hoped it will contribute to an increase in numbers.

Higher apprenticeships are gaining interest from both industry and potential apprentices. In the United Kingdom, only higher apprenticeships have seen an increase in commencements in recent times. The latest statistics reveal that higher apprenticeship commencements grew by 11,900 between their academic years 2016/17 and 2017/18, whereas commencements for other apprenticeships declined by 130,800 for the same period.2 Higher apprenticeships respond to the need by industry for higher-level skills, but they also have the potential to attract a new cohort of potential apprentices by providing clear pathways to higher-level qualifications and careers.

In Australia, there have been two pilots to trial higher apprenticeships, both funded through the Australian Government's Apprenticeships Training — alternative delivery pilots initiative. This Ai Group pilot focused on high-level technical skills in engineering and digital technology. The other was developed by PricewaterhouseCoopers, who piloted an 18-month Diploma of Business in apprenticeship mode for professional, business, information technology and financial services. Both pilots drew interest from employers and potential apprentices.

There are challenges in making higher apprenticeships more broadly available. State Training Authorities currently recognise only VET-level qualifications as apprenticeships or traineeships. Universities in Australia are not familiar with the model. Industrial awards generally do not make provision for them. Potentially the National Skills Commissioner could examine how to progress the model.

Completion Rates

¹ NCVER (2019), Apprentices and trainees 2019: March quarter – Australia

² House of Commons Briefing Paper Number 06113, 11 February 2019, Apprenticeship Statistics: England

Completion rates for apprenticeships continue to worsen. NCVER's latest annual completion data was released in July 2019 and shows national contract completion rates have declined to 49.4 per cent for all occupations and 43.1 per cent for trades. Individual completion rates are 54.5 per cent for trade occupations and 57.7 per cent for non-trade occupations.

Most employers that take on apprentices have small companies. Sixty-three per cent of employers have only one apprentice; these employers need to be supported to help their apprentices complete. They need help to improve their recruitment practices, and help to improve how they manage their apprentice after they commence, including understanding their obligations.

Professional development workshops for apprentice supervisors have been trialled at different times with positive results; however, they have not always reached those employers who need help the most. Encouragement for new employers, or employers with a poor track record, to attend a workshop when eligible for incentives could help extend the intended audience.

Group Training

A recent report published by NCVER3 that relates to apprenticeship completions concerns group training. This report examined apprenticeship completion rates for apprentices and trainees employed through group training compared to those directly employed by a business.

The report found that for non-trade occupations, group training has a better completion rate than for those employed directly by both SME and large employers. For trade occupations, large employers have the highest rate of apprentice completions, but completions for group training are substantially higher than for those directly employed by SMEs.

The Commonwealth previously supported GTOs in their activities through the Joint Group Training Program, which was jointly funded with state governments; however, national funding was discontinued in 2015-16, but some states continue to provide funding. Targeted funding of GTOs to support their activities to help disadvantaged groups, and to help SMEs participate in the apprenticeship system may help improve commencement and completion numbers.

Attracting New Apprentices

Ai Group's latest workforce development needs skills survey asked employers about their main issue of concern around apprentices and trainees. Thirty-one per cent noted a lack of suitable apprentices. This compares to 25.7 per cent in 2016 and reflects increasing frustration with sourcing apprenticeship candidates.4 Some states have implemented programs to promote apprenticeship careers; however, a national approach would have greater reach.

A contributing factor to this general concern is the data released about VET in Schools participation for 2018. In 2018, there were 230,710 VET in schools students, a decrease of 4.7 per cent from 2017. School-based apprentices and trainees make up only 7.9 per cent of all VET in schools students and have decreased by more than 13 per cent since 2013 to 18,180.

³ O'Dwyer, L. & Korbel, P. (2019), *Completion rates for group training organisations and direct employers: how do they compare?*, NCVER, Adelaide

⁴ Ai Group (2018) op cit.

Recommendations

The Commonwealth, in collaboration with the states and territories, refer all apprenticeship and traineeship legislation to the National Skills Commission, with the view of consolidating and progressing genuinely consistent, nationally applicable arrangements.

Continue to support all apprenticeship pathways through the National Skills Needs List.

Promote the uptake of higher apprenticeship initiatives through addressing systemic challenges to their implementation.

Make available apprentice supervisor workshops for employers of apprentices eligible for Commonwealth incentives.

Provide targeted funding to GTOs to support their activities to help disadvantaged groups, and to help SMEs participate in the apprenticeship system, similar to the previous Joint Group Training Program.

5.3 Better Connecting the Tertiary Education Sectors

Australia is experiencing a significant movement towards universal participation in tertiary education; however, over the last decade there has been a significant growth in higher education participation comparative to VET participation, leading to the development of a binary tertiary system.⁵

This binary tertiary system has created funding imbalances and has led to a lack of overall policy direction and governance of the tertiary system. It is essential to address the decline in participation and funding in the VET sector and to restore a better balance between higher education and VET.

Funding of the VET system continues to be inadequate in terms of both the level and composition of its funding, and insufficient in addressing the skills needs of the workforce. The Commonwealth's *Expert Review of Australia's Vocational Education and Training System* has recognised that the total public funding of VET has declined in absolute and relative terms to the higher education and schools sectors over the last decade.⁶

Consideration could be given to the formation of a central and independent coordinating agency to provide common approaches across the tertiary sectors. For policy coherence, an independent coordinating agency is required to engage in consistent, continuous and longer-term strategy development to ensure the articulation of views needed for the effective development and monitoring of a national tertiary education strategy. An independent co-ordinating agency and any resulting national strategy requires the inclusion of both higher and vocational education.

Ai Group also advises in favour of a universal tertiary education student loan scheme, initially for diploma and above courses, to create a more equitable and cost-effective system. With the announcement of the Productivity Commission review of the National Skills and Workforce

⁵ Ai Group (2019), Realising Potential, Solving Australia's tertiary education challenge

⁶ Commonwealth of Australia, Department of the Prime Minister and Cabinet, Strengthening Skills

Development Agreement, it is encouraging to note that 'nationally consistent government funding and pricing arrangements', 'consistency in funding and loan arrangements between VET and higher education', and investment in VET that encourages increased participation have been included within its terms of reference.

Currently, undergraduate students at Australian public universities have access to a variety of Commonwealth subsidies and loans. In the VET sector, students undertaking advanced diplomas may or may not have access to an often variable state government subsidy or VET student loan. Similarly, VET students in Certificate courses face upfront fees and cannot access the VET Student Loans program. The different levels of public subsidy and access to student loans programs have made accessing higher education loans more attractive.⁷

Recommendations

The Productivity Commission review into the National Skills and Workforce Development Agreement, and the COAG Skills Council as part of its VET Reform Roadmap, should:

- address declining investment in VET and establish equitable funding arrangements across the tertiary sector
- establish a universal tertiary education student loan scheme, initially for diploma and above courses, to create a more equitable and cost-effective system.

5.4 Adjusting to Changing Workforce Needs

Targeted investments in education, training and skills must underwrite the rapidly transforming economy and workforce to get more people into more secure employment. Essential to this endeavour is the role our national tertiary system plays and the leadership of industry.

The growth in demand for higher level skills emerges from shifting demographics in the population; more open movement of people, goods and services across international borders; and the exponential growth in technology, including automation, internet of things, big data and artificial intelligence.

The Department of Employment, Skills, Small and Family Business estimates that over the next five years to 2023, four of the 6 occupations projected to have the largest increase in employment are at Certificate II or III (skill level 4) occupations.⁸ Almost 55 percent of projected employment growth to 2023 can be serviced by vocational education and training, in addition to the higher education sector.

It is important to note that while more people are upskilling, 75 per cent of employers are still reporting skills shortages in the workforce. Skill shortages, skills mismatches and skills imbalances

⁷ Croucher G., Noonan P. and Chew J.: Funding an expanded tertiary system: designing a coherent financing architecture, in Visions for Australian Tertiary Education, Melbourne CSHE, February 2017.

⁸ Department of Jobs and Small Business, *Future jobs growth to favour skilled workers*, 16 October 2018, https://www.employment.gov.au/newsroom/future-jobs-growth-favour-skilled-workers

⁹ Australian Industry Group (2018), Skilling: A National Imperative, Workforce Development Needs Survey

are very much a feature of the Australian workforce.¹⁰ An increasing percentage of higher education graduates in full-time employment are reporting they are not fully utilising their skills and education.¹¹ In 2019, this figure was 28.3 percent, up from 27.1 per cent in 2018 and 28.2 per cent in 2017.

Using job advertisement data from 2012 – 2018, Deloitte Access Economics has concluded that skills rather than occupations or qualifications form the job currency of the future.¹² It has mapped out the skills in oversupply and in shortage across the Australian workforce, estimating that in 2019 there will be over 23 million skill shortages across the economy; with the average job requiring around 18 skills, the skills shortage averages to two missing critical skills per employee.

According to Ai Group's 2018 survey of employers, industry is reporting difficulty in recruiting employees with science, technology, engineering, maths (STEM) skills.¹³ The occupations reporting the greatest shortage in these skills were technicians and trades workers (58 per cent) and professionals (54 per cent).

A major focus needs to be on growing the STEM workforce, especially in areas of the economy where there are critical skills shortages. Initiatives to enhance the vocational education and training sector's role in filling STEM skills gaps, and promotion of apprenticeships and traineeships delivered through the VET sector, together with business and industry, such as Ai Group's Industry 4.0 Higher Apprenticeships Program¹⁴ should be prioritised for funding by government as part of an expanded National Science and Innovation Agenda.

Some positive progress has taken place in the school sector through the Education Council's STEM Partnerships Forum and the National STEM School Education Strategy 2016 – 2026. ¹⁵ Ai Group contributed to the Forum through its research project Strengthening School-Industry STEM Skills Partnerships, which produced a number of models and recommendations that should be promoted to encourage further participation. ¹⁶ The Forum's final report, Optimising STEM Industry-School Partnerships: Inspiring Australia's Next Generation, includes a number of valuable recommendations involving industry partnerships that governments should continue to pursue and implement. ¹⁷

Continuous Learning in an Age of Digital Transformation

With technological change affecting nearly all industries, different skills and new practices need to be adopted by existing workers throughout their working lives. Linking lifelong learning to workforce productivity is now essential. Without efforts by government, education and training sectors and

¹⁰ OECD (2018) op cit.

¹¹ Quality Indicators for Learning and Teaching (2019), 2019 Graduate Outcomes Survey, October 2019

¹² Deloitte (2019), *The Path to Prosperity: Why the Future of Work is Human*, Deloitte Insights, Building the Lucky Country No. 7

¹³ Australian Industry Group (2018) op cit.

¹⁴ https://cdn.aigroup.com.au/Reports/2018/Industry 4 Higher Apprenticeship Program July 2018.pdf

¹⁵ Education Council, National STEM School Education Strategy 2016 – 2026, December 2015.

¹⁶ Ai Group (2017), Strengthening School – Industry STEM Skills Partnerships, Final Project Report

¹⁷ Education Council, *Optimising STEM Industry-School Partnerships: Inspiring Australia's Next Generation*, STEM Partnerships Forum, April 2018

industry to normalise cultures of continuous learning in the workplace the Australian economy will not prosper to the extent that is necessary for our future.

The acquisition of new skills by existing workers and the refreshing of existing skills needs to be available in a range of environments (virtual, physical) and through access to shorter form training. The introduction of micro-credentials by education institutions to meet on-demand learning must increase. The growing emphasis by education and training sectors now on developing capabilities in enquiry, agility, adaptability, creativity and problem-solving will assist future workers in gaining a robust base to build skills through their working lives.

In terms of re-skilling, Ai Group's research shows that employers are currently prioritising managers for digital technology training and changes anticipated or caused by its rollout. However, re-skilling extends beyond digital skills development in order to equip workers with the broader capabilities required in more autonomous workplaces.

Businesses will need to assess their own capabilities and train when necessary using education and training partners, supervisors, managers and leaders. These companies will develop employees more capable of taking control of their roles, needing less supervision and better able to contribute to innovation in the workplace. However, support is needed for industry to develop digital strategies and workforce plans, assess existing workers' capabilities and train where necessary.

Ongoing skills alignment between education and training provision and industry requires more reliable and regular skills forecasting and better data collection. As a skills-based approach to skills assessment, this should include identifying sets of competencies in demand rather than qualifications. This would assist workers to build on existing skills by adding those in demand.¹⁸

In moving forward, all improvement actions need to be underpinned by closer partnerships between industry and all education and training sectors. Rapidly changing work environments and skills are best served by learning that is connected to and closely reflects workplace skill needs, such as work-based and work integrated learning models.

Recommendations

Include a national and regional skills forecasting system that is independent and evidence-based, through the National Skills Commission, with regular reporting and assessment against sets of skills that can be mobilised to perform tasks related to a job, occupation and industry.

The National Skills Commission should implement a national workforce strategy.

Raise the profile of the VET sector in the development of STEM skills through higher apprenticeships and traineeships relevant to STEM, which could be funded as part of an expanded National Science and Innovation Agenda.

Provide incentives for industry, focussing on small and medium enterprises, to assist with workforce planning to continue re-skilling its transitioning workforce.

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¹⁸ OECD (2018) op cit.

Build capability for continuous learning in individuals through the curricula frameworks and teaching and learning practices of all education and training sectors.

5.5 Workplace Literacy, Numeracy and Digital Literacy Capabilities

Poor literacy and numeracy have a negative impact on productivity, labour mobility and the capacity of the economy to achieve the higher levels of skills needed for the increasingly knowledge-based economy. There remains an urgent need to address the language, literacy and numeracy and digital literacy needs of the Australian workforce.

Ai Group research reveals that the low levels of workplace literacy and numeracy are a major concern to employers. Ai Group's recent workforce development skills needs survey indicates that 99 per cent of employers reported that low levels of literacy and numeracy have an impact on their business. ¹⁹ An individual with poorly developed literacy and numeracy skills is at greater risk of disengaging from learning and fully participating in the workforce.

Ai Group conducted a return on investment to employers participating in a literacy and numeracy support program with very positive results.²⁰ In addition to the benefits for participating employees, there is also now a firm business case for employer investment in workforce literacy and numeracy. There need to be programs within which they can invest.

A national literacy, numeracy and digital literacy strategy needs support especially for workplaces. A key component of this is the development and implementation of a new co-contribution program specifically for workplaces. Such a program would be based on tight outcomes for both individual participants and employers.

It is encouraging that the recent review of the Foundation Skills Training Package has recognised that literacy and numeracy now involves digital literacy skills, with relevant units in the process of being added to the Package.

Ai Group urges the government to fund, develop, and promote a national workforce language, literacy and numeracy and digital literacy (LLND) strategy and program in connection with industry. The strategy and program should incorporate the development of digital literacy skills to ensure employees – and employers – are adequately equipped to deal with developments in the digital economy.

Recommendations

A national foundation skills strategy needs to be provided with a sufficient budget to support workforce language, literacy, numeracy and digital literacy programs.

The Government commence discussions with industry and other appropriate stakeholders about the development of a new workplace LLN program.

¹⁹ Ai Group (2018) op cit.

²⁰ Investing in Workforce Literacy Pays, Australian Industry Group, August 2015.

5.6 Addressing Youth Unemployment, Transitions and Pathways

Students disengaged from education and training are at greater risk of being out of work or employed in industries most prone to digital disruption. A 2015 PISA survey of students' sense of belonging in school found that Australian students have shown declining results over time, and rate lower when compared to the OECD average.²¹

Vocational education and training can provide a valuable pathway for students who might be at risk of disengaging from education. VET programs delivered in schools have many examples of work-based learning opportunities that deepen a student's knowledge of the workplace and exposes them to real-world situations that require the practical use of acquired skills.

However, data from NCVER shows that in recent years there has been declining participation in VET programs delivered in schools and school-based apprenticeships and traineeships. ²² There is concern that careers teachers do not adequately understand or promote the opportunities in the VET sector. The over-emphasis on academic success in traditional subjects has led to a lack of exposure to vocational options even when students may be better suited to, and have better work outcomes, within these pathways.

Encouraging federal government initiatives have emerged in the careers education space, including a National Career Education Strategy and the creation of a National Careers Institute. The Government's Review of Senior Secondary Pathways into Work, Further Education and Training is also an opportunity to raise the profile VET programs delivered in schools and reforms in this area of learning.

To improve partnerships between schools and industry, a commitment by government to provide greater assistance to industry, especially small and medium enterprise, that bolster student work-based learning opportunities, mentoring, compliance, induction, work health and safety standards, and cooperation on aligning educational outcomes to curriculum and employment outcomes to industry skills needs would be welcome.

Recommendations

The COAG Education and Skills councils to explore funding arrangements through a National Partnership Agreement that bolsters VET participation in school delivered programs, and supports industry, especially SMEs, to offer work-based learning opportunities.

5.7 Linking Higher Education with Industry

The transforming economy will continue to rely heavily on higher education to develop higher critical enquiry. It must provide the high-level skills, research base and culture of innovation that the new economy needs. It is one of the key enablers in the development of our human capital and is crucial to the business sector.

²¹ ACER, PISA Australia in Focus Number 1: Sense of belonging at school, 2018

²² NCVER (2019), Australian vocational education and training statistics: VET in Schools 2018, NCVER, Adelaide

Corresponding with the introduction of the demand driven funding model, participation in the sector grew significantly.²³ Notwithstanding this growth, recent enrolment patterns indicate that higher education numbers have plateaued. In 2018, the number of students starting a Bachelor degree fell for the first time since 2003. A decline is anticipated for 2019 following fewer applications.²⁴

This is concerning given Australia needs an increasing supply of higher education graduates to meet growth rates in high skilled labour over the coming decades. Further, research from the Productivity Commission shows evidence of skills mismatch from 2012 to 2017 with fewer graduates entering occupations that require their skills. It also found that many students are entering university ill-prepared and struggling academically.²⁵

Debate exists over the blurred boundaries between higher education and the VET sector. Student retention and the quality of outcomes have been under scrutiny, including for equity groups. Flexible study options are being demanded by student populations, and changes to credentialing and qualification structures are needed to meet the needs of undergraduate student participation patterns and industry skill needs. Creative collaboration with industry to enable engagement by students and teaching staff must reach a new level to ensure learning relevance.

In the new economy industry needs universities to have the capacity to provide shorter amounts of training in a range of environments. An increased proportion of students are studying through external study modes in both full time and part time capacities.²⁶ A balance needs to be met between the traditional degree program and the demands for 'stacked' learning.

Ai Group's 2018 skills survey found that employer links with universities increased for work placements, partnering for research and project work from 2016 to 2018. Employers considered the most important form of support for companies to link with universities is accessing examples of student activities that could assist the business. A relevant point of contact at a local university, and information on supervising and mentoring students are also considered important.

Many universities now include a strategy to drive employability through work integrated learning models. Universities Australia 2018 research found that one in three university students had a work integrated learning experience in 2017. Ai Group has championed work integrated learning, through our work with the National Strategy for Work Integrated Learning in University Education, our representation on a number of national WIL projects, and our two guides for employers for activities with both undergraduate and post-graduate students.

However, the models of connection between industry and higher education providers will need to become closer as change quickens. The diverse nature of industry is relevant to the search for ways that the two sectors can better connect. The capacities and resources of large, medium and small businesses to collaborate is broad and different. Many large companies have long standing projects

²³ Noonan, P., A new system for financing Australian tertiary education, Mitchell Institute, September, 2016

²⁴ Norton, A., Enrolments flatlining: Australian unis financial strife in three charts, The Conversation, November, 2019

²⁵ The Demand Driven University System: a Mixed Report Card, Productivity Commission Research Paper, June 2019

²⁶ Higher education for a changing world, Deloitte, 2018

with universities and operate placement programs or share facilities. Smaller companies do not always have the resources to take long placements, but they may be able to offer less resource intensive engagements. Universities working with employers to ensure these smaller engagements can be designed to encourage as most student reflection as possible will assist the development of relevant-based and enterprise skills.

A leader in the establishment of beneficial links between higher education and industry, the Canadian Government has allocated a significant budget to programs supporting companies to engage with students for work integrated learning. It is linking the initiative to advancing its Innovation Agenda to spur economic growth. A similar initiative within Australia should be considered.

Recommendations

Fund pilots that implement a range of innovative work integrated learning models connecting industry and higher education providers, with the view to establishing new models of learning suited to industry.

Implement incentives to assist SMEs provide opportunities for higher education students to experience the workforce and develop enterprise-focussed capabilities.

6 Building Dynamic Competitive Industries

6.1 The Entrepreneurs' Programme

At the federal level, the Entrepreneurs' Programme plays an important role in directly assisting transformation in key sectors. EP's success means that the government should continue to scale up this successful program in line with business demand and economic opportunity.

EP has built up considerable recognition and it should retain its current branding. EP's sectoral coverage should stay broad, with construction remaining and energy expanded to cover cleantech. It would make sense to include businesses with prospects of successful transition to new fields, not just growth prospects within their current field.

6.2 Digitalisation, Digital Infrastructure and Cyber Security

Digitalisation is rapidly transforming practices across businesses and industries.

The bDigital service available to EP clients is valuable and should persist, but to improve capability beyond the scope of EP, the government should build on bDigital with a program targeted to large numbers of SMEs to provide information on successful adoption by businesses of digital technologies as well as advice on options for investments in digital capabilities.

Regular discussion of the future of industry between government and a wide array of stakeholders is essential to spur, inform and improve high quality industry policy. The Industry 4.0 Advanced Manufacturing Forum, chaired by Ai Group and bringing together stakeholders from industry, academia, unions and key institutions, is playing a valuable role and the Government should continue to engage with it through the Department of Industry, Innovation and Science.

A mix of communication infrastructure is critical to enable the growth of the digitally enabled economy, including the National Broadband Network (NBN), 5G mobile networks and a mix of other IoT communications platforms. Some of these technologies are growing fast and accommodating them (such as through lower regulatory barriers and increased regulatory flexibility) is challenging for slower-moving government and regulators.

While political visions of the NBN rollout and the future of nbnco remain heavily contested, it is essential that decisions about matters like the connection technology mix, the value of the network or whether and when to privatise are taken on the basis of wide consultation and careful consideration. The needs of businesses that still lack fast or reliable broadband need to be met. Despite recent activity, Australia remains far behind in global broadband speed rankings, and may be slipping further. The deployment of digital infrastructure needs continuing scrutiny against benchmarks including affordability, easing regional constraints, meeting business demand and maximising business benefits.

The Assistance and Access Act (also known as the Encryption Act) that was passed over widespread industry and community objections in late 2018 creates serious risks to Australians' cyber security and the reputation of Australian businesses that sell digitally-enabled products and services.

Substantial amendments are needed as soon as possible to clarify the Act and limit its impact in the areas of greatest risk.

Evolving and growing cyber threats and their impact on businesses and the community are an ongoing concern. Existing initiatives such as AustCyber and the Australian Cyber Security Centre (ACSC) are positive, but contentious issues including the Encryption Act mentioned above and concerns about the security of public and private digital platforms highlight the need to review the National Cyber Security Strategy (previously revised and published in 2016) with input from all affected stakeholders. This may also include consideration of a new Ministerial portfolio on Cyber Security that takes a holistic view, has full responsibility for managing cyber security policy and can operate across relevant departments.

6.3 Industry Capability Networks

The Industry Capability Networks operated in each State are important resources and would benefit from a review to determine how to maximise their value through modernization, integration with widely used digital platforms and other means.

The former Industry Skills Fund, closed in 2016, should be replaced by a new program to bolster training and support services and foster the skills development that will support industry competitiveness and growth.

6.4 Improving Australia's Export Capabilities

While Australia is enjoying a trade surplus for the first time in 20 years, we still need to address the structural imbalance of the Australian Exporter Community and a concerted effort is required to lift the International Competitiveness of Australian companies.

A small number of large exporters account for the majority of exports by value. The ABS data identify micro-exporters (export revenues of less than \$250,000), SMEs (export revenues of between \$250,000 and \$50 million) and large exporters (export revenues of more than \$50 million). Across these categories, approximately 460 large exporters (less than 1% of exporting businesses) accounted for 88% of exports by value in 2017-18. About 41,500 micro-exporters (78% of all exporting businesses) accounted for less than 1% of exports by value, while 11,000 exporting SMEs (21% of all exporting businesses) accounted for 11% of exports by value.

Of the 53,015 Australian businesses directly exporting goods from their Australian base in 2017-18, 49% had fewer than 3 export transactions, 41% had between 3 and 50 export transactions and only 10% had more than 50 export transactions in the year. This illustrates the concentrated nature of Australian's goods exports activity.

It is unclear what limits exporters from expanding beyond three sales, however, given that New Zealand is the first market for many exporters, we assume that the transition to the wider world is presenting a barrier to many companies.

The Export Market Development Grants scheme (EMDG) plays an important role in encouraging small and medium-sized businesses to export new products and services, and to access new

markets. Previous reviews of the EMDG scheme have found a strong return for the money invested in EMDG scheme:

"KPMG found that each EMDG dollar generates an economic benefit of \$7.03 when industry spillovers and productivity gains are taken into account. The scheme effectively redistributes productive resources from Australian taxpayers (including firms) to new and emerging exporters. To the extent that this transfer of resources results in an increase in community welfare than would otherwise be the case, the scheme can be judged to be efficient."

The success of the program ultimately depends on the funding committed in the Budget and we encourage the Government to continue funding the program so that it remains a viable program where the benefits to applicants outweigh the costs of applying. We also make the following EMDG specific recommendations:

- Increase the funding to \$175 Million per annum.
- To encourage more Australian companies to increase their number of export transactions, include New Zealand marketing expenses in the first two grant applications. New Zealand is often the first export market for Australian companies. While there are some benefits from the integration of our two economies, there are sufficient exceptions to add complexity to the export transaction and still include all the usual risks of international business. We believe that this will encourage more companies to take the first step into export.
- To reward innovation and product development in response to global trends, allow Exporters an additional three claims if they market products that have been developed post the expiration of their claim entitlements. Proof can include the registration of patents or trademarks.
- Allow Exporters to claim 50% of educational expenses for a minimum of two and maximum of
 five permanent employees for accredited training that leads to qualifications in either one of
 International Marketing, International Business, Languages and Cross Cultural Awareness or
 International Supply Chain and Logistics. This will lift the overall skill level of our nation's export
 community.
- At the expiration of their claim entitlements, allow Exporters an additional three claims for promotional expenses to markets not previously claimed before and that are outside Australia's top 20 export destinations. We believe that this will provide the incentive to encourage successful exporters to diversify their markets

Recommendations

Increase the availability of one-on-one support for new and emerging exporter either through Austrade or by increased the Export Training Grants delivered by AUstrade.

Progressively increase the budget allocation for EMDG over the next three years to \$175 million.

Continue and expand programs, such as the Colombo Plan, that develop the international business skills of Australian professionals. The relative neglect of new markets such as Latin America in these programs should be addressed.

Review the funding model of the Agencies that regulate cross border trade to ensure that they are encouraged to innovate and reduce operations costs for Australian exporters and importers.

6.5 Innovation

Innovation is critical to better outcomes for Australia's people, economy and environment, and essential to maintain and improve business competitiveness. The next Government should:

- Not proceed with the previously proposed stepping of the Research and Development Tax Incentive (R&DTI) rate based on research intensity, which would amount to a substantial acrossthe-board reduction in support for innovation and not provide meaningful incentives. Improved data analytics to assess the novelty of R&DTI claims would be a better way to focus the program;
- Commit to much-needed stability for the R&DTI and maintain a strong envelope for innovation support overall, including Cooperative Research Centres, Industry Growth Centres and broader research funding; and
- Provide additional funding of Defence research and development and innovation programs to help boost the ADF's capability edge, including a review of the national security innovation system as a whole.

Lifting the frequency and quality of collaborative innovation between Australian businesses and our substantial capabilities in scientific research is essential to improve competitiveness and open new commercial opportunities. The next Government should:

- Continue and expand the Innovation Connections element of the Entrepreneurs' Programme;
- Consider wider access beyond EP to incentives for employment of recent STEM PhD graduates in innovation roles;
- Do not introduce a higher rate of R&DTI for collaboration until and unless the practical difficulties of assessing collaboration with sufficient rigour and minimal costs can be overcome;
- Promote case studies and best practices for collaboration to both business and researchers, including the benefits of cross-organisational teams and deeper 'stage zero' collaboration that starts from problem analysis rather than contracting out solution delivery;
- Assess the success of the Commonwealth's efforts to link public sector research funding to industry collaboration and real-world impact, and refine the formulae and metrics if warranted in consultation with industry and the research community.

6.6 Standards and Regulation

Australia should strive for a more judicious and effective mix of standards and regulation in lifting public safety, consumer confidence and business performance.

There is considerable potential for the more effective use of consensus-developed standards in addressing a range of economic and social opportunities and challenges. In some cases standards

can work alongside formal regulatory approaches (such as when standards are called up in regulatory instruments) and at other times as a lower-cost substitute for formal regulation.

There has been a tendency for government to move away from the use of Australian standards. While international consistency and efficiency have clear value, international standards development processes are often unduly influenced by particular interests without adequate opportunities for Australian input reflecting domestic expertise, local conditions and needs. The Australian Government should continue to help fund Australian involvement in international standards development and it should ensure that an Australian filter is applied before the adoption of international standards in Australia.

There is also a disturbing tendency for Australian government agencies to forego the well-regarded model of the transparent, consensus approach to the development of standards in favour of rules and regulations developed by the agencies themselves. Government agencies typically do not have the technical expertise, the practical experience or the expertise in effective and structured consultation with industry and others in the community. The result is often sub-standard and government should be more willing to back and indeed expediate the use of the more transparent consensus standards development model.

In relation to regulation in general, the next government should reinvigorate best practice regulation initiatives including by extending the focus into developing greater understanding of best practice regulator behaviors and cultures.

6.7 Non-conforming Building Products

Australia's building and construction regulatory frameworks are weak and inadequately enforced to ensure that products sold to industry and the public meet applicable standards and are fit for purpose. This has been a source of increasing disquiet, particularly given high profile failures in relation to the construction sector. Since the Grenfell fire the Government's focus has moved away from non-conforming product to non-complying product; however, as the Senate inquiry into non-conforming product highlights this remains an issue in the building sector.

As of late 2019, building certifiers are increasingly finding it difficult to obtain professional indemnity insurance which is delaying the sign off of projects. As a result, calls for self-certification are expected to increase. Care must be exercise by policy makers as making such a significant change may weaken conformance frameworks further.

The Commonwealth needs to maintain a leadership role and to coordinate action with the States and industry to achieve safer outcomes for the public and a level playing field for suppliers who do the right thing.

6.8 Waste management

Waste reduction, materials efficiency and the 'circular economy' present important opportunities over the long term, while Australia also faces an ongoing crisis as our waste and recycling systems are roiled by China's clampdown on the contaminated plastics we previously exported for

processing. Ambitious National Waste Policy targets for improved waste outcomes need to be supported by effective policies and investments, including:

- Support for innovation and commercialisation of technology options to close materials loops and utilise waste products, and improved technologies for automated waste sorting;
- A coordinated push to revise standards at all levels to encourage, rather than discouraging, the use of recycled content which performs adequately;
- · Improved education of the public to encourage better sorting and reduced contamination; and
- Adopting effective and efficient measures to address waste-related externalities.

6.9 Industry Transitions

From digitalisation to decarbonisation, major waves of change bring novel and transitional challenges along with the opportunity to increase shared national prosperity. New and emerging technologies such as AI, augmented reality, drones and robotics can benefit business and the community through improved services, higher productivity and greater quality of life. But they can also present challenges to traditional ways of doing things and have costs that are more concentrated than benefits, though lower. This raises demands to manage or even halt change, such as through heavy regulation or bans.

Thoughtful strategy and credible policy responses from governments and regulators are important to plan for and respond to economic and technological change in ways that will meet community expectations. Making the most of new technologies requires room to experiment and learn, particularly where the technologies involved have the potential to be low-cost and widely distributed, like additive manufacturing, encrypted communications and CRISPR gene editing.

Highly reactive or overly change-averse responses risk curtailing innovation, reducing competitiveness and limiting the benefits of developments like digitalization. A policy and regulatory vacuum is likely to provoke subsequent hasty overreaction to any problems that emerge. Regulation has a role in addressing reasonable public concerns, for instance around security, safety, privacy and the environment. But there are also often alternative approaches to the regulatory "stick", including consultation and dialogue, codes of practice, transitional support and education. Where regulatory measures are warranted they still need careful development.

The next government should proactively consult about major technological and economic changes; consider the full range of options for response; adopt regulatory responses only where they are proportionate and likely to provide net community benefits; and develop any regulatory response in full consultation with affected stakeholders.

Climate policy presents a particularly important industry transition challenge. Global efforts to combat climate change will ultimately require net emissions of greenhouse gasses to reach net zero or below in most countries, including Australia. This transition will take decades and entail substantial changes in technology and practices across many sectors. This creates both economic

opportunities for new products and industries, as well as vulnerabilities where existing industries may experience a challenging transition or risk exit.

The next Government should develop and resource a strategy to seize the economic opportunities and manage the vulnerabilities. Bioproducts, carbon capture use and storage, electrification, hydrogen products, solar, wind and more present chances for new industries and the successful transition of existing industries. Coordinated policies, supporting infrastructure, and commercialisation finance can support growth and manage the considerable uncertainties. Any climate policy should ensure that assistance arrangements for trade exposed industries achieve trade neutrality and support decisions on longer term investments by those industries to decarbonise.

Some sectors are likely to contract over time, including in the electricity generation sector. These closures have wider impacts, including on direct employees, the supply chains in which closing facilities are embedded, and the communities and regions in which they are located. Ai Group strongly supports a fair and successful transition for these sectors. To that end Australia should work with representatives of industry, employees, States, local government and community organisations to develop effective and proactive responses to anticipated closures or transitions of existing emissions-intensive facilities.

7 Climate, energy and environment policies

Australia's climate, energy and environment challenges are significant. It is urgent that we develop pathways for successful transition to net zero emissions by 2050. High energy prices and concerns about supply reliability demand careful action. The crisis in recycling and waste management is of pressing community concern. Addressing these issues extends beyond the scope of budgetary policy and involves prominent roles for the States, industry and the community. Nonetheless Commonwealth fiscal decisions have an important place.

Climate action

The Commonwealth has commissioned a rapid review of the Climate Solutions Fund to explore additional opportunities to use the already-committed \$2 billion to drive a greater range of emissions abatement activity. While the Fund has assisted abatement in forest and land management, many other sectors have been largely untouched, including industry, resources, transport, energy and buildings. These sectors have immediate opportunities, particularly through energy efficiency, and will benefit from commercialization and deployment of new technologies that can underpin longer-term transition.

Ai Group and other stakeholders have made it clear that Australia's overall climate goals will not be achievable within the current financial envelope. Existing policies may under-deliver expectations; all countries, including Australia, will need to update and lift the ambition of their Nationally Determined Contributions under the Paris Agreement to close the gap with the Paris goals; and longer term transition will require investments well beyond the scope of the Fund. Policy structures that drive private demand for abatement can ease the requirement for public funding, though they need to be designed to maintain trade competitiveness, social equity and other needs.

In the absence of such policies the Government will need to commit substantial additional funds. One area of particular importance is the future of the Australian Renewable Energy Agency, which has a strong record of support for energy innovation and commercialization but is rapidly nearing the end of its initial ten-year funding allocation. There is widespread agreement that ARENA should be extended for another decade, with refreshed funding of at least \$3.6 billion over that time – equal in inflation adjusted terms to the initial allocation. ARENA's scope of activities should also evolve, reflecting the importance of renewables integration in electricity and of decarbonization pathways in industry, transport, agriculture and the built environment. The maintenance of ARENA's strong governance arrangements is crucial to this refreshed role.

Energy efficiency: While the largest and most energy intensive businesses tend to have strong internal capabilities and resources for efficiency, many other energy users across business do not – and many households lag further, particularly in rental properties. Low energy efficiency hurts individual users, who are more exposed to rises in energy prices. But it also increases the vulnerability of the whole electricity system, which notably struggled in early 2019 to meet demand during extreme heat events. The National Energy Productivity Plan (NEPP) agreed through the COAG Energy Council in 2015 contains many initiatives but few resources. The NEPP should be revised,

strengthened and financed appropriately, including with additional capital injections to the Clean Energy Finance Corporation. Measures developed should include at a minimum:

- Finance facilitation for energy monitoring enhancements (at a high match) and energy efficiency improvement capital upgrades (at a lower match) at SME industrial and commercial sites;
- Connecting businesses with verified high quality efficiency advisors;
- Recommencing development of efficiency standards for light road vehicles and investing where appropriate in infrastructure such as public charging points to support high-efficiency vehicles; and
- Raise the efficiency performance and thermal comfort of existing housing, particularly rental properties.

Energy investment

The steep increase in electricity prices in recent years, coupled with concerns about reliability, has inspired many calls for government action. There are undoubtedly major investment needs, particularly in the National Electricity Market, for new and upgraded generation, transmission, distribution and demand-side assets to promote cleaner, cheaper and reliable energy systems. However, the Federal Government should exercise caution in making these investments itself.

The NEM design relies primarily on wholesale price signals and associated financial markets to encourage generation investment by private (or corporatized public) actors. Government intervention to support particular assets or favoured actors can easily create a degree of risk and uncertainty that dissuades unsupported investors. For this reason the Government should ensure that any support is provided either through generally accessible incentives, or through investments that are consistent with independent advice and transparent to the market. The Clean Energy Finance Corporation's governance and market approach have been of high quality, making it a positive vehicle. The Australian Energy Market Operator's regularly updated Integrated System Plan is also a strong guide, particularly for the transmission and interconnection assets that the system is likely to need.

Through a range of market reforms now under consideration, particularly the Energy Security Board's review of options for a post-2025 NEM design, the Government should aim to arrive at a durable balance of market and regulatory drivers that avoids the need for more reactive and unpredictable government interventions.

Waste and recycling

In 2019 COAG agreed to develop a ban on exports of waste glass, plastics, tyres and paper, and the Meeting of Environment Ministers has laid out a timeline to achieve this in stages by 2022. Governments have also established an ambitious set of goals under the latest National Waste Policy, including 80% resource recovery from waste by 2030. These goals will require substantial resources to achieve.

Export bans and the import bans imposed by many countries to which we previously sent waste will, on their own, largely drive additional waste to landfill. Landfill bans on certain waste streams and higher landfill levies across the board, as many States rely on, may lead to illegal dumping and dangerous stockpiling. The reason is that bans do not of themselves support adequate resource recovery capacity, or — most crucially — create financially sustainable markets for recovered materials that are often more expensive than virgin materials and may have different performance characteristics.

Achieving a circular economy will ultimately involve considerable innovation that changes cost structures and creates new opportunities. But there are likely to be significant costs and investments along the way. State and local governments and industry have a role in making these investments and bearing these costs. But so does the Commonwealth. The Federal Government should continue working closely with all stakeholders on plans to implement the revised National Waste Policy and be ready to make a substantial financial contribution. In addition, the Commonwealth should explore using its procurement policies to create a preference for recovered materials, even if this involves higher costs.

Recommendations

Extend the Australian Renewable Energy Agency with at least a further \$3.6b over ten years, and update its scope of action to address transition in industry and other sectors.

Increase funding to energy efficiency in industry and low-income households.

Ensure any public funding for electricity investments is predictable and does not increase uncertainty.

Invest alongside the States, local government and industry in building sustainable markets for recovered materials.

8 Annual skilled migration program

Ai Group strongly supports Australia's permanent migration program and its focus on skilled migration. Skilled migrants generate the greatest benefits to the Australian community, since they contribute directly to our national employment and skills base. Many also bring specialist knowledge that provide even bigger benefits, by deepening our entrepreneurship, innovation and international linkages. Those that enter via the 'demand-driven' streams such as employer sponsored migration experience a better skills match and faster entry to the labour market - therefore utilising more of their skills more quickly on arrival in Australia – than those who arrive independently to seek work.

For these reasons, Ai Group was disappointed with the reduction to a maximum of 160,000 places in annual permanent migration that was announced in the Budget in May 2019. This reduction was not warranted. Nor does it accord with recent trends in economic or population growth.

Growth in Australia's Estimated Resident Population (ERP) had already slowed slightly before this announcement, to 388,000 or 1.56% p.a. in Q1 of 2019, from 395,000 and 1.60% in Q4 of 2018 (and a recent peak of 415,000 and 1.72% p.a. in Q1 of 2017). The monthly arrivals and departures data indicate however, that more people arrived as non-residents for long-term stays (12 months) in 2019 and fewer arrived as permanent settlers (chart 8.1). The number of people arriving in Australia on long-term but temporary visas has remained elevated in 2019, at more than 600,000 over the year to October 2019. The majority of these arrivals are students and backpackers. These groups make enormous contributions to the economy and the labour market, but they are not necessarily the best fit for occupational skill shortages, which are rising in many industrial sectors and particularly in the infrastructure and engineering construction fields. For these industries, permanent skilled migration and/or employer sponsored skilled migration are a better solution.

passenger movements per year, '000 700 Long-term non-resident arrivals 600 605 permanent and long-term 'net balance' 500 400 300 Long-term Australian resident returns 200 100 100 Permanent settler arrivals 0 -100 Long-term non-resident departures -200 -300 Permanent and long-term Australian resident departures -293 -400 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

Chart 8.1: Australian long-term arrivals and departures (12 months+), to Oct 2019

Source: ABS arrivals and departures, October 2019.

Ai Group notes the findings of the Productivity Commission (PC) in its formal review Australia's migration program (April 2016). It found that the greatest benefits to the community come from younger, highly skilled migrants. In the long-term, the PC found that immigration delivers a measurable 'demographic dividend' which will raise output and incomes for everyone:

"Continuing [Net Overseas Migration] NOM at the long term historical average rate [of 0.6% of the population] and assuming the same young age profile as the current intake is projected to increase GDP per person by around 7 per cent (equivalent to around \$7000 per person in 2013 14 dollars) in 2060 relative to a zero NOM scenario. Increasing or decreasing the level of NOM from this rate is projected to have a corresponding impact on GDP per person, all other factors equal.

The results reinforce the importance of age and skills in the migrant intake. Increasing the average age structure of NOM to reflect that of the Australian population is projected to reduce real GDP per person, while increasing the share of migrants entering in higher skilled occupations is projected to lead to an expansion in real GDP per person." (PC, p. 15).

The benefits of migration – and especially skilled migration - to national *per capita* output and income present a compelling argument for restoring the annual migration intake to its previous cap of 190,000 and for strengthening the focus on skilled migration categories.

Recommendations:

- The permanent migration planning level should be restored to the previous cap of 190,000 places per year.
- Within this total, greater priority should be given to the skilled migration stream and especially to the demand-driven components of skilled migration.