Ai GROUP SUBMISSION

2016-17 Federal Budget Submission

FEBRUARY 2016

Ai GROUP

Contents

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.

Australian Industry Group contact for this submission

Dr Peter Burn, Head of Influence and Policy
Ph: 02 9466 5566
Email: peter.burn@aigroup.com.au

1. Executive Summary

Over the past year the base of Australia's economic growth has been slowly broadening aided by the lower dollar and historically low interest rates. This has been associated with a strengthening labour market which in turn has fed back into the gradual improvement of the economy. Nevertheless the growth outlook suggests only a modest further recovery over the course of 2016-17. Further, risks are still weighted to the downside with confidence fragile; business investment anticipated to fall further; and with profound uncertainties around the global economy associated with China; the extent of commodity price falls; and the divergence of monetary policy across the major developed economies.

Against this background a budget that detracts from aggregate demand would risk stifling the tentative positive developments in non-mining sectors of the Australian economy. The Budget should avoid excessive aggregate spending cuts or aggregate tax increases in the 2016-17 year. Indeed there is a strong case for targeted tax measures to boost business investment.

At the same time there is a clear need to ensure the budget is on a convincing path to fiscal sustainability. This will require a combination of increased revenue and lower than anticipated spending.

- On the spending side, the key objective should be the tight prioritisation of expenditure to areas of greatest need and greatest social and economic value. Inevitably this will require difficult decisions affecting the areas of greatest spending – namely health and income support. It will also require driving greater efficiency in public sector spending across the board.

- With increases in tax rates likely to stifle the pace of economic activity, the keys to revenue growth over the medium and longer terms should involve improving the resilience of the tax base – in particular by addressing the structural decline in the relative contribution of indirect taxes; and lifting the pace of economic growth (and therefore of the tax base).

In addition to balancing the near and medium and longer-term challenges of fiscal policy, the Budget should add momentum to sustainable improvements in living standards by elevating the economy onto a higher growth path.

The task of lifting growth is critical in the face of the following challenges:

- Low rates of gains in productivity and associated rises in unit labour costs are undermining our competitiveness. Australia has not experienced a sustained growth in multifactor productivity since the 1990s.

- Demographic forces which continue to weigh on growth – with population wide participation rates set to decline, and on the budget - via a rising call on government services.

- The rising reliance on commodity exports is lifting the volatility of national income and has elevated the importance of developing more diverse sources of competitiveness.

While these challenges are sizable, Australia has before it an encouraging range of opportunities for growth. Critically, these include the opportunities of greater and more broad-based participation in the international economy. This includes greater trade and investment links with the regions to our north and northwest where income growth is expected to rise strongly over the next couple of decades as well as in other regions of emergence such as South and Central America.

The key to our ability to make the most of these opportunities is to improve our competitiveness by raising productivity. Businesses are working hard to eke out much-needed productivity gains and they are looking to invest in new ideas and markets, but governments also have critical roles in supporting confidence and capability development and removing barriers to investment and innovation.

In support of the objective of lifting the growth potential of the economy Ai Group proposes a Budget that:

- Embeds the encouraging policy focus on innovation;
- Invests in skills and education, including with a stronger emphasis on science, technology, engineering and maths (STEM) skills;
- Continues to accelerate the development of Australia's business capabilities;
- Facilitates an increase in investment in rigorously-assessed infrastructure projects;
- Increases the migration program both with a strong emphasis on skilled migration and by lifting the Syrian refugee intake;
- Assists the preparation of the next, and more challenging, phase of greenhouse gas emissions reductions by supporting innovation and by allocating additional revenue to the Emissions Reduction Fund;
- Commits to ongoing defence investment and leverages the opportunities for Australian businesses to participate in global defence-industry supply chains.

Proactive measures in support of higher growth in the 2016-17 Budget will complement progress across a range of longer-term reform areas. Ai Group is contributing separately to these areas – including in relation to workplace relations, energy policy and taxation - which fall outside the scope of this submission. Ai Group members support the Government's processes to address these critical areas and are keen to assist in building public support for change.

Recommendations

Ai Group's policy recommendations for the 2016-17 Budget are consolidated below.

Fiscal Policy

- In the face of the ongoing fragility of domestic growth and the uncertainties surrounding the global economy, large cuts should not be made to aggregate spending and there should not be large increases in aggregate taxation. Indeed, given the shortfall in business investment, there is a strong case for targeted tax measures aimed at encouraging investment by Australian industry.
- That said, clearly there is a need to ensure the budget is on a convincing path to sustainability. This will require improvements in the resilience of taxation arrangements and tight prioritisation of expenditure to areas of greatest need and greatest social and economic value. It will also require greater efficiency across the public sector.

Innovation

- The Government should closely monitor take-up of the recently-announced measures in the National Innovation and Science Agenda (NISA) to ensure they are effective and build scope to scale-up funding if that is appropriate.
- These programs add to more than two dozen initiatives to an innovation and industry policy agenda that is already crowded with good and partly interconnected activity including at a state level so coherent monitoring and coordination will be absolutely critical.
- NISA bolsters the valuable Entrepreneur's Programme and expands Innovation Connections, which Ai Group welcomes although it will be important for the Programme's core activities and existing funding to remain stable in the 2016-17 Budget and beyond.
- Clarification on the scope and coordination of the new initiatives with the Industry Growth Centres (IGCs) and the new $200m CSIRO Innovation Fund will also be important.
- The NISA takes important but incomplete steps towards sharpening incentives for collaboration between researchers and industry. Reforming the funding formula for research to more heavily incorporate industry collaboration has long been a key objective of Ai Group.
- Ai Group supports the current review of the R&D Tax Incentive and is open to changes that improve the effectiveness of the tax incentive and put an end to the damaging policy vacillations of recent years. The lessons from this disruptive period include the importance of ensuring that proposed changes are supported by evidence and that measures are designed in close consultation with industry.

Skills, Education and Training

Higher Education

- The Commonwealth Government should commit to partnering the peak employer bodies with the National Framework for Work Integrated Learning in University Education, including funding to connect businesses and universities, supporting a broad range of university/student/business collaborative models, and disseminating guidelines and examples of good practice.
- Support further initiatives to connect university research teams with industry and to assist the commercialisation of projects.
- Investigate and pilot initiatives for industry to address barriers to connecting with universities and learners.

Quality and Integrity in the Australian VET system

- Include direct and formal engagement of key industry stakeholders to drive improved outcomes during the forthcoming negotiations for the 2017 Commonwealth & State Partnership Agreements.
- Continue to adequately resource the Australian Skills Quality Authority to implement a strengthened quality assurance role and to monitor the operation of the new standards.
- Give urgent attention to the establishment of a new workable VET fee loan scheme that delivers graduates with well-targeted qualifications and the relevant skills needed by industry.
- Fund the establishment of new strategies that further encourage direct industry and employer engagement in flexible of delivery and assessment.

VET changes with Reform of the Federation

- Develop and effectively resource reforms that establish national VET governance led by industry. Determine roles and responsibilities for policy, regulation, funding, delivery and reporting in order to build a sustainable sector with high quality student outcomes.

Training Package Development and Endorsement for Australian industry

- Ensure adequate funding is available for all new training package and industry engagement arrangements in order that industry continues to drive the process.

Bolstering Apprenticeship Support

- Investigate and trial a range of measures that link apprenticeships to higher level qualifications to attract a more diverse range of apprentices with employer incentives provided to engage employers in these arrangements.

- Reinstate Commonwealth Joint Group Training funding to support group training companies to enable more extensive engagement of small-to-medium enterprises in apprenticeship arrangements.
- Investigate the potential for introducing employment-based pathways to a wider range of occupations including para-professional occupations.
- Implement measures to achieve full national consistency for all apprenticeships across Australia, including consideration of an oversighting body to ensure programs and arrangements meet current and emerging occupational needs.
- Develop and implement a communication strategy in conjunction with states and territories to develop mechanisms to facilitate Registered Training Organisations to promote the outcomes from the Engineering Excellence Report and to raise their capability to implement competency based progression and completion for their apprentices.

Industry Leadership Development

- In order to achieve the potential of the National Innovation and Science Agenda, the Government must undertake initiatives that support innovative leadership development for Australia.

Science, Technology, Engineering and Maths (STEM)

- Develop and effectively resource a national STEM skills strategy in conjunction with industry to expand the STEM-qualified workforce.
- Implement measures to increase the level of STEM participation in the VET sector, especially through apprenticeships and traineeships relevant to STEM skills.
- Introduce employer incentives for employers engaging apprentices and trainees in STEM-related areas.
- Develop specific measures to expand the STEM workforce in SMEs through cluster/network models.
- Support STEM skills workforce projects through Industry Growth Centres.

Workplace Literacy and Numeracy

- A national foundation skills strategy needs to be provided with a sufficient budget to support workforce literacy and numeracy programs.
- Networks such as the employer workforce champions network need to be developed and supported to reach more employers.
- The Government, in concert with industry, implement a national information campaign to distribute the return on investment outcomes of participation in workplace LLN programs to employers.

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

Investing in Business Capabilities

Trade

- Ai Group encourages the Government to maintain funding for Austrade staff training to ensure Australian businesses can benefit the opportunities offered in the new FTAs.
- We propose that the Government commits funding in the 2016-17 Budget required to continue the Export Market Development Grant scheme.
- We also propose that the Government commits funding to boosting Austrade's presence in Latin America.

Energy Efficiency

- Ai Group proposes that the Government funds energy efficiency information provision to SME businesses via industry organisations, using shared materials.
- We also propose that the Government support the voluntary 2XEP Challenge Program to recognise leading businesses.

Digital Capabilities

- Ai Group proposes that funding to the new Cyber Security Growth Centre should be adequate and should not dilute the resources available for the existing industry growth agenda.
- Ai Group supports adequate Government funding of Data61 which will deepen Data61's talent pool and strengthen the research agency, and encourage continued collaboration with industry.
- We propose that the Government should be ready to increase and redirect investment in information and communications technology (ICT) procurement accordingly, once the Digital Transformation Office (DTO) builds its capability and strengthens whole-of-government digital strategy.

Infrastructure

- Ai Group encourages the Government to make further progressing in facilitating higher levels of infrastructure across the country.

Migration

- Ai Group encourages the Government to lift its annual migration planning level from 190,000 where it has been for several years to 220,000 for 2016-17 and beyond.
- We propose that emphasis be given to the skilled migration portion of the program and especially the demand-driven components of the skilled migration program.
- Ai Group also supports prudently raising the number of refugees from Syria to further increase Australia's contribution to this global challenge.

Climate Change Measures

- Ai Group proposes that the Government retains funding for ARENA and the CEFC, while ensuring both can invest in industrial efficiency.
- We also propose that the Government allocate funds to provide for the continuation of the Emissions Reduction Fund ahead of the review of the ERF anticipated in 2017.

Defence

- We support modest growth in funding for Defence towards 2 per cent of GDP over the next decade. This will ensure that the Australian Defence Force (ADF) acquires capabilities enabling it to meet its operational responsibilities and defence industry to continue to offer innovative solutions to meet advanced technology military requirements.
- Ai Group proposes that the Government implement its sound continuous naval shipbuilding plan, introduction of a new fleet of submarines, the F-35 Joint Strike Fighter, Hawkei and Land 400 armoured vehicles allowing the ADF to protect the national security interests of all Australians with agility and certainty.

3. The Economic Outlook

The Australian economy posted another year of below-trend growth in 2015, with data available to date suggesting 2015 will be the fourth consecutive year to record below-trend activity. Weak commodity prices, wages and profits also led nominal growth to record very low rates through 2015.

The ongoing pullback in engineering investment by the resources sector continued to dampen growth, but encouragingly, long-awaited signs have emerged showing economy is transitioning to broader growth among industries to replace mining-led investment. The depreciation in the dollar has been a key driver in this transition, igniting foreign demand for manufactures exports, tourism and education services. Low interest rates have led to a strong upswing in residential investment, while households have consumed at around decade-average pace. Business investment remains weak, with businesses across the broader economy yet to fill the void left by the mining investment slowdown.

Early indications are that modest growth should continue through 2016 led by ongoing export growth and household spending on consumption and housing investment. But confidence remains fragile, and this slow recovery could be derailed easily, especially given the heightened concerns seen early in the new year around the global outlook.

This section takes a comprehensive look at official data as well as Ai Group's own surveys.

2.1. Economic Growth over 2015

Official Data – The Global Outlook

In January 2016, the International Monetary Fund used its latest World Economic Outlook report to revise down growth prospects for the global economy owing to an uncertain outlook in emerging economies and slightly less optimistic growth in key advanced economies (Table 1). Global output is still expected to grow more strongly in 2016 than the 3.1% growth seen in 2015. However the latest forecast of 2016 growth of 3.4% is 0.2 percentage points lower than the forecast in October, while 2017 growth was also downgraded by 0.2 percentage points to 3.6% growth.

While this outlook still implies a strengthening global economy, significant risks surround the outlook for emerging economies, especially the risks and spillovers of slowdown and rebalancing underway in the Chinese economy. The IMF highlighted risks to the global economic outlook are skewed to the downside and also include lower commodity prices and tightening of monetary conditions in the US. The IMF said in the January WEO "if these key challenges are not successfully managed, global growth could be derailed."

Emerging economies are forecast to grow by 4.3% in 2016 and then 4.7% growth in 2017, with both forecasts 0.2 percentage points lower than predicted in October. China is expected to slow to 6.3% in 2016 from the 6.9% growth seen in 2015, which was already the slowest pace seen in 25 years. The IMF characterizes such an outlook as an orderly resolution of previous excesses in real

estate, credit, and investment continuing to unwind. This will lead to further slowing in the growth rates of investment, especially that in residential real estate. While Chinese growth is slowing as broadly expected, the IMF notes there has a faster-than-expected slowdown in China's imports and exports. Together with market concerns about the future performance of the Chinese economy, weaker trade from China has hit other countries through trade channels and weaker commodity prices, as well as through diminishing confidence and increasing volatility in financial markets. Commodity price falls associated with China are not only being felt in Australia, with Brazil (-3.5% recession in 2016) and Russia (-1% in 2016) both hit hard.

Advanced economies are forecast to grow by 2.1% in 2016 (revised down from 2.2% in October) as lower oil prices and expansionary monetary policies support growth. Growth for the United States has been downgraded by 0.2 percentage points to grow by 2.6% in 2016, on account of slowing exports and manufacturing activity, along with hits to investment in the oil sector. Overall growth is still resilient, with housing and labour markets showing further signs of strength. The gradual recovery in the euro area and Japan are both forecast to continue.

Table 1: IMF Projections for Global Growth

	IMF in Jan 2016			IMF in Oct 2015		IMF in Jul 2015	
Change in GDP, % p.a.	**2015**	**2016**	**2017**	2015	2016	2015	2016
World	**3.1**	**3.4**	**3.6**	3.1	3.6	3.3	3.8
Advanced economies	**1.9**	**2.1**	**2.1**	2.0	2.2	2.1	2.4
US	**2.5**	**2.6**	**2.6**	2.6	2.8	2.5	3.0
Euro area	**1.5**	**1.7**	**1.7**	1.5	1.6	1.5	1.7
UK	**2.2**	**2.2**	**2.2**	2.5	2.2	2.4	2.2
Japan	**0.6**	**1.0**	**-0.1**	0.6	1.0	0.8	1.2
Emerging and developing	**4.0**	**4.3**	**4.7**	4.0	4.5	4.2	4.7
China	**6.9**	**6.3**	**6.0**	6.8	6.3	6.8	6.3
India	**7.3**	**7.5**	**7.5**	7.3	7.5	7.5	7.5
ASEAN-5	**4.7**	**4.8**	**5.1**	4.6	4.9	4.7	5.1

Sources: IMF, *World Economic Outlook,* January 2016, October and July 2015.

Official Data – The National Outlook

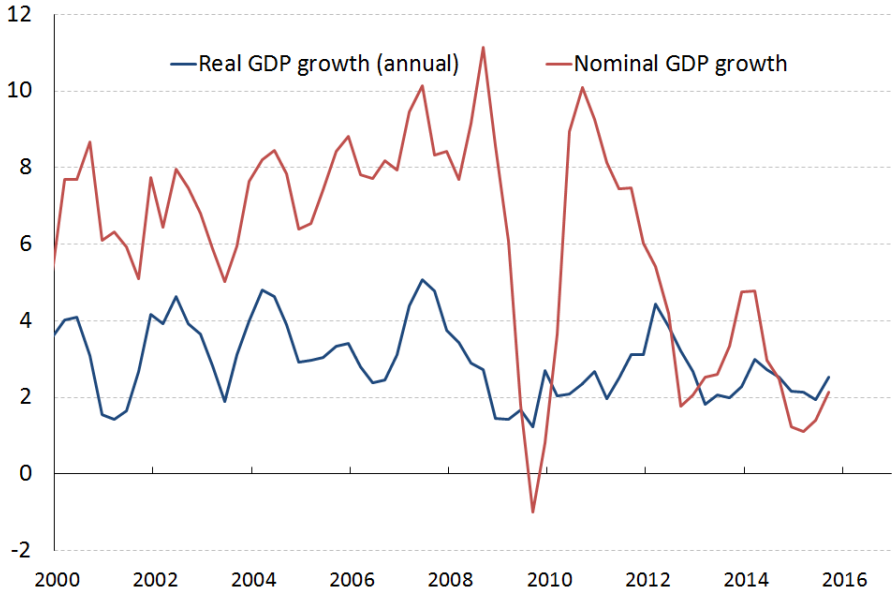
The Australian economy continued to underperform in 2015 although growth strengthened from previous two years (2.1% growth in 2014 and 2.3% growth in 2013). The most recent GDP data for the September quarter reported the economy grew by 2.5% over the year, which below the decade-average annual growth of 2.7% (Chart 1).

Coincidentally, 2.75% is now considered by the RBA and Treasury to be the economy's potential growth rate, or the rate of real GDP growth which is consistent with a stable inflation rate. This is weaker than the previous estimates of potential growth of 3-3.25%. RBA Governor Glenn Stevens attributed the lower rate of 'potential' economic growth to slower net migration and a weaker migration outlook ahead. This will flow through to slower population, labour force and GDP growth than might otherwise have occurred. Looking ahead, Australia's 'potential' real GDP

growth rate could move higher again, if improvements can be gained from its three key ingredients: population growth, workforce participation and productivity.

Household consumption grew by 2.7% over the year to September, a touch below its decade-average of 2.8%, which is well below 3.6% average growth seen through 2000-2009. Over 2015, household spending was supported by low interest rates, rising asset values and savings as the savings rate fell through 2015, offsetting weak wage growth and an improving but weak labour market.

Chart 1: GDP Growth

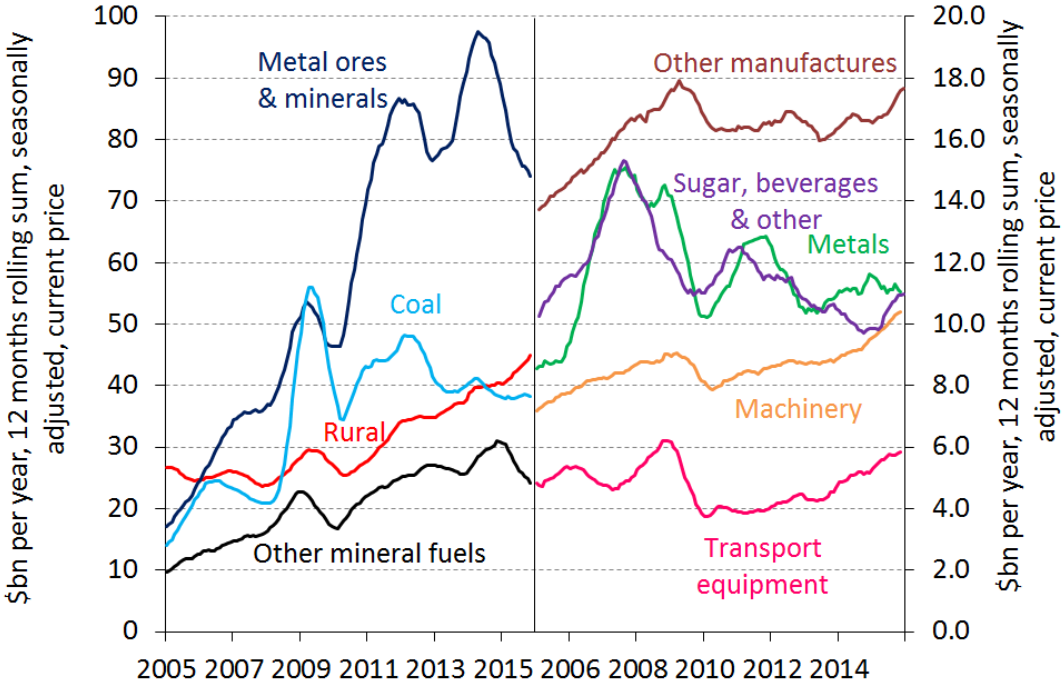


Source: ABS Cat 5206, September 2015

Exports have also surged over the past year growing by 6.5% over the year to September, as export volumes stay strong while export prices, especially commodity prices, have fallen. Chart 2 highlights the strength of rural exports, which in this definition includes food manufacturing, as well the recent pick-up in transport, machinery and other manufactures, which includes chemicals, wood, paper and textiles products. Coal and iron ore have continued to be exported at high volumes, but the fall in the graph represents the falling value of those exports given lower commodity prices. Tourism exports have also strengthened over the past two years (Chart 3). Import prices were down 1.2% over the year, as consumption imports were relatively steady but capital imports fell consistent with the weakness in business investment.

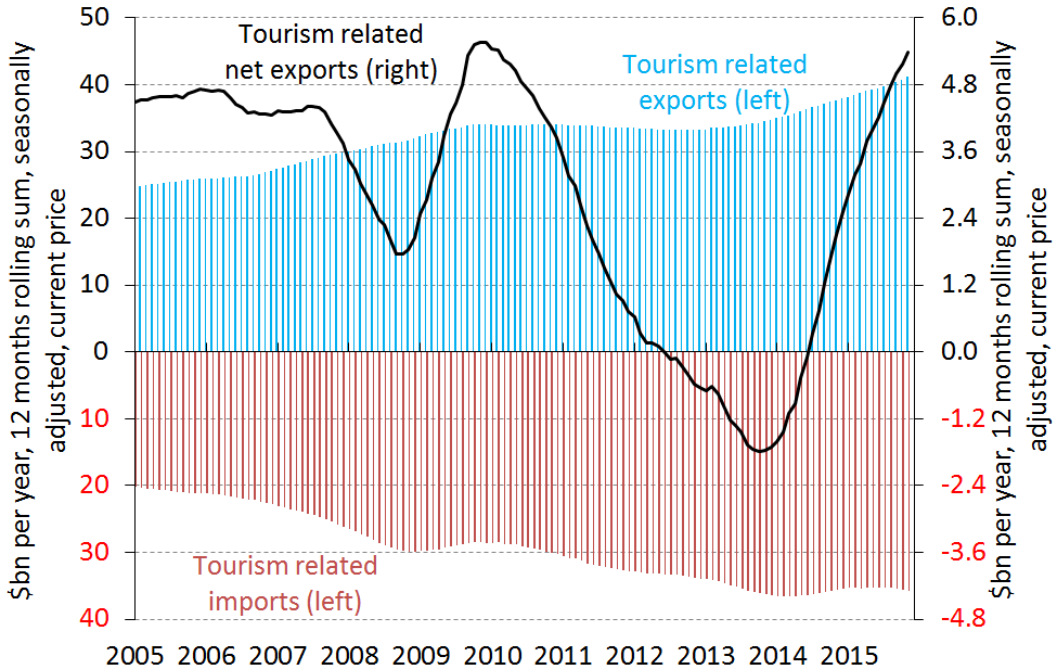
Residential construction remains a key bright spot, recording growth of 10.3% over the year to September. Housing commencements reached record levels in 2014-2015 of 212,000 new dwellings. The Housing Industry Association released their National Outlook for housing activity for 2016 in late 2015 and noted that 2014-15 is likely to have been the peak for new dwelling commencements. The HIA forecast a modest pullback in commencements over the next few years, with dwelling commencements forecast to slow to 200,000 in 2015-16

Chart 2: Australian exports



Source: ABS Cat 5368.0, November 2015

Chart 3: Tourism Trade Balance



Source: ABS Cat 5368.0, November 2015

Business investment remains weak, and fell by 9.7% over the year to September. Engineering construction, where mining investment is concentrated, fell by 21.5% over the year to September. Building construction grew by 2.6% over the year, although September quarter growth was weak. Machinery and equipment spending was down by 11.4% over the year.

Engineering investment has fallen as mining investment projects are completed and are not replaced by new projects. This has been underway since 2012 and RBA Governor Glenn Stevens

recently noted the economy is currently experiencing the most intense phase of the mining investment pullback. The RBA suspect the falls are around half way through in total with mining investment expected to fall for some time yet.

The most recent Capital Expenditure Survey released by the ABS in November provided an estimate by businesses of their planned capital expenditure in 2015-16. It is worth noting this survey is not comprehensive as it does not include sectors like health and education. The fourth estimate suggests capital expenditure will fall by 23.6% in 2015-16, although this is better than previous estimates. Investment in buildings and structures as well as equipment spending are both weak (Table 2). The weakness is especially marked in goods production industries, which include mining, construction as well as manufacturing and electricity. Good distribution also has a weak outlook, although not to the same extent, while business services has a weak but better outlook.

A more promising sign for the business investment outlook has been the growth in bank lending to businesses which has been trending up through 2015. While growth was flat in November, business credit steadily rose through most of 2015 rising by 6.2% over the year, compared with growth of 4.6% over the year to November 2014. It is worth highlighting that business credit was in sharp decline each month through 2009 to 2011.

Table 2: Planned Capital Investment by Industry

	Actual 2014-15 Q2 2015 (Actual) Nominal $mn	**Expectations 2015-16 (a)** Q3 2015 (Estimate 4) Nominal $mn
By type of asset:		
Buildings & structures	69,110	-29.3
Equipment, plant & machinery	46,766	-11.6
Total new capital expenditure	***115,124***	**-23.6**
By Industry:		
Goods Production*	***122,610***	***-31.3***
Mining	49,199	-35.4
Manufacturing	7,782	-21.2
Electricity, gas and other	60,716	-9.8
Construction	4,912	-3.6
Goods production ex mining	***73,411***	***-20.3***
Goods Distribution	***19,459***	***-10.2***
Wholesale trade	3,947	14.5
Retail trade	4,769	-16.0
Transport & storage	10,743	-14.0
Business Services	***23,929***	***-5.9***
Professional, Scientific and Technical Services	3,083	-15.3
Finance	3,468	-8.6
Rental, Hiring and Real Estate Services	10,797	-11.5
IT, media & telecomms	6,581	13.3
Household Services		
Other services^	7,751	3.7

(a) Expectations using average 5-year realisation ratios
* Does not include agriculture
^ Does not include health, education, and only includes accomododation & food, administration & support, arts & recreation, and other
Source: ABS Cat 5625.0, November 2015

The outlook for business output has improved helped by the Australian dollar, which now sits around US70 cents. The fall seen in the Australian dollar reflects falling commodity prices, and more recently, the decision by the US Federal Reserve to begin raising interest rates back to long-run rates. However, recent concerns around the global economic outlook, especially China, may delay further rate rises by the Fed.

Growth across Australian industries did broaden in 2015 relative to recent years (Table 3). The mining industry continued to grow strongly through export volumes even as investment in new mines slowed. Other sectors to record strong growth included those benefitting from low interest rates did the best including *Finance & Insurance* and *Rental & Real Estate Services* through the strong property market and *Retail Trade* and *IT, Media & Telecommunications.* While *Manufacturing* did decline over the year, the fall of 0.9% was a smaller decline than in the six years before and there are positive signs of an export-led recovery in the manufacturing sector. *Construction* and *Professional Services* had weak growth, owing to the slow overall business investment and the mining engineering construction slowdown.

Table 3: Economic Activity by Industry

	Size of output		September 2015		2012-2014	2009-2011
seasonally adjusted real value added	$mn per qtr	% of total	% per qtr	% yoy	ave	ave
Mining	36,217	8.8	5.2	4.1	9.4	4.8
Finance & Insurance	35,977	8.7	1.3	5.3	4.0	1.2
Construction	31,582	7.7	1.2	2.0	4.1	3.0
Health	26,944	6.5	0.9	4.6	4.0	4.4
Manufacturing	25,033	6.1	0.0	-0.9	-1.8	-1.2
Professional services	23,959	5.8	-1.2	-0.4	1.1	6.0
Public Administration & Safety	21,535	5.2	1.0	5.1	2.5	2.9
Education	19,197	4.7	0.7	2.6	2.0	2.1
Transport, Post & Warehousing	18,908	4.6	0.2	2.4	1.2	1.7
Retail Trade	18,353	4.5	0.6	3.7	2.7	1.6
Wholesale Trade	16,522	4.0	-0.1	2.3	1.9	2.1
IT, Media & Telecomms	12,212	3.0	1.0	8.3	1.7	1.8
Rental & Real Estate services	11,986	2.9	2.8	8.0	7.4	3.1
Utilities	10,971	2.7	-0.2	1.1	-0.3	2.6
Administrative services	10,747	2.6	-1.3	0.4	1.1	-2.3
Food & Accomodation Services	9,871	2.4	0.4	3.2	1.3	1.5
Agriculture	8,733	2.1	-2.3	-0.6	0.0	2.7
Personal & Other Services	7,455	1.8	-0.6	0.2	1.2	1.7
Arts & Recreation	3,230	0.8	1.3	2.0	1.0	2.9
GDP*	**411,643**	**84.9**	**0.9**	**2.5**	**2.7**	**2.2**

* All industries do not sum to GDP due to individual seasonal adjustment of industries and other items that are included in total GDP such as 'ownership of dwellings', 'taxes less subsidies' and 'statistical discrepancy'.

Source: ABS Cat 5625.0, November 2015

The Australian labour market strengthened through 2015 from weakness seen in 2014, with unemployment down and employment growth strengthening. In December, the trend unemployment rate sat at 5.8%, stronger than Treasury's forecast of 6.5% a year earlier. Employment grew by 2.7% over the year in trend terms, its strongest growth since October 2010. Participation in the labour market and hours worked have also recovered through 2015, which also suggests underlying strength. Conditions by state vary with NSW's unemployment rate the lowest at 5.2% and South Australia's unemployment rate the nation's highest at 7.3% (Table 4).

The ABS estimates that for the market sector as a whole, multi-factor productivity (MFP) improved by 0.3% in 2014-15 using the hours-worked basis. But on a quality-adjusted hours-worked basis (which takes into account changes in the mix and quality of outputs such as educational

attainment), national multi-factor productivity declined by -0.1%. Although another decline in MFP is disappointing, this annual change is not as weak as the average annual change in quality-adjusted MFP of -0.2% from 2007-08 to 2014-15 and -0.7% from 2003-04 to 2007-08.

Some of the improvement in productivity owes to the cyclical strengthening productivity in the mining sector as the sector transitions away from resource-intensive investment phase to the production phase. On an hours-worked basis, mining productivity grew by 5.5% in 2014-15, its strongest growth since 2000-1 and the first growth seen in eight years. Eight of the remaining 15 market sector industries the ABS measures also recorded positive MFP growth using the hours-worked measure, with *Information, media and telecommunications* recording a strong 4.5% improvement and *Financial and insurance services* MFP rising by 4.0%. *Professional, scientific and technical services* recorded a large MFP fall of 4.3% on an hours-worked basis.

Table 4: State Labour Market Data

Trend	Employment growth			Unemployment	Participation
Dec-15	'000 m/m	'000 y/y	% p.a.	rate %	rate %
NSW	14.7	173.4	4.8	5.2	64.5
VIC	6.4	60.7	2.1	5.9	64.7
Qld	6.2	64.0	2.8	5.9	65.7
SA	2.7	8.6	1.1	7.3	62.2
WA	0.7	4.6	0.3	6.4	68.8
Tas	-2.2	-1.2	-0.5	6.6	60.7
NT (trend)	-0.1	1.9	1.5	4.1	74.3
ACT (trend)	1.4	3.2	1.6	5.2	70.9
Australia	**27.5**	**312.2**	**2.7**	**5.8**	**65.2**

Source: ABS Labour Force, Cat 6202.0

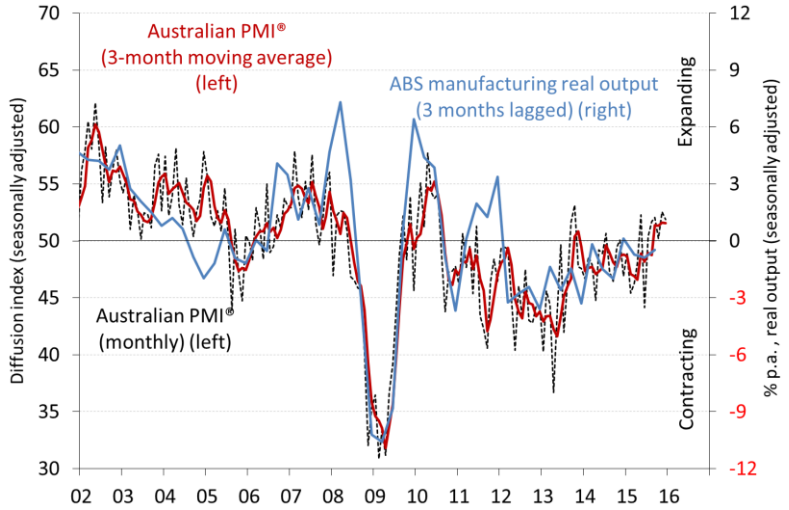
Ai Group Data

Ai Group's own monthly surveys have provided a timely read on conditions throughout 2015, and paint a picture of strong export growth, but they suggest weaker activity in consumption and professional services spending and construction outside of residential investment as well as professional services.

The Australian manufacturing sector expanded for a sixth straight month in December, with the Australian Industry Group Australian Performance of Manufacturing Index (**Australian PMI®**) declining marginally by 0.6 points to 51.9 to remain above the 50-point level separating expansion from contraction (Chart 4). This result continued the longest run of expansionary readings since 2010. Of the seven activity sub-indexes, new orders (up 2.1 points to 55.3) and exports (down 1.5 points to 54.9) were strongly positive, which augurs well for further expansion in 2016.

Five of the eight sub sectors expanded in December (above 50 points in three-month moving averages) which were wood & paper products; petroleum, coal, chemical & rubber products (down 2.2 points to 55.2); non-metallic mineral products (down 3.8 points to 54.2); food & beverages (down 0.6 points to 51.8); and printing & recorded media (up 3.3 points to 50.9).

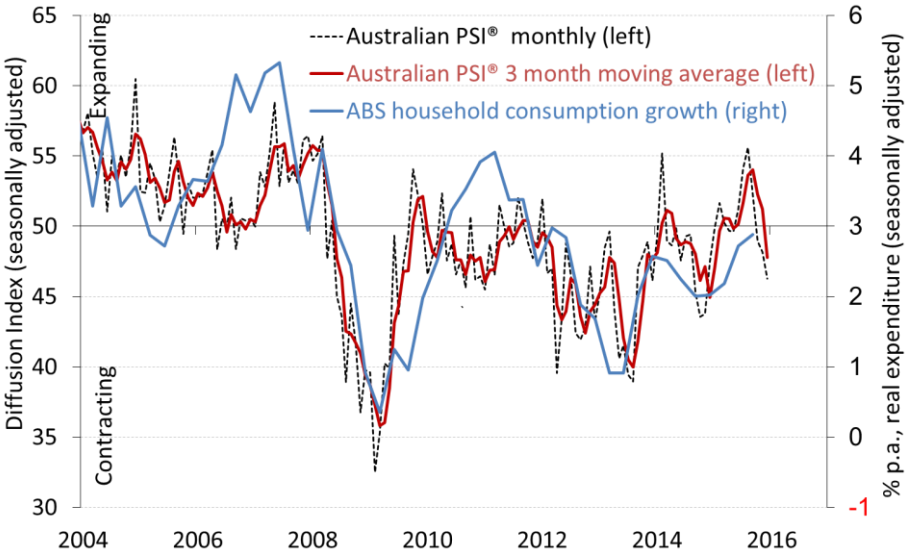
Chart 4: Australian PMI® and ABS Consumption



Sources: Ai Group and ABS

By contrast, the Australian Industry Group Australian Performance of Services Index (**Australian PSI®**) ended 2015 on a low note, falling 1.9 points to 46.3 points in December (Chart 5). It was the third consecutive month of services sector contraction (readings below 50 points indicate contraction, with the distance from 50 points indicating the strength of the contraction). Health and community services and personal and recreational services grew and the hospitality sub-sector maintained its levels of activity while all other sub-sectors contracted in December. Businesses reported an early onset of price discounting as competitors tried, largely without success, to maintain sales volumes. With new orders for services continuing a run of falls that began in September, the sector's outlook for the early months of 2016 is not encouraging.

Chart 5: Australian PSI® and ABS Consumption



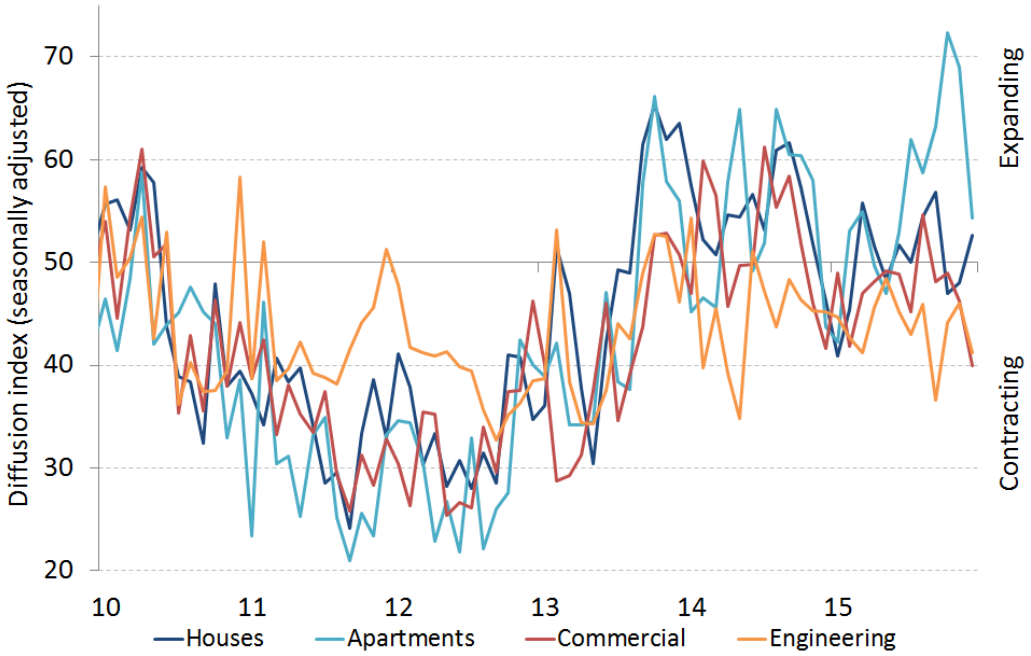
Sources: Ai Group and ABS

After four months of expansion, the national construction industry ended 2015 in negative territory with the Australian Industry Group/Housing Industry Association Australian Performance of Construction Index® (Australian PCI®) dropping 3.9 points to 46.8 points in December (readings

below 50 points indicate contraction, with the distance from 50 points indicating the strength of the contraction). The contraction in the Australian PCI® in December occurred despite growth in the apartment and house building sectors, owing to weak activity in the engineering and commercial construction sectors (Chart 6).

The residential construction sector, especially apartment construction, was strong through 2015 but this strength was outweighed by the ongoing contraction in engineering construction activity. Commercial construction also failed to register any meaningful growth through much of 2015. Looking ahead, the downturn in new orders across all four construction sub-sectors in December is concerning. There is still a very large volume of residential building work yet to be done which should sustain an elevated level of activity throughout the first half of 2016 despite the softening in new orders in late 2015. But as HIA noted in their residential outlook mentioned above, the peak in apartment construction activity is likely to have passed, while a much-needed lift in commercial construction approvals and new orders is yet to take its place.

Chart 6: Australian PCI®



Source: Ai Group

Ai Group's Business Prospects survey of Australian CEOs found that 2015 was a better year for more businesses, with actual conditions closer to what CEOs had been expecting. Around a third of CEOs reported an improvement in their general business conditions, up from just 18% who experienced an improvement in business conditions.

2.2. Economic Outlook for 2016

Official Data

Looking ahead, the RBA forecasts growth will slowly return to trend through 2016, and be above trend in late 2016, according to its recent *Statement on Monetary Policy* (Table 5). The RBA expect

further pullback in mining investment to dampen growth and the investment outlook by other industries remains subdued, although they note potential to surprise on the upside exists. Exports and dwelling investment are both forecast to remain strong, while household consumption is forecast to strengthen to an above-average pace in 2016.

Treasury forecast a similar set of growth rates for Australia in its latest update on the Australian economy in December 2015 (the *Mid-Year Economic and Fiscal Outlook*, MYEFO). Growth in Australian GDP is now expected to be a below-trend 2.5% in 2015-16 (down from 2.75% in the May Budget) and 2.75% in 2016-17 (down from 3.25% in the May Budget), which is around trend.

Slower GDP growth in 2015-16 owes to a weaker outlook for household consumption (growing at 2.75%) and a larger fall in engineering investment (expected to decline by 9.5% in 2015-16, mainly owing to the mining industry) than was forecast in the May Budget. Demand for Australian exports is expected to remain strong, although not to the extent anticipated in the May Budget. On the positive side, Treasury expects dwelling construction will be stronger in 2015-16 than it had previously forecast. Looking further ahead, growth is forecast to strengthen to around 3% in 2017-18 and 2018-19.

Table 5: RBA Economic Forecasts

Year-ended % p.a.	**Jun 2015 (actual)**	**Dec 2015**	**Jun 2016**	**Dec 2016**	**Jun 2017**	**Dec 2017**
GDP growth	2.0	2.25	2.0-3.0	2.5-3.5	2.75-3.75	3.0-4.0
CPI (headline)	1.5	1.75	1.5-2.5	2.0-3.0	2.0-3.0	2.0-3.0

Source: ABS, RBA *Statement of Monetary Policy* November 2015.

Treasury officials now forecast the unemployment rate will stay at a relatively elevated 6.0% through 2016-17. Employment will grow by 2.0% in 2015-16, which is slower than the 3.0% growth seen in 2015. Average wages are expected to grow by 2.5% p.a., which is around its current pace and a touch higher than the expected headline inflation rate of 2.0% for 2015-16 (implying a small degree of real wage growth).

Ai Group Data

Looking ahead, more CEOs are optimistic about their general business conditions than at any time in the past three years, with 39% of CEOs expect their general business conditions to improve in 2016 relative to 2015. Overall, this means a balance of +15 in general business conditions (of the remainder, 23% expect their business conditions to deteriorate and 37% expect conditions to remain the same. This is a marked improvement in mood compared to 2015, when 41% of CEOs expected 2015 to be a worse year than 2014, and just 25% had expected it to be better (or a negative balance of -16).

Services sector CEOs are the most the most optimistic industry group on business conditions in 2016 (a net balance of +25). The services industries included in this report are finance; healthcare; professional services; education; transport; retail trade; wholesale trade; IT and telecommunications; real estate services; administrative services; hospitality; personal services; and arts and recreation. Construction businesses are the least optimistic for 2016 (a net balance of

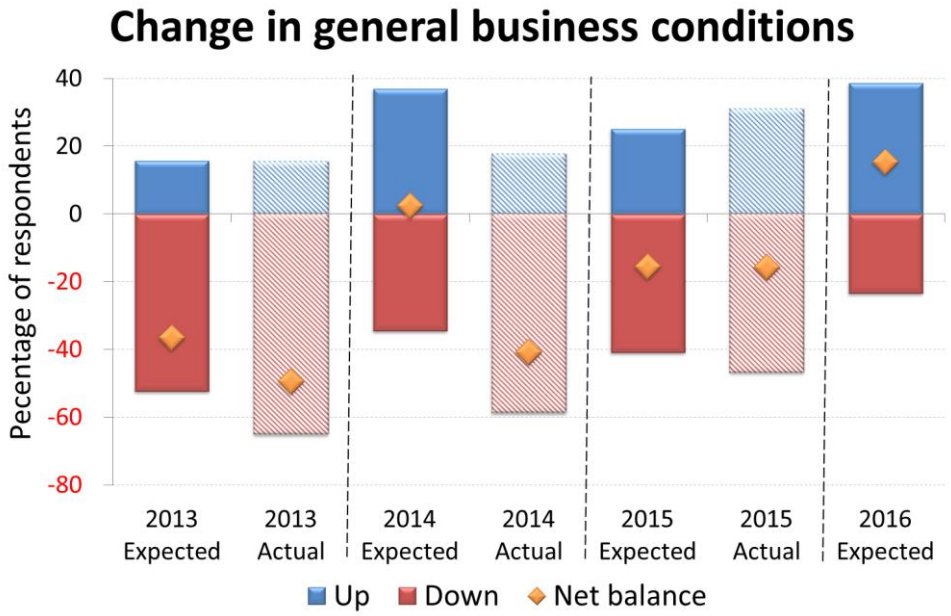
-15). Mining and mining services CEOs are more likely to be pessimistic than optimistic about 2016 (a net balance of -6.7). Manufacturers are also more likely to be pessimistic than optimistic about 2016, albeit to a lesser extent (a net balance of -0.7).

This **improvement in outlook for 2016** reflects more favourable developments in Australia's economic and business landscape through the latter half of 2015 including:

- further drops in the Australian dollar;
- low interest rates and inflation;
- a slowly improving Australian labour market;
- a strong residential construction sector;
- improving consumer confidence and local spending;
- and a change in Australian political leadership.

Despite this recent recovery, threats to growth remain, especially stemming from global financial market weakness and falls in the commodity prices.

Chart 7: Business Prospects



Source: Ai Group's Business Prospects Survey, 2016.

Across all of the industries included in the Business Prospects Survey 2016 (aggregate results, weighted by the real value added output of each industry), Australian CEOs told us that in 2016 they expect:

Better sales and profits

- **Turnover (nominal sales) will improve for the majority of businesses, with 63% of CEOs expecting their own annual sales to increase** in 2016, 21% expecting no change and 16% expecting a decrease.

- **Export income will rise for 26% of businesses** in 2016 and be stable for 68% of businesses, with just 6% expecting their export income to fall. This growth or stability for the majority of businesses comes after 48% reported increased export earnings in 2015, with another 32% reporting no change from 2014. This solid growth in export income in 2015 had largely met expectations, with 49% of businesses having expected to grow their export income in 2015, one year earlier. It reflects the fall in the Australian dollar.

- **Profit margins will improve for 47% of businesses** in 2016, be stable for 30% and will shrink for 22% of businesses. This indicates more businesses are optimistic about improving their profitability in 2016 compared to 2015. For 2015, 37% of businesses reported an improvement in their profit margins.

Mixed plans for growth in business inputs

- **Employment numbers will increase in 36% of businesses**, about the same proportion that reported an increase in employment in 2015 (36%) and who had planned to increase employment in 2015 one year earlier (34%). That said, 27% of businesses expect to reduce their headcount, after 35% did so in 2015. The remainder will keep staff numbers the same.

- **Training expenditure will grow in 47% of businesses**, up slightly from 44% of businesses who increased their spending on staff training in 2015. 11% of businesses will cut their spending on staff training in 2016, compared with 17% of businesses in 2015.

- **Labour productivity is expected to improve in 49% of businesses**, up from 36% of businesses that reported an actual improvement in 2015. Another 48% expect no change to their labour productivity, with just 3% expecting a deterioration. This is more optimistic than the reported experiences of 2015, in which only 36% of businesses reported improving their labour productivity and 11% reported a deterioration. It also more optimistic than a year earlier, when just 39% of CEOs had expected better labour productivity.

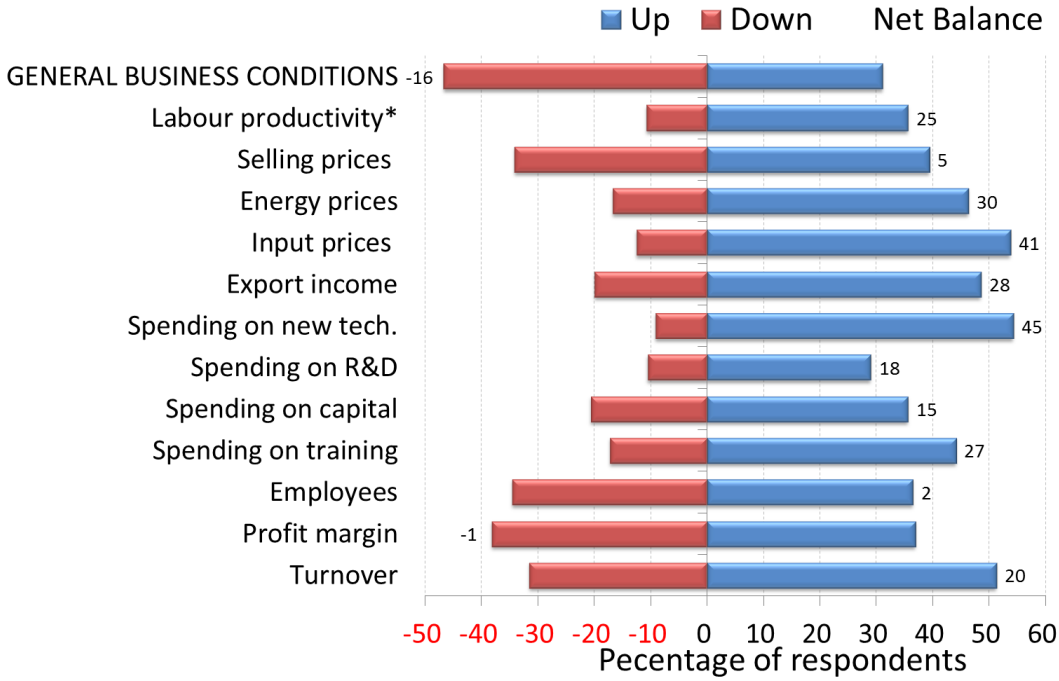
- **Capital expenditure on physical assets will grow in 43% of businesses**, but will be unchanged in 38% of businesses and will decline in 19% of businesses. This is a stronger investment outlook than in 2015, when 36% of businesses increased their annual capital investments, 57% spent the same as in 2014 and 21% cut their annual investment expenditure. It is also stronger than the initial expectations for capital expenditure one year earlier, when 30% of businesses had said they planned to increase their investment spending in 2015, compared to 2014 (43% had planned no change and 27% planned to cut).

- **R&D expenditure will grow in 36% of businesses**, up from 29% who reported an increase in their R&D spending in 2015 and 22% who had planned to increase their R&D spending, one year earlier. 51% will keep their annual R&D spending stable and 13% plan to reduce it in 2016.

- **Spending on new technologies will grow in 59% of businesses** and be stable in 35% of businesses in 2016, with just 6% planning to cut this key area of investment expenditure. This is a similar profile to 2015, when 54% of businesses reported that they increased their spending on new technologies and 9% reported a cut and 37% said they spent about the same

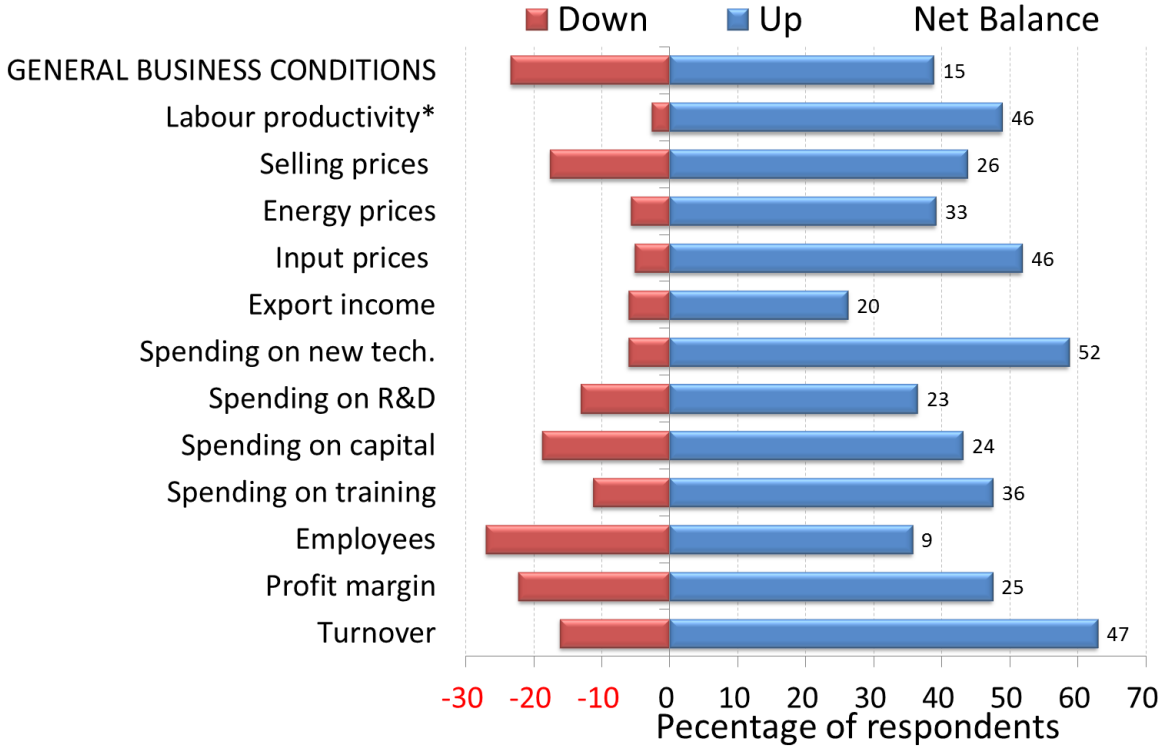
as in 2014.

Chart 8: Reported change in business conditions, 2015



Source: Ai Group's Business Prospects Survey, 2016.

Chart 9: Expected change in business conditions, 2016



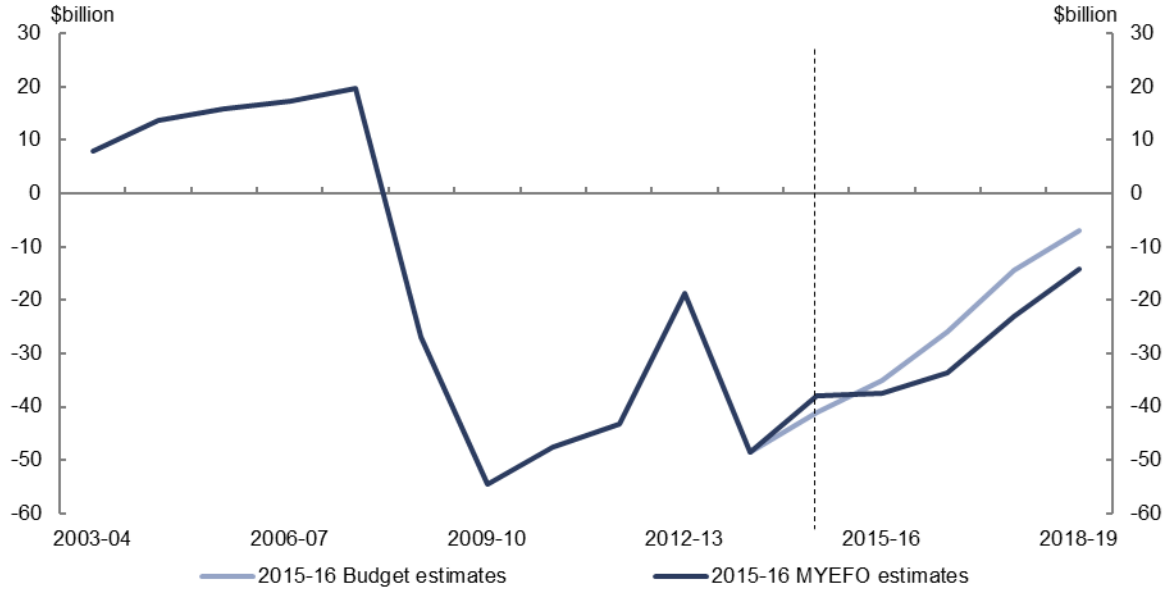
Percentage of respondents to Ai Group's Business Prospects survey 2016. Weighted by industry value added real output in 2015 (derived, from ABS *National Accounts*, September 2015), across the four major ANZSIC 2006 industry groups of: manufacturing; construction; services (excluding public administration); and mining and mining services.
* Labour productivity is defined as "output per hour worked" in your own business.

Source: Ai Group's Business Prospects Survey, 2016.

4. The Fiscal Outlook

The 2016-17 Budget will be delivered at a time of below-trend economic activity and weak nominal GDP growth, together with volatile movements in the price of key commodities and uncertainty over the durability of their demand. This scenario has played out since 2012 and has led to a sharp deterioration in the Budget each year as revenues, in particular corporate tax, have taken sizeable hits. The sharp deterioration in the Budget position since the Mid-Year Economic and Fiscal Update in mid-December, in part due to lower corporate tax revenues on account of lower commodity prices and low wage growth hitting income tax revenues, highlights the fiscal pressures facing the Government (Chart 10).

Chart 10: Underlying cash balance – change from 2015–16 Budget to 2015–16 MYEFO estimates



Source: Parliamentary Budget Office

The sensitivity of the Federal Budget to swings in nominal GDP growth was highlighted in the scenario analysis presented in 2015-16 Budget Paper 1. Treasury found that a scenario where the terms of trade fell by 4% would lead to a 1% reduction in nominal GDP. This would flow through to hit the underlying cash balance by around $2.9 billion in 2015-16 and $5.8 billion in 2016-17. The permanent decline in the terms of trade would lead to lower domestic incomes, falls in both consumption and investment, which also result in lower real GDP, employment, wages and prices.

Further scenario analysis presented in Budget Paper 1 indicates the harm to the economy from falling commodity prices could be mitigated through higher labour productivity. Treasury predicts that a scenario of a modest 0.5% increase in labour productivity and labour force participation in 2015-16 would lift real GDP by 1% in 2015-16. This would lead to higher real wages and employment, and would through to an improvement in the fiscal position by around $3.7 billion in 2015-16 and around $4.5 billion in 2016-17.

Ai Group believes both of these scenarios are instructive for the Government as it prepares the 2016-17 Budget. We believe that it would be inappropriate for the Government to substantially

pull back on spending as economic growth remains below trend on account of cyclical movements owing to commodity price cycles. Such fiscal policy settings would exacerbate weak demand seen in the domestic economy, which is largely owes to offshore events.

Instead, Ai Group believes the 2016-17 Budget should contain sound government policies that are focused on lifting productivity and participation in the economy. As the scenario analysis shows, this would lift economic growth and improve government revenues helping to return the Budget to surplus over the long run. Ai Group believes a similarly strong case can be made for accelerating infrastructure investment in carefully selected projects, which would boost the productive capacity and competitiveness of the economy and lift growth and revenues over time. The case for accelerated infrastructure investment is especially compelling given the low cost of capital facing the Government today and the availability of engineering construction capacity as the mining investment surge fades.

In addition to capacity-boosting investments, it is clear the Government will also need to reduce spending where it is prudent to do so. Ai Group supports the Government's ongoing focus to address inefficiencies in spending, including in areas of direct Federal Government responsibility as well as through grants made to the States. We keenly await the Federation White Paper which will examine the issue of the roles and responsibilities of the three levels of government, as well as the Taxation White Paper, and we hope this leads to meaningful reform. In this regard, we are encouraged by the Treasurer's announcement the Government would adopt Harper Panel recommendations to reintroduce National Competition payments to the States in return for competition reform, as well as the recommendations aimed at encouraging greater efficiencies in service delivery by the States. The approach of finding sensible savings to fund new productivity-enhancing initiatives was taken in the Mid-Year Economic and Fiscal Outlook when the Government funded the National Innovation and Science Agenda. We would welcome such an approach again.

Longer-term reforms to government programs may prove necessary given the need to put longer-term fiscal settings on a surer footing and return to the Budget to a sustainable position. The long-term pressures of demography, most noticeably through the ageing of the population and associated increased demand for government services like aged care, health and on the pension system, along with the effects of technology on revenues, require Australians to examine if our expectations of governments are realistic. This is a difficult conversation to have, but it will only become more arduous the longer it takes to occur.

Recommendations:

- **In the face of the ongoing fragility of domestic growth and the uncertainties surrounding the global economy, large cuts should not be made to aggregate spending and there should not be large increases in aggregate taxation. Indeed, given the shortfall in business investment, there is a strong case for targeted tax measures aimed at encouraging investment by Australian industry.**
- **That said, clearly there is a need to ensure the budget is on a convincing path to sustainability. This will require improvements in the resilience of taxation arrangements and tight prioritisation of expenditure to areas of greatest need and greatest social and economic value. It will also require greater efficiency across the public sector.**

5. Innovation

Improving Australian innovation and increasing its commercial outcomes are essential to lifting and broadening the sources of growth. This is needed to lift Australia's prosperity and to reduce our heightened vulnerability to shifts in the demand for and prices of our commodity exports.

This task is ongoing and must be led by business.

The recently released National Innovation and Science Agenda (NISA) is an important step to return innovation to centre stage and includes many positive initiatives. However, there are several aspects of the package and the innovation area more broadly that can be improved or built on in the 2016-17 Budget and beyond.

The two biggest risks in the NISA package relate to scale and coordination. Several of the most exciting elements of the package are currently very small scale:

- the refundable tax offset for early stage investors, which tops out at investments of $1 million per investor per year;
- the Business Research and Innovation Initiative offers grants or prizes for proposals that address key procurement needs in innovative ways, but these prizes top out at $100,000;
- Innovation and Science Australia will provide critical research, strategic advice and coordination, but has funding of just $8 million over four years.

Restricting the scope and cost of these initiatives limits risks and creates opportunities to demonstrate performance and efficacy at small scale. But it also greatly reduces the potential benefits. The Government should closely monitor take-up of the refundable tax offset and build-in scope for adjustment and expansion over the course of 2016-17 and in subsequent years.

The Business Research and Innovation Initiative is an iteration of concepts of prizes and smart procurement that have already been used in many jurisdictions at a larger scale, such as Victoria's Market Validation Program, to elicit innovative solutions that deliver improved quality or value to the public while growing innovative industries. The Government should proceed with its current plan to build experience, but in the meantime it should launch an internal interdepartmental conversation about major procurement and service delivery needs that could be treated as innovation opportunities and fed into an expanded initiative.

The NISA adds more than two dozen initiatives to an innovation and industry policy agenda that is already crowded with good and partly-connected activities. Coherent monitoring and coordination will be absolutely critical to make this work.

Innovation and Science Australia is an excellent initiative to help deliver this coordination but in its current form it may be highly dependent on departmental support and caught up in the annual budget process. The Government should consider increasing ISA's funding to enable it to have significant independent capacity, whether in-house or through consultancies; this could involve moving some staff and functions from the Department of Industry, Innovation and Science such as

the preparation of the annual Innovation System Report. The forthcoming legislative basis for ISA should seek to lock in independence and adequate operational funding.

Coordination of the new initiatives with the Industry Growth Centres (IGCs) will also be important. The Cyber Security IGC is addressed elsewhere in this submission. The announced $200m CSIRO Innovation Fund is very positive, and the intention that it will work with the IGCs is sensible. It will be particularly important to work out the relationship between the scope of the Fund's activities and the scope of the project funding pool already associated with the IGCs. This will need to be clarified well before the latter pool opens for bids in late 2016. Similarly, the $250m Biomedical Translation Fund is highly relevant to the Medical Technologies and Pharmaceuticals IGC. The two initiatives should be closely aligned.

Reductions in CSIRO resources outside the NISA appear to impact its activity in many areas, including a loss of staff associated with manufacturing and the Data61 initiative. While CSIRO operates independently, a loss of performance in these areas would be damaging and monitoring will be needed.

The NISA bolsters the valuable Entrepreneur's Programme with new elements to foster incubators and expand Innovation Connections. While it will be important to monitor these initiatives and allow funding to reflect demand and results, to maintain the recognition and engagement of business it will also be important for the Programme's core activities and existing funding to remain stable in the 2016-17 Budget and beyond.

The NISA takes important but incomplete steps towards sharpening incentives for collaboration between researchers and industry. Reforming the funding formula for research to more heavily incorporate industry collaboration has long been a key objective of Ai Group and many others. However, the initial reform will use research income from industry as a proxy for business engagement. This is not ideal, as it could worsen existing incentives for universities to prioritise immediate revenue over wider impacts and longer term relationships. Successful overseas academic-industry collaborations such as those at the UK's Warwick Manufacturing Group often involve little or no direct payment for particular projects, but provide other benefits such as co-investment in shared infrastructure.

In this context the NISA initiative on measuring impact and engagement in university research is exceptionally important. The work should identify better measures for the commercial impacts and other real-world effects of research that do not require researchers to prioritise their own revenue above all. The outcomes of the foreshadowed 2017 pilot study and 2018 full assessment should be incorporated into a fuller reform of research funding as soon as practical thereafter. The Government should make this reform schedule clear in the coming Budget.

The NISA also initiated a review of the Research and Development Tax Incentive. Given the disruptive policy vacillations over recent years, this is a welcome initiative that should aim to lift the effectiveness of the tax incentive and to reintroduce much-needed stability to this important measure.

Notwithstanding the contradictory and often ill-considered changes proposed and made to the tax incentive over recent years, Ai Group remains open to improving the targeting and effectiveness of support for private sector R&D. To get support, the changes will need to be supported by firm evidence and the design of any changes will need to involve close consultation with industry.

Recommendations:

- **The Government should closely monitor take-up of the recently-announced measures in the National Innovation and Science Agenda (NISA) to ensure they are effective and build scope to scale-up funding if that is appropriate.**
- **These programs add to more than two dozen initiatives to an innovation and industry policy agenda that is already crowded with good and interconnected activity, also at a state-level so coherent monitoring and coordination will be absolutely critical.**
- **NISA bolsters the valuable Entrepreneur's Programme and expand Innovation Connections, which Ai Group welcomes although it will be important for the Programme's core activities and existing funding to remain stable in the 2016-17 Budget and beyond**.
- **Clarification on the scope and coordination of the new initiatives with the Industry Growth Centres (IGCs) will also be important, as well as the new $200m CSIRO Innovation Fund.**
- **The NISA takes important but incomplete steps towards sharpening incentives for collaboration between researchers and industry. Reforming the funding formula for research to more heavily incorporate industry collaboration has long been a key objective of Ai Group.**
- **Ai Group supports the current review of the R&D Tax Incentive and is open to changes that improve the effectiveness of the tax incentive and put an end to the damaging policy vacillations of recent years. The lessons from this disruptive period include the importance of ensuring that proposed changes are supported by evidence and that measures are designed in close consultation with industry.**

6. Skills, Education and Training

The development of the skills of the current and future workforce and its managers is central to further advances in Australia's economic and social well-being. Ai Group proposes a number of skills, education and training issues be addressed in the 2016-17 Budget.

6.1. Higher Education

Faced with a rapidly changing global economy, over the past two years the Higher Education sector has endured reviews and questions over policy settings, funding, priorities, relevance and stakeholder relationships.

This sector is relied upon to prepare Australia's next generation of professionals, and is a critical source of innovation and entrepreneurship. It is recognised as a key sector within the government's National Innovation and Science Agenda and is hugely important to Australia as an export.

There are a number of challenges facing the sector ranging from global environmental pressures, through to internal structural factors. Amongst these include:

- a global economy which is transforming jobs resulting in different skill needs and graduate capabilities
- higher order and highly specialised skill requirements coupled with generic skills around enquiry, problem-solving and initiative
- future need for greater numbers of Higher Education graduates for Australia
- expansion through a demand-driven system creating pressures on funding, quality and access
- with innovation a national focus, researchers needing the ability to translate research to a commercial product or service
- graduates taking longer to find full time employment.

Increased student demand must align with industry need, and the Ai Group considers that a demand based funding system for Higher Education is potentially a more effective mechanism for meeting these needs than the previous system. However any move towards a de-regulation of fees must not affect quality or equitable student access. And any system changes under consideration such as loan scheme eligibility changes, must be cognisant of impacts on the Vocational Education and Training system.

Recognising that a major challenge for Higher Education policy is to find a sustainable, stable basis for funding the demand-driven system where funding incentives help to create informed and

rational decisions by providers and students alike, the Government has frozen the current Higher Education funding arrangements for 2016 while it consults further on future reforms. [1]

Industry understands its co-dependency on a relevant and vibrant Higher Education sector, as well as the mutual benefits in developing strong, enduring relationships. The work readiness and employability of university graduates has been an issue for Australian companies for some time. Ai Group members surveyed in 2014 said fitting with the business culture was the most important recruitment factor for graduates (Chart 11), and their main areas of dissatisfaction once graduates were employed related to graduates' self-management, problem solving, initiative and teamwork (Chart 12).[2]

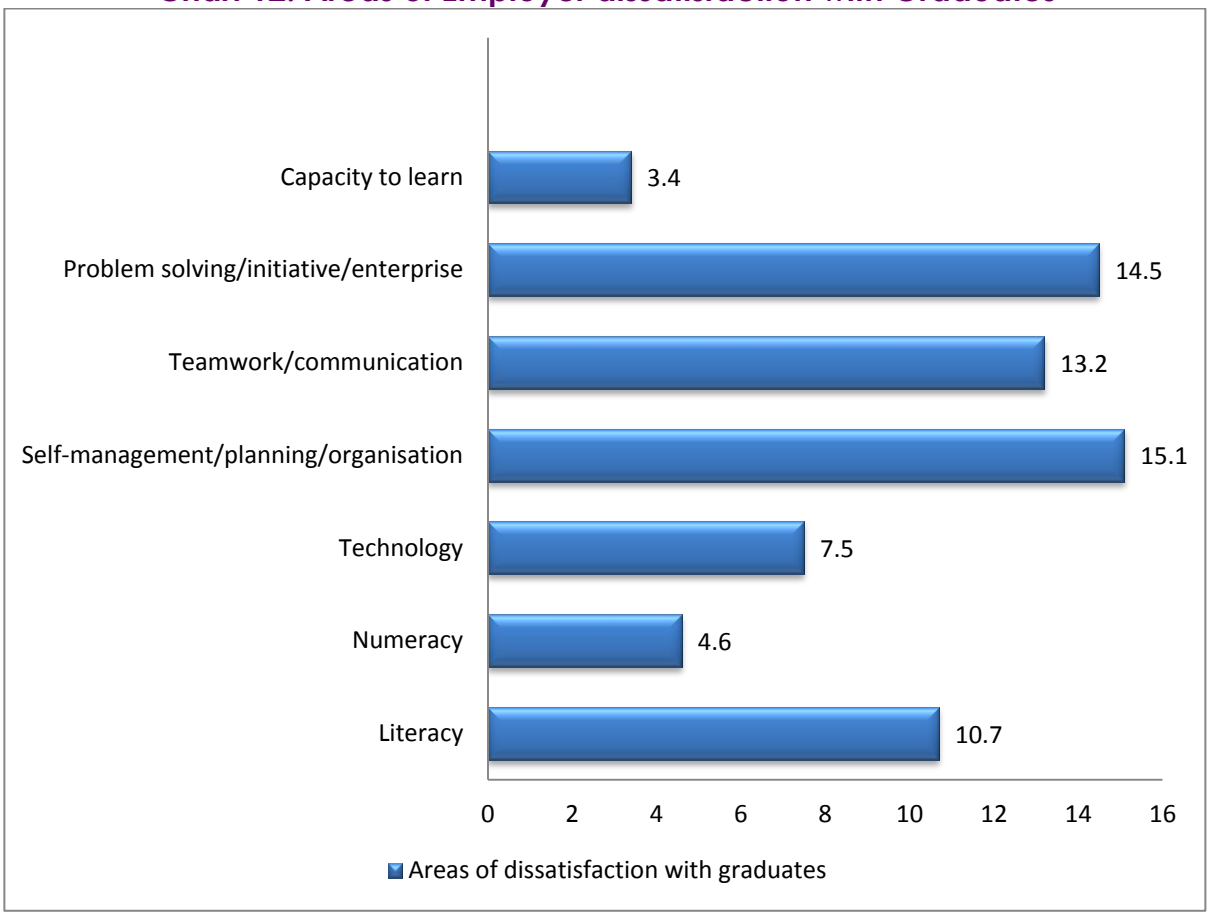
Chart 11: Highest-ranked recruitment factors for Tertiary Graduates

Source: Australian Industry Group Workforce Development Needs Survey 2014

[1] Senator the Hon Simon Birmingham, Minister for Education, 'The challenge of world class higher education at the University of Melbourne, October 2015

[2] The Australian Industry Group, Workforce Development Needs Survey, 2014

Chart 12: Areas of Employer dissatisfaction with Graduates



Source: Australian Industry Group Workforce Development Needs Survey 2014

There is increasing recognition that integrating workplace experiences with learning has benefits for the learner, the Higher Education provider, the company involved and the economy.

Ai Group is assisting in bringing about closer relationships between industry and Higher Education providers, in particular with relation to integrating a range of work experiences into degree programs. As a signatory to the National Framework for Work Integrated Learning (WIL) in University Education, we are progressing a broad agenda and actions with our partners that also encourages increased government commitment to WIL. Ai Group is involved with a number of WIL projects and recognises the importance of further educating industry of the benefits, guidelines and effective models around WIL. However support for business involvement is needed. In universities, funding support to bring about structural and cultural change will lead to WIL becoming widespread and embedded in curriculum.

Collaborative projects between industry and universities, including those for research, also need support. The low level of business to research collaboration in Australia compared with other OECD countries needs urgent attention.[3]

[3] Benchmarking Australian Science Technology, Engineering and Mathematics, Office of the Chief Scientist, 2014.

Recommendations:

- **The Commonwealth Government should commit to partnering the peak employer bodies with the National Framework for Work Integrated Learning in University Education, including funding to connect businesses and universities, supporting a broad range of university/student/business collaborative models, and disseminating guidelines and examples of good practice.**
- **Support further initiatives to connect university research teams with industry and to assist the commercialisation of projects.**
- **Investigate and pilot initiatives for industry to address barriers to connecting with universities and learners.**

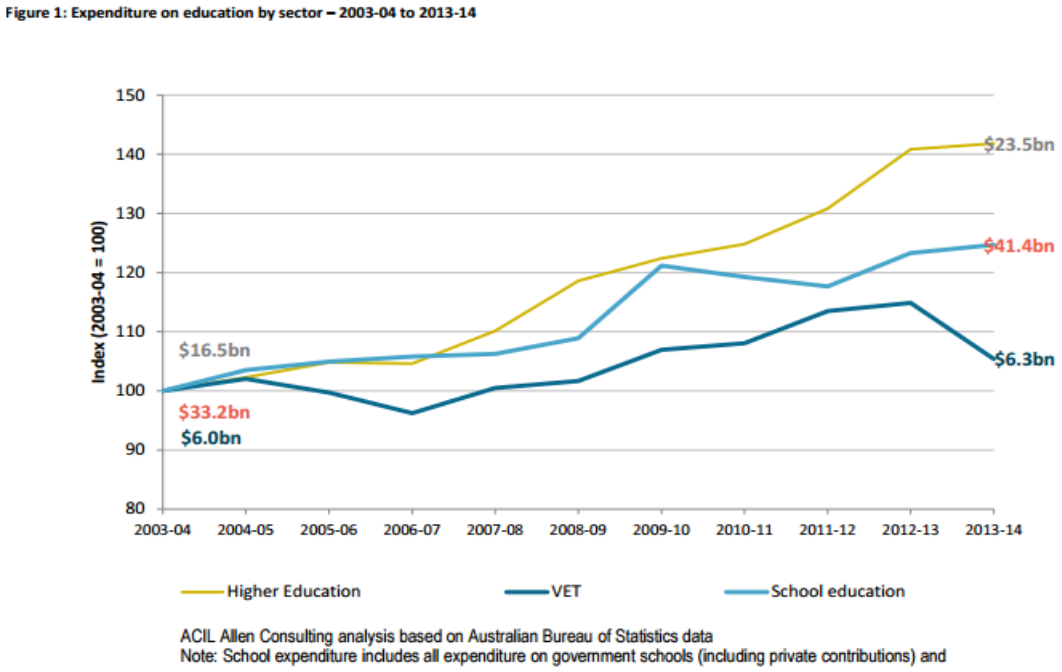
6.2. Quality and Integrity in the Australian VET system

Australia's VET system has been challenged by a tumultuous year, experiencing changes to the architecture of the system, whilst facing issues with quality, flexibility, ethics of some training providers and low levels of consumer awareness. These issues undermine the VET sector, affect the skills supply to industry and continue to be a concern to the Ai Group.

This concern is particularly acute in a period of declining funding to the VET sector. Research by the Mitchell Institute shows there has been a much lower rate of growth in VET spending compared with other education sectors. Expenditure on VET has grown much more slowly, by around 15 per cent until 2012-13, before experiencing a sharp decline in 2014. This left total VET expenditure in 2013-14 only around 5 per cent higher than 2003-4 levels.[4]

[4] Expenditure on education and training in Australia: update and analysis, Peter Noonan, Gerald Burke, Andrew Wade, Sarah Pilcher, Mitchell Policy Paper No. 8/2015.

Chart 13: Expenditure on education by sector 2003-04 to 2013-14



Low completion rates have been exacerbated by abuse by some training providers of the VET FEE-HELP loan scheme, and a number of providers' registrations have been cancelled. The public perception of the sector has been affected. The continuing issues with the quality of VET Providers has resulted in the Australian Competition and Consumer Commission (ACCC) prosecuting one provider, with other prosecutions pending; a class action being brought against another; and the Australian Skills Quality Authority (ASQA) cancelling registration for others. The ACCC has alleged that providers' tactics have earned them millions of dollars from the federal taxpayer. The strengthened compliance measures in the Government's Mid-Year Economic and Fiscal Outlook, whilst needed, only act as a stop-gap towards fixing the issues. A new loan scheme is urgently needed.

Strengthening compliance measures only rectifies part of the problem. Across jurisdictions different policy settings for student entitlements and incentive structures have also led to unintended consequences, resulting in misalignments between the skill needs of industry and actual training undertaken. As a consequence of demand-driven funding, some providers have exploited systems to shape the training offered to meet their own business objectives and not those of individual learners. In many cases the quality of delivery and assessment has also been questionable. Courses have been provided with no options offered with regard to units undertaken or delivery approaches applied. Flexibility for users is intended to be a central principle of training packages, with choice for employers and learners being important in order to have relevance to specific job roles.

Vocational education and training is most relevant and effective when it is driven by those who are directly involved with the jobs needed for successful businesses. In a national training system industry must be central to governance and operations, ensuring the desirable features of national consistency, a focus on outcomes, timeliness and quality assurance are built in.

Recent reform has recognised this and retained industry advisory roles to ensure engagement by industry as well as guidance in the design, development and approval of training packages. In the past few years the steering by training providers of qualification selections as well as delivery approaches has in many cases not met particular skill needs of employers or individual learners. The Ai Group believes stronger mechanisms are still required to produce VET graduates in the right numbers with the right skills for industry.

Highlighting one policy driven example that does place industry at the centre of vocational training - the Commonwealth's Industry Skills Fund (ISF) – it has achieved early results that indicate satisfied, engaged employers and learners, who are being supported to provide training in the right skills to grow their businesses. This is an important product of the Government's Industry Innovation and Competitiveness Agenda which commits to increasing the skills of our workforce to better prepare for the jobs and industry of the future. The Fund also has a strategic focus on growth industries, including food and agribusiness; mining equipment, technology and services; medical technologies and pharmaceuticals; oil and gas; and advanced manufacturing. It is unfortunate that this industry driven scheme, already relatively small in scale, experienced a reduction in funding in the Mid-Year Economic and Fiscal Outlook.

By identifying the training needed for growth by businesses and bringing it to the centre of training activity, the ISF has satisfied the diverse needs of businesses. Employers have taken up a combination of accredited qualifications, specialist skill sets, non-accredited or customised short courses, language and literacy skills, and/or personalised mentoring or coaching.

This boutique program is meeting industry needs and yet the overwhelming majority of the training system is in the hands of states and territories, under a range of different systems and continues to suffer inconsistencies. It is important that the excessively complex and duplicative Commonwealth and State/Territory roles and responsibilities in the training system be addressed, and that industry leadership is strengthened, including at the governance level.

Recommendations:

- **Include direct and formal engagement of key industry stakeholders to drive improved outcomes during the forthcoming negotiations for the 2017 Commonwealth & State Partnership Agreements.**
- **Continue to adequately resource the Australian Skills Quality Authority to implement a strengthened quality assurance role and to monitor the operation of the new standards.**
- **Give urgent attention to the establishment of a new workable VET fee loan scheme that delivers graduates with well-targeted qualifications and the relevant skills needed by industry.**
- **Fund the establishment of new strategies that further encourage direct industry and employer engagement in flexible of delivery and assessment.**

6.3. VET changes with Reform of the Federation

The complex arrangements between the Commonwealth and its jurisdictions have contributed to the current VET predicament. Since the implementation of the student training entitlement funding model by all states and territories, the jurisdictions have used in-built flexibility parameters resulting in differences in the eligibility requirements, the courses eligible for an entitlement, course subsidy levels, the quality requirements of providers, and the information provided to students.[5]

Whilst most jurisdictions have been moving towards market-based models, with contestable services and competitive funding, government intervention is still needed to support thin markets in regional and remote areas.

The shared funding arrangements are impacting on the effectiveness of the VET system. Different mixes of Commonwealth and States and Territories funding and different ways of funding each VET system 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 recent COAG steps towards major reform of Australia's Federation include reform of the vocational education and training sector, recognising its importance in building a better trained workforce essential to grow our economy.[6] The changes must result in a more demand driven system, greater engagement with business and new ways to support students.

By addressing and clarifying the excessively complex and duplicative Commonwealth and State/Territory roles and responsibilities in the training system, a genuinely national training system may be possible. The Ai Group considers direct and formal engagement of the key industry and government stakeholders in the system will enable the right level of 'buy in' to drive improved outcomes. Industry must be at the most senior and determinative table during the forthcoming negotiations for the 2017 Commonwealth & State Partnership Agreements.

Recommendations

- **Develop and effectively resource reforms that establish national VET governance led by industry. Determine roles and responsibilities for policy, regulation, funding, delivery and reporting in order to build a sustainable sector with high quality student outcomes.**

[5] Kaye Bowman and Suzy McKenna, NCVER, Jurisdictional approaches to student entitlements: commonalities and differences, 2016

[6] Communique for the COAG Industry and Skills Council Meetings, Skills Ministers, November 2015.

6.4. Training Package development and endorsement for Australian industry

As part of the Australian Government's VET Reform program, the past year has seen the design of a new system for Training Package development and industry engagement with new arrangements still being rolled out. Funding is being provided for Skills Service Organisations under new arrangements for training package development. These the new arrangements must be responsive to the needs of industry, drive efficiencies, and deliver high quality training packages.

The new system has already established the Australian Industry and Skills Committee (AISC), on which Ai Group has a rotating peak body seat. Industry Reference Committees (IRC) will also be established over the coming months.

New product development arrangements under the Government's Mid-Year Economic and Fiscal Outlook reiterated the intention to 'streamline and enhance existing Vocational Education and Training product development to ensure training packages better meet the needs of industry', including the intention 'to work more directly with industry to develop, review and maintain VET training products and qualifications'.[7]

Whilst renewed arrangements that maintain industry's central role in the development of skills through the AISC and IRCs are welcomed, the new arrangements need to be progressed, and adequately funded. They must result in definitive guidelines on the purpose of training packages; the balance between preparation for work and specific industry determined outcomes; improvements to industry breadth in qualifications being developed; the meeting of industry needs for workers; the flexibility in qualification units selected; and assessment guidelines designed to suit individual businesses and their work-based learners. Registered training organisations do not always make use of the inherent flexibility of training packages suggesting they would benefit from professional development focussed on this aspect.

Research undertaken by the Ithaca Group in 2014 on VET Qualification Design remains relevant given the disparate range of views in relation to the purpose and achievement of training packages.[8] Ultimately training packages need to provide industry with workers who have relevant skills and the ability for contextual application.

With the world of work changing rapidly, generic foundations and broad pathways are important for learners to adapt to new work situations. Whilst vocational outcomes are a cornerstone of VET qualifications, at lower AQF levels it is important that generic certificates are accessible to students who need to be prepared for a number of future jobs in their working lives. These certificates have a role in providing preparatory vocational capabilities, and opening up a range of qualification pathways into which learners may move. The Australian Qualifications Framework summarises Level 2 as:

[7] Australian Government, Mid-Year Economic and Fiscal Outlook, December 2015.
[8] Ithaca Group, VET Qualification Design, Industry Skills Council Forum, November 2014.

Graduates at this level will have knowledge and skills for work in a defined context and/or further learning.

As this implies, it is important at this level that options are not closed. These broad-based preparatory qualifications can sit comfortably alongside other AQF Level 2 certificates with specific vocational outcomes.

Recommendations

- **Ensure adequate funding is available for all new training package and industry engagement arrangements in order that industry continues to drive the process.**

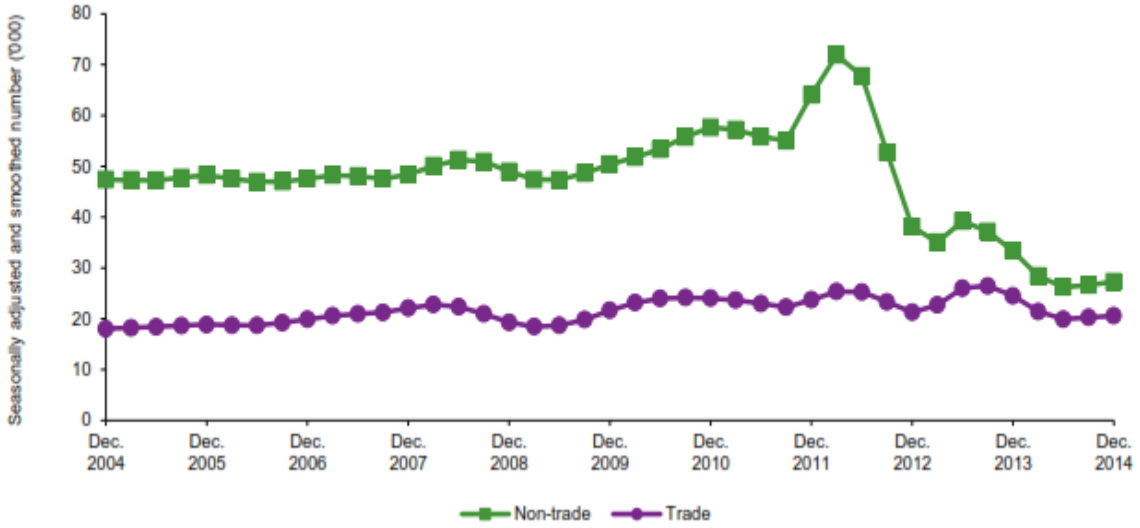
6.5. Bolstering Apprenticeship Support

The need for reform to Australia's apprenticeship system has been recognised as a major component in the VET Reform Agenda. Apprenticeships are the backbone in the formation of highly valued and adaptable skilled tradespeople Australia needs for its future. It is imperative that Australia's apprenticeship architecture achieves the right skills for young people and employers to fuel innovative and competitive companies.

However a number of issues remain a concern. Recent instability around the levels of apprentice and trainee commencements jeopardises the ongoing supply of newly skilled tradespeople.

Chart 14: Quarterly commencements for Trade and Non-Trade Occupations

Figure 2 Quarterly commencements for trade and non-trade occupations, seasonally adjusted and smoothed, 2004–14 ('000)

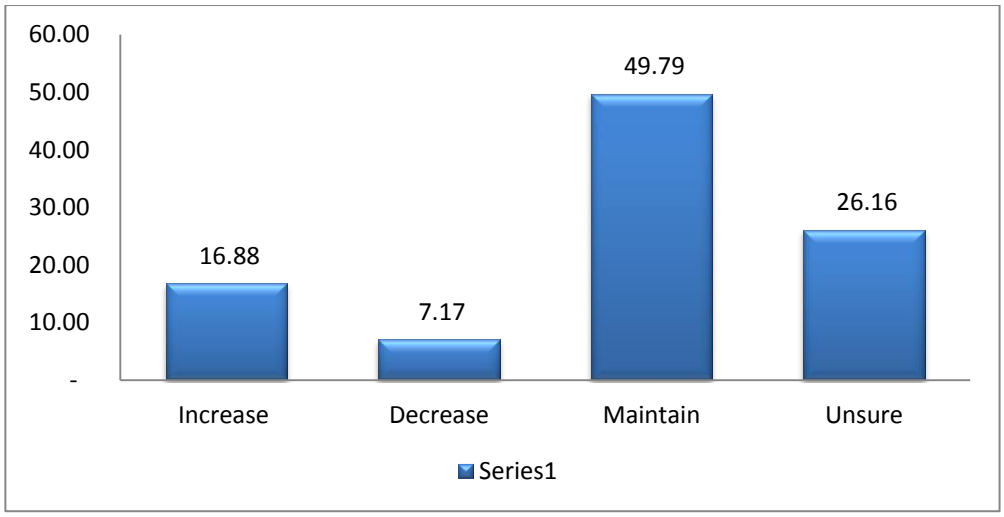


The latest data from the NCVER indicates that the number of apprentices and trainees in-training at the completion of 2014 was around 316,400 – a decrease of 18.3 per cent on the previous year. This is the lowest level for a decade. This data includes a decrease in commencements by 21.9 per cent and a decrease in completions of 17.8 per cent for the same period. The percentage of

Australian workers employed as an apprentice or a trainee declined from 3.3 per cent to 2.7 per cent during this period. This is also the lowest for a decade. [9]

In a recent Ai Group survey on workforce development needs, only 17 per cent of employers intend to increase apprentices and trainee numbers over the next twelve months. A further 50 per cent will maintain their numbers, while 33 per cent intend to decrease numbers or are unsure about their intentions.[10]

Chart 15: Employment intentions for apprentices for the next 12 months



Source: Australian Industry Group Workforce Development Needs Survey 2014

Further data from the expanded VET collection indicates that apprenticeships and traineeships are shrinking as part of the total VET effort. Of the approximate 3.9 million VET students only 9.7 per cent are participating in apprenticeships and traineeships.[11] This work-based training pathway is the one that most engages employers in the VET system and is now in serious decline. Measures need to be introduced to support this crucial pathway.

In response to this it is imperative that a range of measures be considered to support this pathway. One of the most successful apprenticeship arrangements is the use of the group training model, which in particular, provides a range of services to small-to-medium enterprises. The decision to remove the Joint Group Training Program funding has had significant consequences for the uptake of apprenticeships by SMEs. Experience has demonstrated that in the absence of public intervention the market produces less than the optimal proportion of apprentices. Funding support is required for group training companies to enable them to more effectively engage SMEs in apprenticeship arrangements.

[9] *Apprentices and trainees 2014*, NCVER, Commonwealth of Australia, 2015.
[10] 2014 Survey of workforce development needs
[11] *Total VET students and courses 2014*, NCVER, Commonwealth of Australia, 2015

One set of measures revolves around attracting a greater diversity of apprentices and encouraging and supporting high achievers to undertake trade careers.[12] A key aspect of this approach is to more formally link apprenticeship training to higher level qualifications including higher education degrees. An example of this is to link Certificate III apprenticeship training in building and construction to Certificate IV and Diploma level training.[13] Such models of innovative practice in apprenticeships could be implemented via sequential, concurrent or integrated models and require incentives to engage employers in these arrangements.

A further model worthy of consideration is the combination of apprenticeship training with a higher education degree that is available in the dual-system countries of Europe such as through the Universities of Applied Science in Germany. Notwithstanding the cultural differences, these settings provide a dual study program which transfers the principle of practice-oriented learning to university studies.

> *"The dual study programme transfers this principle of practice-oriented learning to university studies. It consists of several practical blocks at a company and study phases at a university. The four and a half year programme goes beyond the classic seven semester degree programmes at MUAS, which feature only one internship semester. Students gain considerable practical knowledge at a company alongside their studies and can earn a vocational diploma as well as a university degree."*[14]

A different approach implemented overseas is the introduction of the so-called "higher apprenticeships" in the United Kingdom, France and the United States. While this title may well be unsuited to Australian conditions these approaches have the twin benefit of increasing the level of qualification awarded for apprenticeships as well as extending the scope to non-trade and more para-professional occupations. In the UK the higher apprenticeship framework covers qualifications from level 4 to 6 and includes a wide range of occupations, over 47, not usually associated with apprenticeships including: accounting; advertising and marketing communications; banking; care leadership and management; construction management; facilities management; information security; legal services; life sciences; power engineering; and supply chain management to name a few.[15]

The experience to date in the UK suggests that this approach may only appeal to a particular range of companies, especially large, vertically integrated organisations. Nevertheless, this initiative was prompted by the same issues that face Australia and the approach warrants further investigation about whether it fits within an Australian context.

A number of measures are still required to deliver a high quality Australian apprenticeship system. Central to these is competency based progression and completion for apprentices which is an important flexibility mechanism available to employers. Employers can potentially gain skilled

---

[12] *Higher Apprenticeships*, Victoria University, September 2012.
[13] Ibid.
[14] This example is taken from the University of Applied Science in Munich. https://www.hm.edu/en/course_offerings/dual_2/index.en.html
[15] *Employer Guide to Higher Apprenticeships*, National Apprenticeship Services, 2014.

people in shorter periods of time. A national roll-out of competency based progression across engineering and the construction trades needs to be supported. A number of successful strategies, as well as barriers to implementation, have been developed through projects such as Ai Group's Australian Government funded Engineering Excellence project.[16] This comprehensive report recommended the development of mechanisms to support the implementation of this initiative as well as a communication strategy with States and Territories to facilitate the expansion of the initiative. This process needs to incorporate a professional development strategy for RTOs to assist implementation.

A national body would assist the implementation of these measures including overseeing national consistency and ensuring programs and arrangements meet current and future workforce needs. It is interesting to note that on the UK an independent and employer-led body, the Institute for Apprenticeships, will be established to regulate the quality of apprenticeships in the context of anticipated rapid expansion of the program.[17] It is timely for Australia to review the governance arrangements for apprenticeships with a view to providing a genuinely national approach.

Recommendations:

- **Investigate and trial a range of measures that link apprenticeships to higher level qualifications to attract a more diverse range of apprentices with employer incentives provided to engage employers in these arrangements.**
- **Reinstate Commonwealth Joint Group Training funding to support group training companies to enable more extensive engagement of small-to-medium enterprises in apprenticeship arrangements.**
- **Investigate the potential for introducing employment-based pathways to a wider range of occupations including para-professional occupations.**
- **Implement measures to achieve full national consistency for all apprenticeships across Australia, including consideration of an oversighting body to ensure programs and arrangements meet current and emerging occupational needs.**
- **Develop and implement a communication strategy in conjunction with states and territories to develop mechanisms to facilitate Registered Training Organisations to promote the outcomes from the Engineering Excellence Report and to raise their capability to implement competency based progression and completion for their apprentices.**

[16] *Engineering Excellence Report*, Australian Industry Group, November 2015.
[17] English Apprenticeships: Our 2020 Vision, Department for Business, Innovation and Skills, 2015.

6.6. Industry Leadership Development

In releasing its statement, *Addressing Enterprise Leadership in Australia* in June last year, Ai Group drew attention to Australia's broad challenge to lift its enterprise leadership capability in order to enhance productivity, innovation and sustainability.[18] On an international scale Australia's ranking in leadership and management practices has been falling against a number of measures in recent years.[19]

Globalisation, the increasing pace of technological change and pressure to deliver short-term financial results are creating tensions around the approach to strategy by business leaders. New business models are emerging that lend themselves to a more volatile environment. The evidence from both academic research and business surveys shows that workplaces with more effective leadership and management capability are more productive, profitable and innovative.

There exists an enormous amount of latent potential in organisations that will continue to remain largely untapped unless it can be unlocked through a paradigm shift in our leadership approach and recognition of the strong link between an organisation's culture, its structure and leadership approach, and business success. Some of the key barriers include:

- Existing levels of leadership capability. Australian workers from all levels and across all sectors say they could be on average 21 per cent more productive every day, if they could change just one or two things at work, representing unrealised productivity of $305 billion or $26,300 per worker.
- Short term focus. Current organisational culture challenges focus on the short term which leads to under investment in longer term goals. These goals include changes to organisational culture to support new ways of working, and the development of an organisation's people. Culture impacts on strategy and in the case of Australia it is impacting on our ability to innovate.
- Low investment in leadership development at all levels. There are limitations in the current leadership development frameworks which predominantly focus on individual development without consideration of the collective leadership capability needed in order to meet the organisation's business goals.

Ai Group sees that addressing the leadership imperative is a joint responsibility. The reform of leadership and management education at university and within the VET sector, in particular through context specific programs, needs to be encouraged. Ai Group recently undertook a successful project that implemented an innovative approach to the development of emerging/frontline managers. Three components were integral to the success of the pilot program and are key principles that could be adopted in other programs and communicated broadly. These are:

[18] The Australian Industry Group, Addressing Enterprise Leadership in Australia, 2015.
[19] World Economic Forum Global Competitiveness Report and International Institute of Management Development World Competitiveness Yearbook.

- developing management skills within an industry context, and solving workplace-related issues
- bringing together a group of participants from locally-based companies in order to develop networks of first line managers across companies
- facilitating the learning via innovative methodology supported through a partnership with an education provider to deliver a qualification, but driven by the needs of individuals and their companies.

Recommendation:

- **In order to achieve the potential of the National Innovation and Science Agenda, the Government must undertake initiatives that support innovative leadership development for Australia.**

6.7. Science, Technology, Engineering and Maths (STEM)

Ai Group acknowledges recent Commonwealth initiatives to address issues related to the acquisition of STEM skills. These include the endorsement of the National STEM School Education Strategy by the Education Council[20] and the inclusion of STEM components in the National Innovation and Science Agenda[21] released by the Australian Government, both in December 2015.

The Education Council strategy is naturally focused on schools although one of the five areas for national action addresses "facilitating effective partnerships with tertiary education providers, business and industry."[22] The initiatives include the establishment of a STEM Partnership Forum to promote these partnerships and the Ai Group would welcome the opportunity to participate in this. While the National Innovation and Science Agenda is broader in scope, the $48 million to be devoted to STEM initiatives is relatively narrow and is again focused on schools.[23]

While this progress is to be encouraged there are still gaps in the national approach to STEM skills and initiatives released to date and these do not constitute an overall national strategy. In particular, there is little focus on measures to support and expand the STEM-qualified workforce and no reference to the importance of Vocational Education and Training (VET) sector in this policy area.

Ai Group's long-standing concerns about the state of STEM skills and the impact on the economy are well documented.[24] The modelling in The World in 2050 report indicates that Australia will slip

[20] *National STEM School Education Strategy*, Education Council, December 2015.
[21] *National Innovation and Science Agenda*, Commonwealth of Australia, 2015.
[22] *National STEM School Education Strategy*, Education Council, December 2015, page 10.
[23] *National Innovation and Science Agenda*, Commonwealth of Australia, 2015, page 13.
[24] *Progressing STEM Skills in Australia*, Australian Industry Group, February 2015.

from 19th position in economy size in 2014 to 28th in size by 2050 and thus falling out of the G20.[25] PwC Australia Economics Partner, Jeremy Thorpe commented:

> *"We need to diversity our economy, which starts with transitioning and upskilling Australia's workforce for the jobs of the future. This will require a huge investment by government and business away from mining and into education, particularly into science, technology, engineering and mathematics (STEM) subjects."*[26]

A major focus needs to be on growing the STEM workforce. Modelling by PwC finds that shifting just 1 per cent of the workforce into STEM roles would add $57.4 billion to GDP.[27] Skilled technicians are often the most pressing area of shortage for companies rather than graduates as Ai Group workforce development surveys reveal. The latest data indicates that around 45 per cent of employers anticipated recruiting technicians and trade workers with STEM skills. This is twice as many for managers and professionals who are more likely to have taken the higher education route to employment. Accordingly, there needs to be a renewed focus on apprenticeships and traineeships in STEM-related areas. Employer incentives could be targeted in these areas.

Chart 16: Difficulties recruiting people with STEM skills

Source: Australian Industry Group Workforce development needs Survey 2014

[25] *The World in 2050: Will the shift in global economic power continue?*, pwc, February 2015
[26] PwC Australia, Media Centre, Australia Beaten by Bangladesh, Iran as World Economic Leaders in 2050, 11 February 2015.
[27] *A smart move*, pwc, April 2015, page 4.

While longer-term solutions to the STEM skills shortfall properly concentrate on the school sector, there is much to be done to reduce short-term pressure. In addition, support for existing workers to retrain in STEM areas would also assist to meet the relatively short-term needs of the economy.

Strategies are also required to meet the particular needs of SMEs given their prominence in the economy. Government could support these companies via networks or clusters and engagement with group training companies. Support for sectoral and supply-chain companies working with larger companies also warrants consideration.

The Industry Growth Centres initiative has significant potential to promote and implement STEM skills. All six of the Centres announced to date overlap with STEM skill areas. The centres are tasked with improving the management and workforce skills of key growth centres.[28] The long-term strategies to be developed by each of these centres needs to focus on the development of workforce STEM skills. There has been research by NCVER about the readiness of five of these growth industries to meet the demand for skills. Among a number of findings to overcoming limitations this research found there is a requirement to have

"a priority focus on STEM, including the development of workplace skills in STEM undergraduate or research degrees and opportunities for continuing professional development in STEM disciplines."[29]

The Australian Bureau of Statistics has reported that STEM skills jobs such as scientists, ICT professionals and engineers have grown at 1.5 times the rate of other jobs in recent years.[30] The Office of the Chief Scientist has estimated that 65% of economic growth per capita from 1964 to 2005 is due to improvements in the use of capital, labour and technological innovation made possible in large part by STEM.[31] There is a clear link between the development of STEM skills and productivity. As an ACOLA report has noted:

"Productivity improvements driven by innovation rely on a mix of STEM and HASS (Humanities, Arts and Social Sciences) skills, together with an understanding of innovation systems."[32]

To address this issue the Ai Group supports the call from the Chief Scientist and others for an overall national STEM skills strategy. The government can take a leadership role, potentially through the Commonwealth Science Council, in the development of this strategy in conjunction with industry. A multi-pronged approach is needed to address school, university, VET and industry involvement. Sufficient resourcing is required to develop a co-ordinated and systemic response to the issue.

---

[28] www.business.gov.au/advice-and-support/IndustryGrowthCentres

[29] Francesca Beddie et al; *Readiness to meet demand for skills: a study of five growth industries*, NCVER, 2014.

[30] Media Release, *Qualifications paying off in science, technology, engineering and maths*, ABS, 24 February 2014.

[31] *Science, Technology, Engineering and Mathematics: Australia's Future*, Office of the Chief Scientist, September 2014, page 7.

[32] *The role of science, research and technology in lifting Australia's productivity*, Australian Council of Learned Academies, June 2014.

Recommendations:

- **Develop and effectively resource a national STEM skills strategy in conjunction with industry to expand the STEM-qualified workforce.**
- **Implement measures to increase the level of STEM participation in the VET sector, especially through apprenticeships and traineeships relevant to STEM skills.**
- **Introduce employer incentives for employers engaging apprentices and trainees in STEM-related areas.**
- **Develop specific measures to expand the STEM workforce in SMEs through cluster/network models.**
- **Support STEM skills workforce projects through Industry Growth Centres.**

6.8. Workplace Literacy and Numeracy

Ai Group research confirms that the low levels of workplace literacy and numeracy are a major concern to employers. This has 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 needs of the Australian workforce.

In addition to the well-known results of the Adult Literacy and Life Skills Survey (ALLS) and the more recent Programme for the International Assessment of Adult Competencies (PIAAC) study, research undertaken by the Ai Group demonstrates that 93% of surveyed employers reported that low levels of literacy and numeracy were having an impact on their business.[33] The Ai Group and employers see a strong connection between improving workplace literacy and numeracy and lifting Australia's productivity performance.

Ai Group has recently completed a significant national project in this area – *Building Employer Commitment to Workplace Language, Literacy and Numeracy Programs*. The major focus of this project was to establish the return on investment to employers who participate in the Workplace English Language and Literacy (WELL) program. Very positive results were achieved for employers demonstrating a key reason for participation in these programs.[34] In addition to the benefits for participating employees, there is also a firm business case for employer investment in workforce literacy and numeracy. Ai Group believes that these results should be widely distributed to encourage more employers to engage in this area.

A national strategy needs support especially for workforce literacy and numeracy. The workplace champions program has demonstrated the potential to increase industry engagement. Networks

[33] *Getting it Right: Foundation Skills for the Workforce*, Australian Industry Group, October 2013.
[34] *Investing in Workforce Literacy Pays*, Australian Industry Group, August 2015.

such as these need to be developed to enable employers to advocate for foundation skills programs to other employers. The Ai Group is prepared to play a supporting role in such networks.

In terms of programmatic responses, the only two avenues are via State and Territory publicly funded Foundation Skills programs or the Commonwealth funded Industry Skills Fund. At this point it is not known to what extent literacy and numeracy measures are addressed through the Fund. In any case, the total size of the Fund is only 250,000 places over four years. The data available through the international surveys such as PIAAC indicates that there are over four million workers currently experiencing low levels of literacy and numeracy.

Given this, it is timely to consider a new co-contribution program to replace the former Workplace English Language and Literacy (WELL) program. A new program would be based on the experiences of WELL but significantly involve a number of improvements. It would be based on tighter outcomes for both individual participants and employers. The use of the Australian Core Skills Framework could be mandatory to measure individual improvement and return on investment measures could be utilised to demonstrate benefits to the employer including direct linkages to productivity. The program could also be nationally accredited through the use of the Foundation Skills Training Package adapted to suit particular workplace needs. This combination of measures could be implemented through a pilot program in concert with industry.

Recommendations:

- **A national foundation skills strategy needs to be provided with a sufficient budget to support workforce literacy and numeracy programs.**
- **Networks such as the employer workforce champions network need to be developed and supported to reach more employers.**
- **The Government, in concert with industry, implement a national information campaign to distribute the return on investment outcomes of participation in workplace LLN programs to employers.**
- **The Government commence discussions with industry and other appropriate stakeholders about the development of a new workplace LLN program.**

7. Investing in Business Capabilities

As a complement to investments in workforce and managerial skills and in innovation, there are clear benefits that can be generated by accelerating the development of Australia's business capabilities. We propose a continuation of targeted efforts in a number of key areas.

7.1. Trade

Ai Group applauds the work done by the Department of Foreign Affairs and Trade and Austrade over the past year to expand trade opportunities for Australian businesses. This includes the implementation of the China Free Trade agreement along with ongoing work on new agreements including the Regional Comprehensive Economic Partnership, as well as a bilateral agreement with India which also have the potential to open up new opportunities for Australian exporters. Despite these new opportunities, many Australian businesses still view the challenges to exporting as insurmountable. The export environment has also helped by a lower dollar, although an uncertain economic outlook in the Asia region highlights the ongoing need to diversify in to new markets. For these reasons, Ai Group proposes the continuation of support programs aimed at increasing awareness of how to use FTAs, maintain funding to Export Market Development Grant scheme, and boost Austrade's presence in South and Central America.

Making the most of FTAs

Ai Group welcomed the 2015-16 Budget's commitment to boosting FTA awareness among Australian businesses. Another important element in the success of converting opportunities from free trade agreements into commercial outcomes is the role of Austrade as well as State trade mission agency staff operating in market and advising companies in Australia. Such commitments are expensive and resource-intensive, but the significant investment by the Government has made in negotiating these agreements – $350 million according to the Productivity Commission Report into Bilateral and Regional Trade Agreements – indicates warrants a significant investment post implementation to ensure that Australian companies benefit from the gains secured by DFAT.

Austrade and State Government staff assisting companies in these markets must be trained in the rules of the agreement and the new opportunities the free trade can offer Australian companies and given appropriate tools to assist them in educating their clients and stakeholders. This should be provided to both onshore and offshore staff. Importantly, they must also be given instructions on the protected rights of Australian companies and the mechanisms for review if unsuccessful. Given the high turnover of staff in these areas this training should occur every three years and include other agreements that complement the training.

Austrade offshore staff from relevant markets can inform industry participants on the local government procurement practices, provide an overview of key stakeholders and any future work plans announced by the relevant foreign government agencies.

Ausindustry and Entrepreneurs' Programme Business Facilitators with expertise in supply chain facilitation and strategic partnering should be invited to provide an overview of the business and

supply chain support programs available to Australian businesses. All information, tools and factsheets should be made available online after the workshop series has concluded.

Other agencies who are working with businesses to improve their competitiveness and productivity, particularly Entrepreneurs' Programme Advisers should also be provided with market intelligence to better inform their clients. Industry associations, ICN and all TradeStart Network members should also be given the opportunity to participate in these workshops.

Export Market Development Grants

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. Ai Group supported the review of the scheme by Mr Michael Lee and we were pleased that the Government will adopt nine of the review's ten recommendations aimed at improving the functioning and integrity of the EMDG program.

In response to the other recommendations made by Mr Lee, we encourage Austrade to take a proactive role in advising clients on the strategic importance of each of their eight grant applications, especially in the early years of application.

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.

Boosting presence into Latin America

Ai Group believes the current fragility of Asian economies highlight the need for Australia to build trading relationships across the world. Ai Group is involved in exploring trading relationships for our members in countries like Mexico and Chile, and believes the ability of Australian businesses to do business would be enhanced by a larger Austrade presence. The region offers great opportunities for Australian businesses in the mining equipment, technology and services area as well as broader manufacturing and services like education. Two-way merchandise trade with Mexico, an OECD economy, grew by 13.0% in 2014-15 while our services exports there grew by 21%.

Recommendations:

- **Ai Group proposes the Government maintains funding for Austrade staff training to ensure Australian businesses can benefit the opportunities offered in the new FTAs.**
- **We propose that the Government commits funding in the 2016-17 Budget required to continue the Export Market Development Grant scheme.**
- **We also propose that the Government commits funding to boosting Austrade's presence in Latin America.**

7.2 Energy Efficiency

The National Energy Productivity Plan (NEPP), whose first phase was recently agreed by COAG Energy Ministers, is an important initiative that can make a major economic and environmental contribution. We encourage the Commonwealth to ensure its initiatives under the Plan are appropriately resourced and scaled over time to ensure success.

Proposals under the NEPP for efforts to help business manage energy costs better are very positive. There is a strong case for additional Budget funding to build on the previous Energy Efficiency Information Grants, which could be continued at even lower cost than before by avoiding duplication. While a variety of industry organisations and other bodies should be able to get involved as trusted conduits for information to their members, much of the information provided will be similar and need not be developed separately. Funding to further improve the breadth, depth and accessibility of information in the Energy Efficiency Exchange site will help support information outreach via industry associations. Streamlined assessments of individual businesses also have a role to play, as they provide specific actionable advice to time-poor businesses and can be delivered at low cost. Integrating energy productivity into the Entrepreneurs' Programme is positive, however it should be noted that Business Evaluations conducted under the Programme cover many areas of business operation and the resultant action plans are tailored to the priorities of participants who are often low-intensity energy users. Further, the Programme's focus on deep work with limited numbers of businesses means it will not substitute for wider-scale energy information programmes.

The 2XEP (doubling energy productivity) initiative, in which Ai Group is a partner, has proposed a voluntary Challenge Program for recognition, support and validation of improved performance by businesses and other organisations. The support for the Challenge Program in the NEPP is welcome, and we encourage a contribution by the Commonwealth towards the administrative costs of the scheme, which would be shared across the Commonwealth, the States and industry. Furthermore, the prospect of improved access to information and other support programs at all levels of government would also increase participation by businesses.

While not strictly a matter of business capabilities, the Government has committed to improve its own energy productivity. As in other sectors, split incentives can be a serious barrier to investment and improved performance. Budget practices are significant; efficiency activity has lagged in jurisdictions where agencies must fund efficiency investments while savings are handed back to the broader budget. A coherent approach will either fund and encourage efficiency centrally, or allow departments to retain operational savings.

Recommendations:

- **Ai Group proposes that the Government funds energy efficiency information provision to SME businesses via industry organisations, using shared materials.**
- **We also propose that the Government support the voluntary 2XEP Challenge Program to recognise leading businesses.**

7.3 Digital Capabilities

Cyber Security

Ai Group welcomes the Government's announcement in the National Innovation & Science Agenda (NISA) to provide $30 million through to 2019-20 to establish a new industry-led Cyber Security Growth Centre (CSGC) to grow and strengthen Australia's cyber security industry. The Government's basis for this initiative is to specifically promote collaboration between industry and government, and enable Australia to become a global industry leader in exporting cyber security products and addressing cyber security crime.

The Government should clarify whether the CSGC will have access to the same Growth Centre Project Fund used by the other Growth Centres already established. A unified structure would make sense, but unless the $30 million allocated is partly intended to top up the Fund, it would also dilute the resources available for the existing industry growth agenda. The Budget should ensure that the Fund remains adequate.

Furthermore, the benefits gained through allocation of funding in the Federal Budget for establishing the CSGC will be lost if the regulatory and policy framework in place does not strike the appropriate balance between risk and opportunity. In this respect, Ai Group notes that the two Federal Government consultations[35] currently under way with respect to cyber security will need to deliver an outcome that is consistent with the objectives of the Government's NISA. Otherwise, this will be a lost opportunity that may lead to companies moving investment in and development of innovative digital technology solutions offshore, especially in respect to cyber security. Ai Group understands this was the experience in New Zealand, where more stringent legislative cyber security requirements were introduced, leading to certain companies shifting their investment in research and development of innovative digital technologies offshore to Australia and the USA.[36]

Recommendations:

- **Ai Group proposes that funding to the new Cyber Security Growth Centre should be adequate and should not dilute the resources available for the existing industry growth agenda.**

Data61

Ai Group also welcomes the NISA's announced investment of $75m in Data61, which was established through the merger of NICTA into CSIRO in August last year. This merger was a positive for industry and researchers that will help build greater collaboration between the business and research communities, especially in digital innovation. Adequate funding in the Federal Budget for Data61 will help to further deepen its talent pool and strengthen the research agency. It will be

[35] National Cyber Security Review, and the Attorney-General Department's Second Exposure Draft of the Telecommunications and Other Legislation Amendment Bill 2015 (Telecommunications Sector Security Reform).
[36] http://www.zdnet.com/article/surveillance-law-prompts-shift-for-google-sponsored-sdn-test-bed

important that job losses associated with CSIRO's recent reorganization, which affect Dat61 as well as other divisions, do not detract from valuable output and collaboration in this vital area. We look forward to working with Data61 as it continues to drive digital innovation with industry.

Recommendation:

- **Ai Group supports adequate Government funding of Data61, which will deepen Data61's talent pool and strengthen the research agency, and encourage continued collaboration with industry.**

Digital Transformation Office and Digital Marketplace

Ai Group continues to support the work of the Federal Government's Digital Transformation Office (DTO), which has only been in operation since last year and is aimed at improving the experience of Australian businesses and citizens dealing with the Government through more efficient and effective online government services. The digitisation of the government agencies will also create opportunities to streamline the way they collect and make use of existing data from businesses, and reduce compliance and regulatory costs for businesses and governments. As the DTO builds its capability and strengthens whole-of-government digital strategy, the Government should be ready to increase and redirect investment accordingly.

To be developed by the DTO, the NISA also includes the establishment of the Digital Marketplace, which is aimed to enable easier access for innovative startups and SMEs to do business with government agencies to procure ICT solutions, which the Federal Government estimates to be worth $5 billion a year. The Government considers that this will breakdown the large scale ICT requirements into smaller components, leading to an increase in the level of competition in supply of ICT solutions, as well as increasing innovation and new jobs. Ai Group supports such an initiative and expects there to be greater transparency and efficiency, especially through the reduction of red tape, in the whole-of-government procurement process of digital services for all suppliers. However, Ai Group also expects that the ultimate choice of supplier should continue to be based on the characteristics of the tender, not a preference for any size of business.

Recommendations:

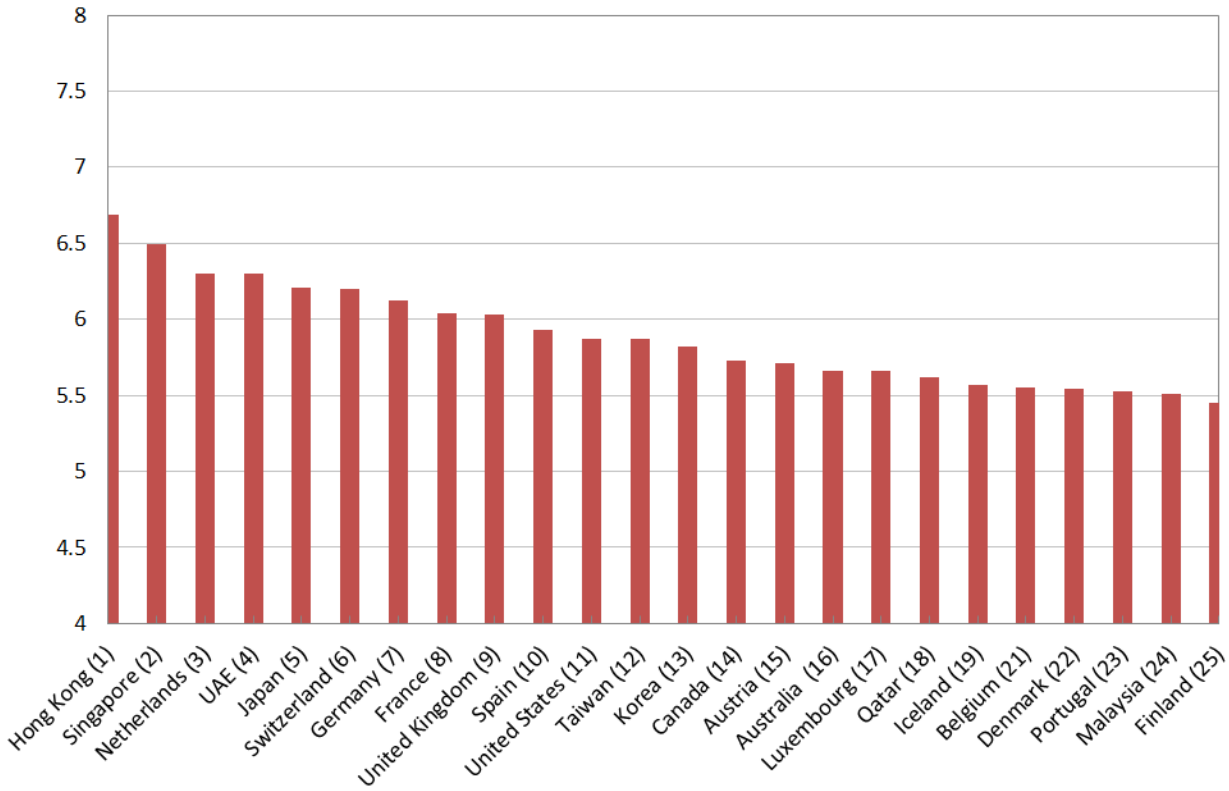
- **We propose that the Government should be ready to increase and redirect investment in ICT procurement accordingly, once the DTO builds its capability and strengthens whole-of-government digital strategy.**

8. Infrastructure

Ai Group has long been an advocate for increased infrastructure investment by both state and federal governments. One of the most important steps in lifting national productivity is to build and improve the nation's infrastructure.

Globally, Australia ranks behind comparable countries when it comes to the quality of our infrastructure, according to the World Economic Forum's Global Competitiveness Survey 2015-16 (Chart 17).

Chart 17: Infrastructure Competitiveness Ranking, World Economic Forum's Global Competitiveness Survey, 2015-16



Source: World Economic Forum's Global Competitiveness Survey, 2015-16

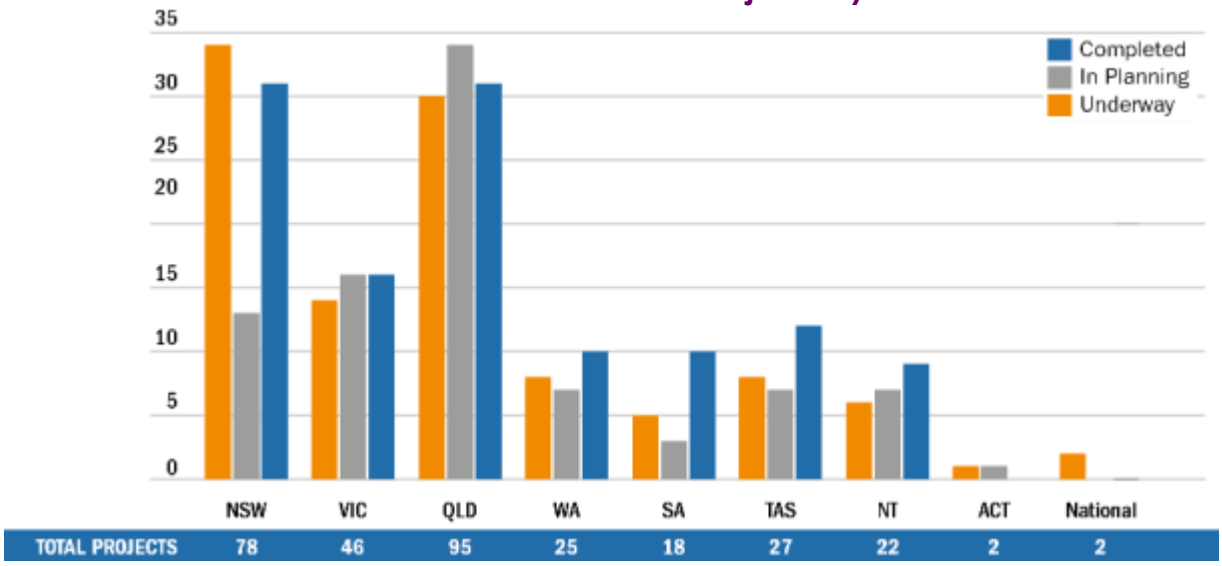
The case for lifting infrastructure now is also made stronger by the engineering construction capacity that is being released as a result of the slowdown in engineering investment in mining-related projects. This is evident in the soft pipeline of work in engineering and commercial construction is soft, as evidenced in Australian Industry Group/Housing Industry Association Australian Performance of Construction Index.

Ai Group's Construction Outlook Survey undertaken in October 2015 painted a positive picture for public infrastructure spending in 2016-17. Overall engineering construction is expected to fall by 5.2% in 2015/16 following a 5.3% decline in 2014-15, which reflects continued falls in mining-related engineering construction, although the outlook is also negative across the heavy industrial sectors. A key positive for the industry in 2016-17 is the boost expected from non-resources engineering work. The value of road and rail projects is forecast to grow strongly in 2016-17 in line

with the emerging growth cycle in major urban transport infrastructure as well as ongoing communications investment.

The Deputy Prime Minister and Infrastructure Minister Warren Truss's annual Infrastructure Statement made to Parliament revealed that outside of NSW and Queensland the number of current and pipeline of infrastructure projects is low (Chart 19). This is in spite of Infrastructure Australia's Australian Infrastructure Audit in 2015 that found on urban transport alone, most major Australian cities face increases in car travel times are expected to increase by at least 20 per cent and in some cases, travel times could more than double between 2011 and 2031. Demand for public transport in the capital cities (measured by passenger kilometres travelled) is also set to rise by 55 per cent in Sydney, 121 per cent in Melbourne and an average of 89 per cent across all capital cities. The Audit also confirmed that investments are needed to increase capacity of national highways, rail freight system, bulk ports and airports.

Chart 18: Infrastructure Projects by State



Source: Deputy Prime Minister and Infrastructure Minister's Infrastructure Statement to Parliament, December 2015

Strengthening the Infrastructure Selection Process

Ai Group believes that transparency and rigorous selection criteria are vital for infrastructure projects, a case that was also made in the Productivity Commission's final report on Public Infrastructure released in early 2014. While changes have been made to strengthen the role of Infrastructure Australia, we believe this organisation could take a more prominent role in the debate around the country.

Sound project selection plays a major role in productivity and growth outcomes according to work by the International Monetary Fund. They examined the institutional environment underpinning infrastructure investment management across four different stages: project appraisal, selection, implementation and evaluation. The research found that the quality of public investment, as measured by variables capturing the adequacy of project selection and implementation, is statistically significant in explaining variations in economic growth across countries. They concluded that these studies highlight the importance of going beyond discussions of spending

levels and addressing issues of the broad institutional framework underpinning the provision of investment.

Ai Group believes each proposed infrastructure project should be subject to thorough and transparent cost-benefit analysis to support that the most worthy projects are given priority. A clear and transparent process also helps to foster public support for infrastructure projects and avoid costly delays in construction. Furthermore, having independent planning bodies like Infrastructure Australia improves the integrity around infrastructure planning and prioritization. Having a transparent and rigorous project creates confidence among investors ensuring that lower-cost financing and a deep pool of investment funds exists for future projects. Together with transparency, Ai Group believes that certainty must exist when it comes to projects.

Ai Group also believes governments should not display a clear preference for one type of infrastructure over others. Rail is an important component of the infrastructure mix, and Ai Group believes that each project regardless of the type should be assessed on a sound cost-benefit analysis performance relative to the alternatives, with the project with the strongest business case proceeding, regardless of its type.

The Intelligent Transport Systems initiative flagged under the NEPP can help our road infrastructure operate more efficiently, with potential savings in user costs, infrastructure investment and emissions. The National Policy Framework for ITS being developed for mid-2016 will need to be backed by Commonwealth investment, though this could be allocated from within the existing infrastructure funding envelope. The Commonwealth can also ensure that ITS options are considered in road infrastructure projects that it funds, and ask Infrastructure Australia to incorporate the issue into its assessments.

Infrastructure Financing

Ai Group supports an ideology-free approach to funding investments in infrastructure. Where public funding is most appropriate, governments should not shy away from making well-assessed investments supported by public sector borrowing. Similarly where private ownership of infrastructure assets makes most sense, we should not shy away from selling existing assets and facilitating private investment in new infrastructure assets. Between these two alternatives there is a range of hybrid arrangements that call on the expertise and resources of both the private and public sectors as appropriate.

We support the Asset Recycling Fund as a means of improving the allocation of public and private ownership and as a means of sourcing funds. It is clear however that outside of NSW the uptake is low. Victoria will benefit from the scheme from the privatisation of Melbourne Port but the state has relatively fewer assets left to privatize. In Queensland, it is clear that the case has not been successfully made on the benefits that privatisation could bring.

Recommendations:

- **Ai Group encourages the Government to make further progressing in facilitating higher levels of infrastructure across the country.**

9. Migration

Ai Group believes Australia benefits from a well-rounded migration program which includes appropriate humanitarian and family streams. We believe the overall migration program should have a focus on skilled migration, which is one tool the Government can use in order to meet the labour force needs of the economy and society, especially as the population ages. Consequently, we believe there are compelling economic arguments for lifting the annual migration intake to 220,000 in 2016-17, from the 190,000 in 2015-16.

Population growth slowed significantly in 2015 to an annual growth rate of 1.4%, its slowest pace in a decade. This deceleration in population growth reflects a fall in net migration, which is already being felt through slower aggregate economic growth for Australia, and has led Treasury and the Reserve Bank to downwardly revise their estimates of the long-run potential growth of the economy.

Even before these revised resident population growth estimates were released by the ABS in September, the Department of Employment (Employment Outlook to Nov 2019, March 2015) estimated that even if recent employment growth rates continue (that is, there is no acceleration in labour demand), Australia will need 1,166,400 additional workers by 2019, or 10% more workers than were employed in November 2014.

Looking further ahead, the Australian Workforce and Productivity Agency has estimated that Australia will be 2.8 million people short of the number of higher-skilled qualifications that industry will need by 2025. AWPA has calculated that in order to meet this demand locally, Australia would need to increase the number of graduates with higher-education qualifications by 3% every year until 2025.

The skill shortages situation is most pronounced in occupations requiring Science, Technology, Engineering and Mathematics (STEM) skills. The occupations where there are shortages due to low STEM levels, as identified by a recent Ai Group report, are technicians and trade workers (41%), professional (26.6%) and managers (26.3%). The Office of the Chief Scientist recently reported that 75% of the fastest growing occupations require STEM skills and knowledge. Under current arrangements, Australia does not have the right people, with the right skills in the right places to do all of the jobs that our growth requires. A larger skilled migration program is necessary to help manage these trends and to assist in smoothing the path to future growth across the economy.

In the Federal Budget for 2015-16 (May 2015), Australia's total Migration Program Planning levels were kept unchanged for a fourth consecutive year, at 190,000 places. Within this total, skilled migration has remained capped at around 128,000 arrivals per year. Consequently, permanent migration including skilled migration has not kept pace with growth in the Australian population, (average annual growth of 1.75% from 2012 through to 2014, falling to 1.4% in 2015) or in the Australian workforce (1.1% average annual growth for 2012 to 2014, rising to 2.3% in 2015). As a result, the annual skilled migration flow has fallen as a proportion of the workforce (from 1.13% in 2012 to 1.11% in 2014 to 1.09% in 2015) and as a proportion of the population.

Most recently, Ai Group is pleased to see some of these long-standing concerns being addressed, through the Government's proposals to:

- enhance pathways to permanent residence for postgraduates with STEM, specified ICT and related Australian qualifications, from December 2016; and
- establish a new Entrepreneur Visa for entrepreneurs with innovative ideas and financial backing from a third party, although the settings of this policy should be examined given evidence of the relatively low take-up since its introduction.[37]

Currently, both of these proposals are within the total skilled migration program, rather than adding to it. This fine-tuning is welcome, but the total intake of skilled migrants needs to increase also. This widening gap between the skilled migration program and general employment growth is contributing to skill shortages and needs to be redressed.

Recommendations:

- **Ai Group encourages the Government to lift its annual migration planning level from 190,000 where it has been for several years to 220,000 for 2016-17 and beyond.**
- **We propose that emphasis be given to the skilled migration portion of the program and especially the demand-driven components of the skilled migration program.**
- **Ai Group also supports prudently raising the number of refugees from Syria to further increase Australia's contribution to this global challenge.**

[37] Han, Misa; "Wealthy foreigners snub significant investor visas", *Australian Financial Review,* January 7, 2016.

10. Climate Change Measures

A key feature of the medium and longer-term outlook is the stance of policy in the face of the threat of climate change from greenhouse gas emissions. The 2016-17 Budget can play important roles by assisting the preparation of the next, and more challenging, phase of emissions reductions by supporting innovation and by allocating additional revenue to the Emissions Reduction Fund

Innovation and commercialization of new technologies will be crucial to creating a new energy advantage for Australia in a world committed to a goal of zero net emissions. The Government can cement and strengthen its existing energy innovation initiatives by committing to retain the Australian Renewable Energy Agency (ARENA) and the Clean Energy Finance Corporation (CEFC). The CEFC needs an achievable investment mandate that allows it to maintain a portfolio of higher- and lower-risk allocations. Finance for industrial energy efficiency and established renewables can reliably balance riskier or more concessional elements of that portfolio. Given the CEFC's financial performance to date, it will credibly be able to maintain itself as an ongoing fund when currently planned Budget contributions are complete, and its additional returns could also support ARENA activity. We support an expansion in ARENA's remit to enable it to fund innovative industrial energy efficiency demonstration projects with good potential for replicability; while ARENA's core business is renewables, energy efficiency plays a key role in making greater use of renewables more manageable and less costly to energy users.

With respect to climate policy, we understand the Government intends to review the future design of the Emissions Reduction Fund and its safeguard mechanism in 2017. In the meantime, there is a strong case for the Government to commit additional funding to the ERF in the 2016-17 Budget to enable it to maintain a significant level of new activity through at least the end of 2019-20. The success of early rounds of the ERF abatement auctions is welcome, but creates a risk at current funding levels that a short boom in abatement industry activity is followed by several years of slump. That is unlikely to be efficient given the scale of the 2030 emissions target challenge, and the deeper targets to which the Paris Agreement points.

Finally, the Paris Agreement also committed developed countries including Australia to scale up climate finance to developing countries, from a variety of sources including public finance, private finance and carbon markets, from US$100 billion per annum after 2020. While Australia's immediate commitments are clear, a close conversation is needed with industry and other stakeholders about how this future commitment will be realized and the implications for the Budget and industry.

Recommendations:

- **Ai Group proposes that the Government retains funding for ARENA and the CEFC, while ensuring both can invest in industrial efficiency.**
- **We also propose that the Government allocate funds to provide for the continuation of the Emissions Reduction Fund ahead of the review of the ERF anticipated in 2017.**

11. Defence

The Coalition Government has, over its two previous budgets, met its pre-Election commitment to restore funding to Defence, with a plan to increase spending to 2 per cent of GDP over the following decade. This represents a substantial improvement on the major spending cuts of $5.4 billion under the previous Government which, despite increasing international uncertainty, saw spending on the portfolio at 1.59 per cent of GDP, the lowest level since 1938.

Since the 2014-15 Budget, the Federal Government has made a number of major commitments to acquire new equipment for the ADF. This includes 72 F-35 Joint Strike Fighter aircraft, 1100 Hawkei armoured personnel vehicles at a cost of $1.3 billion and a continuous program of naval shipbuilding. All of these commitments offered to Australian defence industry greater certainty for investment in infrastructure, innovation and skilling. Doing so will continue to drive advanced technology capabilities essential for defence industry's longer term health and vibrancy. This is precisely the investment which the Prime Minister is championing as the economy transitions over the next decade from traditional manufacturing to the forefront of complex, challenging and exciting industry activity.

During 2015, the Ai Group Defence Council National Executive has worked closely with Defence on implementation of the First Principles Review of Defence. This includes establishing a close relation with former Ai Group members and Boeing Defence Australia CEO, Kim Gillis, and his leadership team in the capability Acquisition and Sustainment Group. We have also worked in partnership on development of the forthcoming Defence Industry Policy speech, which has the potential to further transform defence industry's engagement with Defence. This will have an emphasis on innovation, speed to decision on capability acquisitions and major efficiency improvements to the procurement process. Ai Group has been promoting these changes over recent years principally with the goal of reducing the cost of doing business with Defence.

A major task is to continue to support opportunities for Australian defence companies to access global supply chains. This will require government commitment to an improved Global Supply Chain program. This will enable hundreds, perhaps, thousands, of companies to enter international supply chains, growing their export performance while employing more skilled people involved in the most advanced technology.

Ai Group supports the Coalition Government's ongoing commitment to Defence Budget repair. Doing so will, among other things, offer incentive for defence industry to grow for the benefit of the ADF.

We propose ongoing improvement to funding the nation's defence budget; a strong commitment to acquiring major capabilities allowing the ADF to meet its many operational commitments; continuing to restore confidence to Australia's dynamic, world class defence industry; and supporting opportunities for Australian defence companies to access global supply chains through innovation and application of smart technology.

Recommendations:

- **We support modest growth in funding for Defence towards 2 per cent of GDP over the next decade. This will ensure that the Australian Defence Force (ADF) acquires capabilities enabling it to meet its operational responsibilities and defence industry to continue to offer innovative solutions to meet advanced technology military requirements.**
- **Ai Group proposes that the Government implement its sound continuous naval shipbuilding plan, introduction of a new fleet of submarines, the F-35 Joint Strike Fighter, Hawkei and Land 400 armoured vehicles allowing the ADF to protect the national security interests of all Australians with agility and certainty.**

.

AUSTRALIAN INDUSTRY GROUP METROPOLITAN OFFICES
SYDNEY 51 Walker Street, North Sydney NSW 2060, PO Box 289, North Sydney NSW 2059 Tel 02 9466 5566 Fax 02 9466 5599
CANBERRA 44 Sydney Avenue, Forrest ACT 2603, PO Box 4986, Kingston ACT 2604 Tel 02 6233 0700 Fax 02 6233 0799
MELBOURNE Level 2, 441 St Kilda Road, Melbourne VIC 3004, PO Box 7622, Melbourne VIC 8004 Tel 03 9867 0111 Fax 03 9867 0199
BRISBANE 202 Boundary Street, Spring Hill QLD 4004, PO Box 128, Spring Hill QLD 4004 Tel 07 3244 1777 Fax 07 3244 1799
ADELAIDE 45 Greenhill Road, Wayville SA 5034 Tel 08 08 8394 0000 Fax 08 08 8394 0099
REGIONAL OFFICES
ALBURY/WODONGA 560 David Street Albury NSW 2640 Tel 02 6041 0600 Fax 02 6021 5117
BALLARAT Suite 8, 106-110 Lydiard St South, Ballarat VIC 3350, PO Box 640, Ballarat VIC 3350 Tel 03 5331 7688 Fax 03 5332 3858
BENDIGO 87 Wills Street, Bendigo VIC 3550 Fax 03 5444 5940
NEWCASTLE Suite 1 "Nautilos", 265 Wharf Road, Newcastle 2300, PO Box 811, Newcastle NSW 2300 Tel: 02 4925 8300 Fax: 02 4929 3429
WOLLONGONG Level 1, 166 Keira Street, Wollongong NSW 2500, PO Box 891, Wollongong East NSW 2520 Tel 02 4254 2500 Fax 02 4228 1898
AFFILIATE: PERTH Chamber of Commerce & Industry Western Australia
180 Hay Street, East Perth WA 6004, PO Box 6209, East Perth WA 6892 Tel 08 9365 7555 Fax 08 9365 7550
www.aigroup.com.au