Is Australia facing the risk of complacency?

We have seen Australia’s real per capita income fallen by 6% since the peak in the terms of trade in 2011.

The global Innovation Index ranks Australia 17th compared to Switzerland (1st), UK (2nd), US (5th) and New Zealand (15th).
The risk of complacency

The Australian people have, through good luck and generally prudent governance, been the beneficiary of 25 years of continuous economic growth (Figure 1).

Figure 1: Annual Australia GDP growth

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Source: ABS Catalogue 5206.0

No other country can claim such sustained national prosperity over the same period. Indeed, over a period of significant global volatility, the Australian economy is only months away from breaking an economic growth record (see Figure 2).

Figure 2: Period of economic growth without a recession (selected G10 economies + Australia)

Source: Business Insider, Longview Economics, PwC.
Since the collapse of Lehman Brothers in 2008, marking the beginning of the GFC, Australian economic output has increased by over 19%. This compares favourably to countries such as the US, UK and Euro area which have grown by 11%, 9% and 2% respectively over the same period.

This run of prosperity reflects different drivers of growth, from the micro-economic reforms of the 1990s through to the commodity price boom driven largely by China’s urbanisation in the past decade.

However, the current environment presents us with a series of challenges, which include:

• the need to adjust our economy in the face of lower mining investment and commodity prices – this is our major short term challenge but one which will be partly addressed as the economy adjusts to a lower dollar environment

• continuing weak global growth – the IMF has downgraded its outlook for global growth for the fifteenth time in the past four years, cutting its forecasts for 2016 from 3.8 per cent to 3.6 per cent

• an ageing population – in future years Australia will have far fewer workers to support the demands of the population, lowering economic growth

• the challenge of simply being relevant in the global economy

Some of these are challenges that we can address directly (transitioning the economy, productivity, etc) and some are outside our control (e.g. global growth).

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Our real living standard is on the decline

The consequence of these challenges are not in the never-never – they are happening now. Already in recent years we have seen Australia’s real per capita income (i.e. a measure of our welfare) fallen by 6% since the peak in the terms of trade in 2011 (compared with an increase in GDP of 11% and GDP per capita of 4%).

In effect, our real living standard is on the decline. While the community may not necessarily feel that this is a material outcome at present, this decline in our real standard of living points to a less than comfortable future of lower growth and declining living standards.

Source: ABS Catalogue 5206.0

It would be irresponsible to sit back and hope that this decline in living standards will be halted by some currently unforeseen turnaround in our national circumstances.

2 ‘Real income’ accounts for all income earned by Australians, deflated in terms of prices of national expenditure.
Top 10 locations of economic output in FY15

<table>
<thead>
<tr>
<th>Rank</th>
<th>Location</th>
<th>Economic Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sydney - Haymarket - The Rocks</td>
<td>$69.8 bn</td>
</tr>
<tr>
<td>2</td>
<td>Melbourne CBD (City, Docklands, Southbank)</td>
<td>$58.3 bn</td>
</tr>
<tr>
<td>3</td>
<td>Perth City</td>
<td>$30.7 bn</td>
</tr>
<tr>
<td>4</td>
<td>Ashburton (WA)</td>
<td>$26.8 bn</td>
</tr>
<tr>
<td>5</td>
<td>Roebourne (WA)</td>
<td>$24.7 bn</td>
</tr>
<tr>
<td>6</td>
<td>East Pilbara (WA)</td>
<td>$24.7 bn</td>
</tr>
<tr>
<td>7</td>
<td>Brisbane City</td>
<td>$24.0 bn</td>
</tr>
<tr>
<td>8</td>
<td>Adelaide CBA</td>
<td>$16.3 bn</td>
</tr>
<tr>
<td>9</td>
<td>North Sydney - Lavender Bay</td>
<td>$11.2 bn</td>
</tr>
<tr>
<td>10</td>
<td>Macquarie Park - Marsfield</td>
<td>$10.3 bn</td>
</tr>
</tbody>
</table>

Source: PwC's geospatial economic model (GEM), 2015

Australia's economic growth is concentrated close to one in five dollars of national income comes from just 10 locations.
Realising our productivity potential

Stimulation of sustained longer term growth requires a sustained improvement in national productivity. Unfortunately, when there is reference to ‘productivity improvements’ too often the public equates this with downsizing and job losses.

Instead, we need to see productivity improvement as a reflection of a package of more tangible public policy and corporate goals including, for example:

**A skilled workforce**

- **Fit for the future with increased participation and diversity**
- **With an increased appetite for Innovation and entrepreneurship**

The demographic profile of the Australian community means that we need greater participation in the workforce, with people educated and trained to adapt to the future work environment.

We passionately believe that greater STEM adoption is an integral element of a more fit for the future workforce.²

- Risk-taking and support for disruptive startup innovation will need to become embedded in our national psyche.³
- We need to embrace the disruptive power of technology and innovative thinking so that we are the beneficiaries of disruption rather than the victims.

**Supported by**

- **Tax and regulatory systems that are efficient and promote investment**
- **The right physical and digital infrastructure**

We have a complex and fragmented tax system that is not aligned to supporting growth, minimising distortions and supporting distributional outcomes.⁴

More is not necessarily better; we require the right infrastructure delivered cost effectively to promote the liveability of cities, the efficient delivery of products and digital connectivity to support new digital services.

**Combined, achievement of these goals will set Australia up for the next phase of growth.**

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⁴ PwC (2015), Protecting our prosperity: The pathway to a better tax system, https://pwc.docalytics.com/v/pathway-to-a-better-tax-system
It would be naïve to suggest that these public policy and corporate goals are easily achieved. In some cases, (e.g. tax) the politics of reform is verging on toxic, and in others the policy prescriptions span decades and hence get lost in the day-to-day of political to and fro (e.g. skills and education).

A scan of nations which we may aspire to emulate in some respects shows that there are areas where we lag in best practice when it comes to these goals. What is clear is that we cannot just keep on doing what we have always done, and still expect to achieve these goals. Whether as individuals, or as corporates, not-for-profits or government, we need to fight the urge to see the status quo as acceptable, and embrace the view that we need to take greater risks to jumpstart the economy’s engine.
Can we jump start the economy’s engine by learning from other nations?

**Educational outcomes**
- PISA scores
  - **Australia**
    - Mathematics: 504 (equal 17th)
    - Reading: 512 (rank 13th)
    - Science: 521 (rank 17th)
  - **Finland**
    - Mathematics: 519
    - Reading: 524
    - Science: 545

**Skills**
- STEM degrees as a proportion of all degrees
  - **Australia**: 16%
  - **Singapore**: 48%
  - **China**: 41%
  - **Germany**: 26%

**Pay**
- Gender wage gap
  - **Australia**: 13.8% (rank 13 of OECD countries)
  - **New Zealand**: 6.2% (rank 1 of OECD countries)
  - **Norway and Belgium**: 6.4% (Joint rank 2 of OECD)

**Diversity**

**Health**
- Mortality rate under 5 (per 1,000)
  - **Australia**: 4
  - **Norway**: 3
  - **South Korea**: 3

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### Workforce participation

<table>
<thead>
<tr>
<th>Age</th>
<th>Participation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among 55+ (OECD stat)</td>
<td>12.9% (OECD stat)</td>
</tr>
<tr>
<td>Among 55+ (rank 5 of ECD)</td>
<td>6% (read from graph)</td>
</tr>
<tr>
<td>Among 55+ (read from graph)</td>
<td>66% (rank 4)</td>
</tr>
<tr>
<td>Canada – 66% (rank 4)</td>
<td>New Zealand – 68% (joint rank 2)</td>
</tr>
<tr>
<td>Switzerland – 68% (joint rank 2)</td>
<td>Iceland – 73% (rank 1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender Participation rate of females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia (rank 3 against Canada and New Zealand)</td>
</tr>
<tr>
<td>Male – 72%</td>
</tr>
<tr>
<td>Canada (rank 2)</td>
</tr>
<tr>
<td>Male – 72%</td>
</tr>
<tr>
<td>New Zealand (rank 1)</td>
</tr>
<tr>
<td>Male – 74%</td>
</tr>
</tbody>
</table>

### Childcare

- **Enrolment**
  - 37.6% of three year olds were in formal childcare or pre-school
  - 100% France, 99% Belgium, 97% Denmark, 88% Germany, 83% UK

- **Cost**
  - 16% of family net income
  - Austria – 3% of family net income, Sweden – 4% of family net income, Germany and France – 10% of family net income

### Disability

- Participation Rate for working age people with a disability
  - Australia – 52.8%
  - France – 56.2%, Luxembourg – 62.5%, Sweden – 66.2%, Switzerland – 69.0%

- Foreign-born participation rate
  - Australia – 72.2%
  - Iceland – 87.6%, Switzerland – 82.6%, New Zealand – 76.8%
Can we jump start the economy’s engine by learning from other nations?

**Tax mix**
- Income taxes as a percentage of total taxation:
  - US: 48%
  - Singapore: 45%
  - Australia: 58%
  - UK: 36%
  - Germany: 30%

**Tax**
- Tax as a percentage of GDP:
  - US: 24.4%
  - Australia: 27.3%
  - Singapore: 14.1%

**Size of tax take**
- Australia: 27.3%
- US: 24.4%
- Singapore: 14.1%

**Overall**
- Rating:
  - Australia: 81.4% (4th)
  - Hong Kong: 89.6% (1st)

**Economic freedom**
- Rating:
  - Hong Kong: 89.6% (1st)
  - Australia: 81.4% (4th)

**Trade freedom**
- Rating:
  - Australia: 86.4% (43rd)
  - Hong Kong: 90% (1st)

**Red tape**
- Ease of doing business index:
  - Rank: 10
  - 188

**Labour Freedom**
- Rating:
  - Australia: 81.6% (21st)

**Regulation**
- Burden of government regulation:
  - Australia score: 2.8
  - UK: 3.9

1 = extremely burdensome, 7 = not burdensome at all
Can we jump start the economy’s engine by learning from other nations?

### Venture capital attractiveness

The Venture Capital and Private Equity Country Attractiveness Index

<table>
<thead>
<tr>
<th>Country</th>
<th>Score</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Australia</td>
<td>88.5%</td>
<td>8</td>
</tr>
<tr>
<td>US</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>94%</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>91.3%</td>
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</table>

**Depth of capital market**

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<tr>
<th>Region</th>
<th>Score</th>
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<tbody>
<tr>
<td>Australia</td>
<td>78.9%</td>
<td>(Australasia)</td>
</tr>
<tr>
<td>North America</td>
<td>95.7%</td>
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</tbody>
</table>

**Entrepreneurial culture and deal opportunities**

<table>
<thead>
<tr>
<th>Region</th>
<th>Score</th>
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<tbody>
<tr>
<td>Australia</td>
<td>83.0%</td>
<td>(Australasia)</td>
</tr>
<tr>
<td>North America</td>
<td>94.4%</td>
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</table>
Can we jump start the economy’s engine by learning from other nations?

Global Innovation Index

Ranking

<table>
<thead>
<tr>
<th>Country</th>
<th>Startups per million people</th>
<th>R&amp;D Expenditure as a percentage of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>20-30</td>
<td>2.1%</td>
</tr>
<tr>
<td>Boulder, Silicon Valley, San Francisco</td>
<td>100-250</td>
<td>2.9%</td>
</tr>
<tr>
<td>US</td>
<td>61%</td>
<td>2.8%</td>
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<tr>
<td>OECD average</td>
<td>41%</td>
<td>2.3%</td>
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Startups

<table>
<thead>
<tr>
<th>Country</th>
<th>Proportion of innovative-active businesses collaborating with universities or other non-commercial institutions.</th>
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<tbody>
<tr>
<td>Australia SMEs</td>
<td>4.1%</td>
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<tr>
<td>Large firms</td>
<td>3.5%</td>
</tr>
<tr>
<td>SMEs</td>
<td>27.6%</td>
</tr>
<tr>
<td>Large firms</td>
<td>61%</td>
</tr>
</tbody>
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Collaboration

Proportion of innovative-active businesses collaborating with universities or other non-commercial institutions.

Can we jump start the economy’s engine by learning from other nations?
Can we jump start the economy’s engine by learning from other nations?

**Speeds**

Average connection speed – Kilobytes per second (KBPS)

- Australia: 7828 KBPS
- South Korea: 20543 KBPS (1st)
- US: 12572 KBPS
- Germany: 11528 KBPS

**Internet**

Internet users (per 100 people)

- Australia: 84.6%
- Iceland: 98.2% (1st)
- South Korea: 87.4%
- Norway: 96.3% (3rd)

**Quality**

IPv6 Adoption (%)

- Australia: 1.60%
- Switzerland: 23.2% (2nd)
- US: 18.6% (6th)
- South Korea: 3.6% (26th)

**Digital infrastructure**

Secure internet servers (per 1 million people)

- Australia: 1349
- Liechtenstein: 9762 (1st)
- South Korea: 2178
- US: 1548
- Germany: 1420

**Fibre Connections**

Fibre connections (% of total broadband connections)

- Australia: 5%
- Japan: 72.7% (1st)
- South Korea: 68%
- US: 8.9%
- OECD: 17.1% (2nd)
www.pwc.com.au

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