Education as an Export for Australia: Green Shoots, First Swallows, but Not Quite Out of the Woods Yet

Stephen Connelly and Alan Olsen

(This is the paper behind the presentation at the Australian International Education Conference in Canberra on Thursday 10 October 2013)

Education is an export for Australia. Essentially, Australia exports education by bringing international students to Australia, just as it exports tourism by bringing international tourists to Bondi Beach or to Adelaide for the World Music Festival. The value of Australia’s education exports is the figure for spending on fees and goods and services by students onshore in Australia.

In The Australian newspaper on 30 September 2013, Australia’s Trade Minister Andrew Robb wrote that there is little community understanding of the importance of international education to the country’s balance of payments. Education is Australia’s fourth-biggest export market, and largest service-based industry.

For Australia’s Education Minister Christopher Pyne, education is Australia's biggest non-mining export industry.

Education is the only one of Australia’s top exports that captures Australia as more than a quarry with a view, it is the only clever country export among Australia’s biggest earners of export income.

Methodology

All export figures in this paper have been supplied directly by the Australian Bureau of Statistics (ABS). The paper uses as the value of education exports the figure for spending on fees and goods and services by students onshore in Australia. ABS captures the value of education exports across all education sectors, but, in the English language sector, does not include the figures for spending on fees and goods and services by students on tourist or working holiday visas. The ABS figures do not include the value of education exports where those education services are provided offshore from Australia, for example at branch campuses. The figures may include some spending by international students in Australia, on fees and goods and services, from income earned in Australia. An international student may put some of the income from part-time work in Australia towards the cost of studying in Australia.

Similarly, the state and territory figures below are for spending by students onshore in Australia. These are the figures that would be used, for example, in any negotiations with state and territory governments on matters such as public transport concessions.

Reserve Bank of Australia

Australia’s education services exports have continued to grow in importance this decade. Since 1982, education services exports have grown at an average annual rate of around 14 per cent in volume terms, with their share in the value of total exports increasing from less than 1 per cent to almost 6 per cent in 2007. They have now displaced leisure travel services as Australia’s largest service export. Indeed, education exports are now Australia’s third largest export, behind only coal and iron ore.

These services not only include tuition fees, but also the living expenses of foreign students while studying in Australia. In 2007, tuition fees accounted for 39 per cent of overseas student expenditure in Australia, with the balance representing spending by foreign students on goods and services, such as food, accommodation, transport and entertainment.

**Education as an Export for Australia**

Some figures for 2012/13 on the value of education as an export for Australia are available from ABS. Education in 2012/13 was worth $14.385 billion, ahead of Tourism $11.736 billion, but behind Gold $16.219 billion, Metal ores $79.7 billion and Coal $38.9 billion. When comparative figures are released by ABS in November 2013, Education will continue to be Australia’s fourth largest export.

Chart 1 *Education as an Export: Time Series* compares the value of education as an export for Australia, since 1960, with the value of tourism as an export for Australia.
Australia’s States and Territories

Education in 2011/12 was Australia’s fourth largest export, behind Iron, Coal and Gold, as in Chart 2 Australia’s Top Exports 2011/12 ($ millions).

Chart 2
Australia’s Top Exports 2011/12 ($ millions)

Education in 2011/12 was the largest export for Victoria (by the length of the straight), the second largest export for NSW (behind Coal), the second largest export for ACT (behind Government Services) and the fourth largest export for Queensland (behind Coal, Meat and Tourism).

Charts showing export league tables for each of the eight states and territories in 2011/12 are at Attachment A Australia’s States and Territories.

Composition of Australia’s Education Exports

Australian Education International in May 2013 issued a Research Snapshot on the composition of Australia’s education exports, based on ABS data.

Education exports in calendar year 2012 were valued at $14.487 billion, including $222 million from international students on AusAID/Defence scholarships. Of the remaining $14.265 billion

Fees at $6.812 billion made up 48% and goods and services at $7.453 billion made up 52%

International students in higher education contributed $9.712 billion or 68%

International students in vocational education and training contributed $2.662 billion or 19%
International students in schools contributed $592 million or 4%
International students studying English language courses on student visas contributed $687 million or 5%
International students from New Zealand contributed $153 million or 1%
International students in foundation studies and study abroad students contributed $459 million or 3%.

Education as an Export for US

NAFSA in US has introduced The International Student Economic Value Tool at http://www.nafsa.org/Explore_International_Education/Impact/Data_And_Statistics/The_International_Student_Economic_Value_Tool/. Each year, NAFSA produces a detailed regional, state-by-state, and congressional district analysis on the economic benefits of spending by international students and their dependents to the U.S. economy.

Chart 3
The International Student Economic Value Tool

Note: The total dollar value depends on many factors, meaning that enrollment and economic contribution trends are not always in sync (see methodology for complete information).
A Line in the Sand

Australia’s Trade Minister Andrew Robb in The Australian on 30 September 2013 referred to the damage done to Australia’s education exports by factors such as the high value of the Australian dollar, an uncompetitive student visa system and stronger competition from other countries.

This paper draws a line in the sand and chooses not to focus on the perfect storm of events that reduced the value of Australia’s education exports by 15% from 2009 to 2012. Australia’s Education Minister Christopher Pyne will “fix the system” and this paper, in its modelling of education as an export for Australia, chooses to move forward.

But, in the context of modelling, a comment on UNESCO forecasts is necessary.

Australia’s Trade Minister Robb, in The Australian newspaper on 30 September 2013, wrote that UNESCO has forecast, for example, that the number of internationally mobile students will almost double from 4 million in 2010 to 7 million by 2020. UNESCO did not make this forecast. For the record, neither did OECD.


In the Executive Summary on page viii, Altbach et al write

More than 2.5 million students are studying outside their home countries. Estimates predict the rise to 7 million international students by 2020.

But in the text on page 25 Altbach et al write

By 2025, research undertaken for IDP Pty Ltd in Australia suggests that roughly 7.2 million students may be pursuing some higher education internationally, an increase of 188 percent over the 2006 UNESCO estimate (Böhm, et al.,2002)

The source is IDP’s Anthony Böhm, Dorothy Davis, Denis Meares and David Pearce, writing in 2002 in Global Student Mobility 2025 (page vi)

By 2025, global demand for international higher education will increase to 7.2 million.

Böhm et al indicate (page 20) that their key source of data is UNESCO’s 2001 World Education Report and that the base period for most of the UNESCO data is 1996.

Green Shoots

There are signs of recovery for international education in Australia.

In its quarterly Statements on Monetary Policy, the Reserve Bank of Australia monitors exports through liaison with industry experts

February 2013: liaison suggests that education exports have stabilised, after having declined since 2009
May 2013: liaison also indicates that education exports have stabilised.

The Sydney Morning Herald on 8 October 2013 splashed Nothing but Blue Skies on its front page, from a preview glimpse of a Deloitte Access Economics Report that tourism, international education, wealth management, gas and agribusiness would be five super-growth sectors for Australia, and disproportionately NSW, in the next phase of the Asia boom.

Australian Stock Exchange listed education provider Navitas reported in July 2013

University Programs enrolments continue improvement - Australia returns to growth

“After a downturn in total Australian enrolments that has lasted three years we are delighted to be reporting a return to growth across our Australia college network,” said Navitas Group Chief Executive Officer, Rod Jones

In terms of new students into Australian programs:

- Recruitment of international students from source markets grew by 33% compared to pcp;
- Australian domestic enrolments grew by approximately 20%; and
- Recruitment of international students already in Australia declined by 14% compared to pcp, consistent with recent trends

As in Chart 4 covering second quarter 2013 and Chart 5 covering third quarter 2013, Hobsons Enquiry Management System is showing green shoots.

Chart 4
Hobsons EMS Enquiry Prospects V Exchange Rate Q2/2013
Australia’s Department of Immigration and Border Protection has reported on student visa grants, across all education sectors for 2012/13, compared with 2011/12. Offshore student visa grants were up +13.3%, onshore student visa grants were down -8.2% and student visa grants in aggregate were up +2.4%. Across sectors:

Higher education grants were up +12.5% from 2011/12 to 2012/13 (57% of HE grants were made offshore)

VET grants were down -16.3% (23% offshore)

Schools grants were down -3.4% (87% offshore)

Independent ELICOS grants were up +6.5% (65% offshore)

Non award grants were up +5.7% (96% offshore).

There are green shoots in the Australian Education International data for June 2013, reported through Austrade. In terms of commencements in the first six months of 2013 (first semester for many institutions)

Higher education starts were up +3.3%

ELICOS starts were up +14.2%

Schools starts were up +4.8%

Other starts including Foundation were up +6.6%

In aggregate, excluding VET, starts were up +7.4%

But there are no green shoots in the data for vocational education and training. Commencements in vocational education and training stayed down, with private VET commencements down -5.6% and public VET commencements down -8.2%. 
The data suggest that demand for university places is driving recovery. There are green shoots in higher education and in pathways to higher education, but international education in Australia is becoming a two speed industry, with demand for vocational education and training down and staying down.

The green shoots are patchy in terms of sectors, and patchy also in terms of source countries. There were green shoots in the Australian Education International data for first semester 2013 in four of Australia’s top ten higher education source countries, with starts overall up 3%. In order of magnitude

- China up +2%
- India up +50%
- Malaysia down -6%
- Vietnam down -6%
- South Korea down -13%
- Indonesia down -6%
- Singapore down -6%
- Nepal up +32%
- Pakistan up +49%
- Saudi Arabia down -8%.

In addition to growth in higher education starts from four of the top ten source countries, there were other green shoots, with ÉLICOS starts from China up 11%, schools starts from China up 11%, Foundation starts from China up 19% and ÉLICOS starts from Vietnam up 83%. The green shoots are patchy, but not every source country needs to be a winner.

**Not Quite Out of the Woods**

While there are green shoots, international education in Australia is not quite out of the woods yet.

Australian Education International commencements in year to date June 2013, across all sectors, were up 3.4% but enrolments in June 2013, across all sectors, were down 2.2%. Numbers of students from boom times completing their courses are greater than numbers of new students. In the first half 2013, numbers of new students increased 3%, but the stock of students still fell 2%

**Modeling**

"Essentially, all models are wrong, but some are useful" is attributed to English statistician George Box.

Chart 6 **History to 2012: Enrolments** shows growth in numbers of international students in Australia, up to 2009, and the drop to 2012.
Chart 6
History to 2012: Enrolments

Chart 7 History to 2012: Revenue $millions shows the same pattern

Chart 7
History to 2012: Revenue $millions
Our modelling of enrolments shows numbers of international students in Australia peaking at 631,000 in 2009, then dropping in actual numbers to 516,000 in 2012. Our forecast is that numbers of international students in Australia will bottom out at 509,000 in 2013, will remain flat at 512,000 in 2014, then start to recover to 531,000 in 2015, on the way to a return in 2019 to 623,000, the same level as in 2009, as in Chart 8 Modeling Enrolments.

International education in Australia is not quite out of the woods yet. Numbers of enrolments are still to bottom out, as in the modeling, and the value of education as an export for Australia is still to bottom out, as in the modeling in Chart 9 Modeling Revenue $millions. Revenue peaked at $16.977 billion in 2009, fell to $14.487 billion in 2012, is forecast to bottom out at $14.283 billion in 2013, then turn around to $15.144 billion in 2014 and recover to $16.389 billion in 2015.

In our modeling, higher education is on its way from 36% of enrolments in 2009 to 48% in 2020. Already in 2012, higher education contributed 67% of exports in 2012, from 57% in 2009. Our modelling is that vocational education and training is on its way from 33% of enrolments in 2009 to 16% in 2020.
Our modelling of demand by international students for higher education in Australia suggests issues for Australia’s higher education institutions.

There were 226,000 international students in higher education in the boom year 2009. Because of pipeline, numbers in higher education peaked at 242,000 in 2010 and 2011 then dropped slightly to 231,000 in 2012. Our modelling is that numbers in higher education will bottom out at 231,000 (a drop of 4.5% from the peak), remain flat at 234,000 in 2014, then start to recover to 246,000 in 2015.

Our forecast that there will be demand for 311,000 international higher education places in Australia in 2020 is likely to test the appetites and capacities of higher education institutions in Australia to supply places for international students. Already in 2011, as in Chart 10 Appetites and Capacities: Undergraduates 2011, Australia has a very high proportion of international students among its undergraduates.
Chart 10
Appetites and Capacities: Undergraduates 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>21%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>16%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>15%</td>
</tr>
<tr>
<td>Austria</td>
<td>12%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>11%</td>
</tr>
<tr>
<td>Belgium</td>
<td>11%</td>
</tr>
<tr>
<td>Germany</td>
<td>10%</td>
</tr>
<tr>
<td>Sweden</td>
<td>10%</td>
</tr>
<tr>
<td>Canada</td>
<td>10%</td>
</tr>
<tr>
<td>OECD average</td>
<td>7%</td>
</tr>
<tr>
<td>Denmark</td>
<td>6%</td>
</tr>
<tr>
<td>Ireland</td>
<td>6%</td>
</tr>
<tr>
<td>Iceland</td>
<td>6%</td>
</tr>
<tr>
<td>Hungary</td>
<td>5%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5%</td>
</tr>
<tr>
<td>Finland</td>
<td>5%</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>5%</td>
</tr>
<tr>
<td>United States</td>
<td>4%</td>
</tr>
<tr>
<td>Japan</td>
<td>4%</td>
</tr>
<tr>
<td>Portugal</td>
<td>4%</td>
</tr>
<tr>
<td>Estonia</td>
<td>3%</td>
</tr>
<tr>
<td>Spain</td>
<td>3%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3%</td>
</tr>
<tr>
<td>Norway</td>
<td>3%</td>
</tr>
<tr>
<td>Poland</td>
<td>2%</td>
</tr>
<tr>
<td>Chile</td>
<td>1%</td>
</tr>
</tbody>
</table>
Australia’s States and Territories

Australia

Education in 2011/12 was Australia’s fourth largest export behind Coal, Iron and Gold.

Chart A1
Australia’s Top Exports 2011/12 ($ millions)

NSW

Education as an export for NSW is the state’s second largest export behind coal.
Victoria

Education as an export for Victoria remains the state’s largest export.
Queensland

Education as an export for Queensland is the state’s fourth largest export behind coal, meat and tourism.

South Australia

Education as an export for South Australia is the state’s sixth largest export behind wheat, wine, copper, copper ore and iron.
Western Australia

Education as an export for WA was worth more than $1 billion in 2011/12, but is not one of the state’s biggest exports.

Chart A6
Western Australia’s Top Exports 2011/12 ($ millions)

Tasmania

The chart shows the value of education as an export for Tasmania.

Chart A7
Tasmania’s Top Exports 2011/12 ($ millions)
Northern Territory

The chart shows the value of education as an export for Northern Territory.

Chart A8
Northern Territory’s Top Exports 2011/12 ($ millions)

ACT

Education as an export for ACT is the territory’s second largest export behind government services.

Chart A9
Australian Capital Territory’s Top Exports 2011/12 ($ millions)