

# The China Student Boom and the Risks It Poses to Australian Universities

**Salvatore Babones**





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Salvatore Babones



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# Executive Summary

Australia's universities are taking a multi-billion dollar gamble with taxpayer money to pursue a high-risk, high-reward international growth strategy that may ultimately prove incompatible with their public service mission. Their revenues have boomed as they enrol record numbers of international students, particularly from China. As long as their bets on the international student market pay off, the universities' gamble will look like a success. If their bets go sour, taxpayers may be called on to help pick up the tab.

China has consistently been the world's largest source of international students for the last twenty years, with numbers increasing six-fold over this period. It thus comes as no surprise that the largest source of inbound international student numbers in Australia has been from China. However, global outbound Chinese student numbers have flatlined since 2016, with the rapid growth in Chinese enrolments in Australia slowing dramatically in 2018 and now levelling off. It therefore seems safe to say that Australian universities may have reached 'China max', but is the current 'China max' actually safe?

This report establishes the scale of Australian universities' China risk, assesses the difficulty of addressing it, and proposes steps to take toward reducing it in a fiscally and educationally responsible way.

The report identifies and focuses on seven Australian universities that seem to have extraordinary levels of exposure to the Chinese market:

- University of Melbourne
- Australian National University (ANU)
- University of Sydney
- University of New South Wales (UNSW)
- University of Technology Sydney (UTS)
- University of Adelaide
- University of Queensland (UQ)

All seven of these universities rely heavily on international students for revenue and revenue growth; and at all seven, Chinese students seem to account for more than 50% of all international students. In 2017, they relied on Chinese student course fees for anywhere from 13% (Adelaide and ANU) to 22-23% (UNSW and Sydney) of their total revenues. Even these figures likely understate their true China exposure, since they generate substantial non-course revenue from Chinese students as well.

International comparisons reveal the excessiveness of this China exposure. All seven have higher proportions of international and Chinese students than any university in the entire United States. Indeed, all seven appear to be more dependent on fee-paying Chinese students than just about any other universities in the English-speaking world.

Australia's universities do not seem to understand the high levels of financial risk inherent in their over-reliance on the Chinese market, and they certainly do not make sufficient data available to the public to inform a public debate on these risks. Instead of withholding data, they should follow US and UK best practice in transparently reporting detailed student numbers by country of origin, level of study, and field of study. This should be a first step toward publishing plans for reducing their reliance on international students (and Chinese students in particular) to more manageable levels, with targets set both for the university as a whole and for individual programs.

Key facts uncovered in this report include:

- International students account for roughly 25% of all students on Australian university campuses.
- No public university in the United States has as high a proportion of international students as the average public university in Australia.
- Much of the growth in international student numbers at the seven focus universities has been directed into business education. The five for which data are available draw more than 40% of their entire business student bodies from overseas; for Melbourne and Sydney universities, the figure is 66.9%. American universities do not come close to these levels.
- Approximately 10% of all students now attending an Australian university hail from China.
- More than 40% of all onshore international students (and almost certainly the majority of international student fee revenue) come from China.
- The University of Sydney led the country in 2017 in generating more than half a billion dollars in annual revenue from Chinese student course fees.

Chinese enrolments are particularly unstable because of macroeconomic risk factors such as the slowing of China's economy, the lack of full convertibility of the Chinese yuan, and fluctuations in the value of the yuan versus the Australian dollar. Of the nine potential risk factors identified in this report that

could adversely affect Chinese student numbers, macroeconomic risks are by far the most serious (from a financial perspective) because they could lead to a sudden and severe fall in Chinese enrolments.

Australian universities routinely compromise admissions standards to accommodate international students. Preparatory programs for students with lower English language test scores function as a paid work-around for international students who do not meet admissions standards. By prominently marketing such alternative pathways, Australian universities are in effect taking actions that reduce their financial risks by increasing their standards risks.

Australian universities are now seeking to diversify by expanding into the Indian market, but India is too poor to serve as a realistic alternative to China. The financial risks of over-reliance on China at the seven

focus universities run into the hundreds of millions of dollars annually, and cannot be mitigated or diversified by greater recruitment in India.

Australian universities' current prosperity is based on a flood of international student money — Chinese money in particular. The seven leading universities spotlighted in this report are taking massive financial risks in pursuit of this pot of gold. And just like the world's leading banks in 2008, they must be aware that they are 'too big to fail'. As public and publicly-accountable institutions, they enjoy an implicit guarantee that if things go wrong, the government will come to the rescue. They should act now to mitigate the risk of a sudden revenue collapse by raising admissions standards and reducing international student enrolments.

# Introduction: How international students became the ‘cash cows’ of Australian universities

Australia’s higher education sector is booming. Australia has six universities in the global ‘top 100’, according to the China-based Academic Ranking of World Universities, up from just three when the ranking was first conducted in 2008.<sup>1</sup> It also has six ‘top 100’ universities in the Times Higher Education rankings and seven in the Quacquarelli Symonds rankings.<sup>2</sup> Their rankings have risen in lockstep with their revenues. In 2017, Australia’s higher education providers generated \$32 billion in revenue.<sup>3</sup> This is up from just \$19 billion in 2008, representing an impressive 6% compound annual growth, well in advance of inflation or GDP growth.<sup>4</sup> In both reputational and commercial terms, Australia’s universities are succeeding as never before.

However, on a per student basis, their revenue growth has been much less impressive. The higher

education sector’s per-student revenues rose from approximately \$25,000 in 2008 to nearly \$30,000 in 2017, when total revenues are divided by equivalent full-time student load (EFTSL).<sup>5</sup> This represents a 2% compound annual growth rate, which has only just kept pace with inflation. That per-student revenues matched inflation at all is entirely due to the growth in the number of international students, who generally pay much higher fees than domestic students, often more than three times the total amount (student plus commonwealth contribution) for undergraduate places. Australian higher education providers’ international student EFTSL rose 51% between 2008 and 2017, while domestic student EFTSL rose just 38%.<sup>6</sup> Real revenues per domestic student have actually declined, when adjusted for inflation. See Box 1 for additional information on trends in Australian government funding for higher education.

## **Box 1: Did government cutbacks force Australian universities to expand international enrolments?**

International student numbers at Australian universities have been rising for as long as statistics are available, more than doubling in the first decade of the 2000s and on track to rise another 50% in the 2010s. The only period of relatively slow growth was 2011–2012 when a combination of stricter visa policies and a historically high Australian dollar made Australian university degrees simultaneously less attractive and more expensive. China has driven much of the historical growth in Australia’s international student population but as the number of Chinese recruits levels off, Australian universities are recruiting aggressively in India in an attempt to keep international student numbers growing.

Why are Australian universities so keen to increase their international student enrolments, despite the fact that they are already among the most internationalised universities in the world? They are strongly incentivised to recruit international students by the fact that international student course fees are not regulated by the government, whereas Australian domestic undergraduate course fees are highly regulated (although domestic postgraduate course fees are not).

Historically, the Australian government limited the number of Commonwealth Supported Places (CSP) or equivalent at each university and in broad fields of study. These caps were removed in 2010 (except for medicine) and replaced with a ‘Demand-Driven Model’ that allowed universities to enrol unlimited numbers of undergraduate students in CSPs.

Due to the rapid growth in student numbers under the Demand Driven Model (and the associated rapid growth in government expenditures), the government froze its funding for CSPs at 2017 levels for the two years 2018 and 2019, with modest increases in line with population growth planned for 2020.<sup>7</sup> In inflation-adjusted terms, this represents a slight annual decline in real funding levels of approximately 2% per year. The government has also announced modest cuts to university research block grants of around 4% per year, to take effect in 2019. Taken together, these cuts give the impression that the Commonwealth government is forcing universities to look elsewhere for funding, with international students forming the most readily available source.

This argument, however, misrepresents several clear trends in the data. First and foremost, the greatest proportional growth in international student enrolments occurred in the first decade of the 2000s (a decade in which government funding for universities roughly doubled) and in 2014–2017, the final four years of uncapped CSPs. Second, the universities that took the greatest advantage of uncapped CSPs to dramatically expand their domestic undergraduate enrolments by accepting students, on average, with weaker school achievement — leading to reports of downward pressure on standards — are not the same universities that are now (2018–2019) aggressively recruiting additional international students. Third, even during the period of uncapped CSPs (2012–2017), Australian universities’ revenues from international students grew roughly five times as fast as their revenues from government sources.

Thus, although Australian universities may use international student fee revenue to offset slight declines in Commonwealth funding, the extraordinary expansion in international student enrolments over the last two decades cannot realistically be attributed to cuts in government funding.

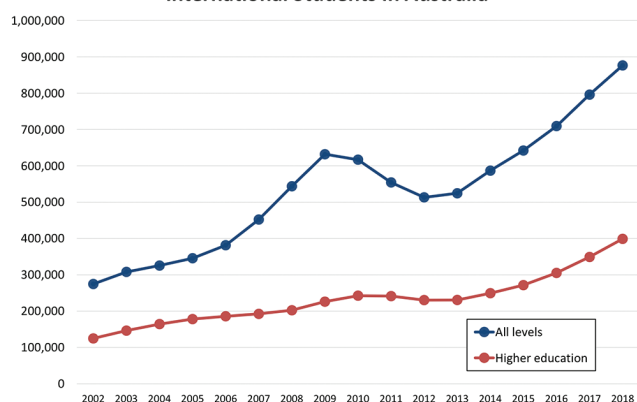
As a recent ABC TV *Four Corners* program put it, international students have become the ‘cash cows’ of Australian universities.<sup>8</sup> In recent years, international student enrolments at Australian universities have grown at more than twice the rate of domestic student enrolments. As a result, between 2012 and 2017, roughly two-thirds of Australian universities’ increase in total revenue was “driven by increased international student fees,” according to the Australian Department of Higher Education and Training (DET), with the remaining growth due to increases in Commonwealth financial assistance.<sup>9</sup> In 2017, international student fee revenue accounted for 23.3% of the higher education sector’s total revenue, up from just 16.3% in 2013 when international students were already a prominent presence on Australian campuses.<sup>10</sup> Within the higher education sector, Australia’s universities account for most of this figure: nearly 90% of the total international student fee revenue generated by Australian higher education institutions goes to the university sector.<sup>11</sup> (A schematic illustration of the structure of Australia’s education industry is provided in the Glossary at the back of this report.)

As of December 2018, Australia hosted nearly 400,000 international higher education students, according to DET data reported in Table 1 in the appendix.<sup>12</sup> The growth since 2002 in international students, both overall and specifically in the higher education sector, is depicted in Figure 1. International students account for 28.5% of all higher education students at Australian institutions, and 26.7% of all university students, according to DET data for 2017.<sup>13</sup> These statistics include both onshore and offshore students of Australian higher education institutions.<sup>14</sup> Calculations based on DET data suggest that onshore international higher education students made up approximately 25% of total onshore enrolments in 2018.<sup>15</sup>

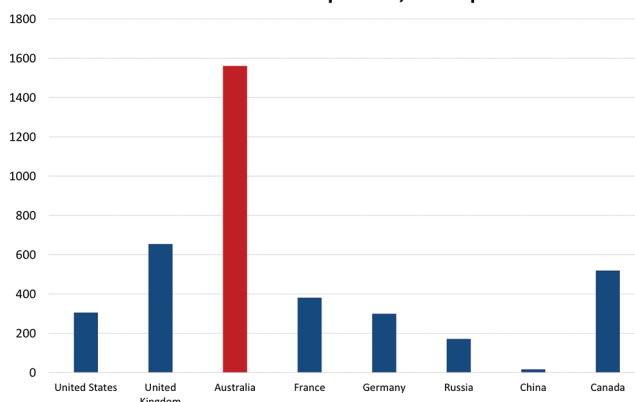
The total number of international higher education students at Australian institutions has nearly doubled since 2008 and more than tripled since 2002, with most of that growth occurring onshore.<sup>16</sup> International students in other education sectors (outside higher education) have kept pace as well, bringing the total number of international student enrolments at Australian educational institutions to 876,000 in December 2018, or about 3.6% of Australia’s total population.<sup>17</sup> International student numbers have reached such high levels that a recent national survey found the majority of Australians now oppose any further increases, with younger Australians recording the highest levels of opposition.<sup>18</sup> Australia’s international students are overwhelmingly concentrated in institutions in New South Wales (38%) and Victoria (32%), which together account for more than 70% of all international students.<sup>19</sup>

Australia ranks third in the world in the number of international tertiary education students, trailing only the United States and the United Kingdom, as reported in Table 2 in the appendix, which is based on data compiled by the United Nations Educational, Scientific and Cultural Organisation (UNESCO).<sup>20 21</sup> Australia has more than twice as many international tertiary education students as eighth-ranking Canada, which has a population 50% larger than Australia’s. Measured on a per capita basis, Australia now hosts more international students than any other major country in the world, as depicted in Figure 2. Australia leads the world by taking in 26 international students for every one it sends abroad, a ratio more than twice that of its nearest competitor, the United States (which has 14 inbound students for every outbound one).<sup>22</sup>

**Figure 1**  
**International Students in Australia**

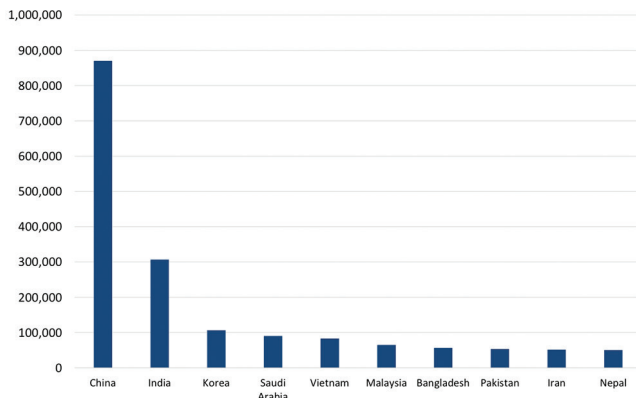


**Figure 2**  
**International Students per 100,000 Population**



**Figure 3**

**Asia's Top 10 Sources of Outbound Students**

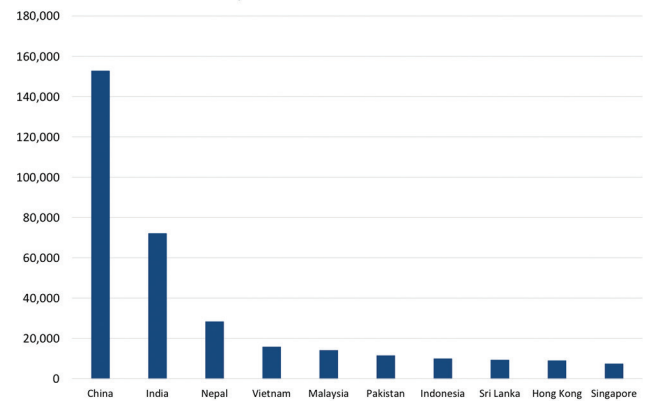


China is by far the largest source of outbound international higher education students in the world, as depicted in Figure 3, based on data compiled by UNESCO.<sup>23</sup> It has consistently been the world's largest source of international students for the last twenty years, as reflected in Table 3 in the Appendix, which reports outbound student numbers for the 10 largest sources of international higher education students in Asia for the past 20 years. China's outbound numbers have increased six-fold over the past two decades, from 134,000 to 869,000. In terms of absolute numbers, only India comes close, with a five-fold increase from 59,000 to 306,000. The only other countries to exhibit similar growth are Vietnam and Nepal, where outbound student numbers have grown more than 10-fold, though from much lower initial bases.

It thus comes as no surprise that the largest source of inbound international student numbers and growth in Australia has been China, as depicted in Figure 4. Table 4 in the Appendix further breaks down Australia's international student numbers by country of origin, using data from the Department of Education and Training.<sup>24</sup> As of December 2018, students from China accounted for 38.3% of Australian international higher education students, and 21.6% of students at all other levels (Vocational Education and Training (VET), schools, English Language Intensive Courses for Overseas Students (ELICOS), and non-award programs). Chinese students are even more concentrated in the schools sector, where they account for slightly more than half (51%) of all international enrolments. Chinese students also account for 39% of non-award enrolment, which consists mainly of university preparatory programs. They account for 31% of the ELICOS category, but are notably absent in VET (9%). These statistics include both onshore and offshore enrolments of Australian higher education institutions. Chinese students tend to be concentrated onshore (in Australia itself) more than other students. Thus Chinese students accounted for 43% of new onshore university commencements in 2016, more than three times as many as the next largest country of origin (India).<sup>25</sup>

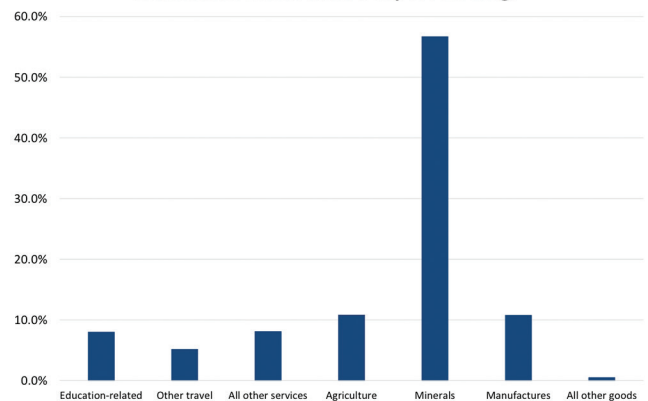
**Figure 4**

**Australia's Top 10 Sources of Inbound Students**



**Figure 5**

**Breakdown of Australia's Export Earnings**



International students are clearly important for Australia's universities, but their importance to the economy as a whole is frequently overstated. One oft-quoted statistic is that educational exports have risen to become Australia's third-largest export after iron and coal.<sup>26</sup> That doesn't really capture the full story, since exports in different sectors are reported at different levels of granularity. Figure 5 compares the size of Australia's educational exports to that of other major sectors from across the economy, using data from the Australian Bureau of Statistics (ABS).<sup>27</sup> Additional historical data going back to 2002 are reported in Table 5 in the Appendix. Educational exports overtook receipts from all other travel (tourism, family, and business combined) in 2008, but are still smaller than Australia's exports of agricultural or manufactured goods. Moreover, more than half of Australia's reported educational exports (53.7% in higher education and 57.2% for the education sector as a whole) consists not of student fees, but of goods and services bought by students while in Australia.<sup>28</sup> Since this spending is at least partly generated by income that students earn from working in Australia while studying, the true net value of education exports to the Australian economy is likely lower than the headline figures reported by the ABS and DET.

Thus although the extraordinarily large number of international students in Australia can be said to benefit the Australian economy, these benefits are not as large as they are often portrayed. But even if the Australian economy as a whole does not rely heavily on international students, Australia's higher education sector does. Other education sectors also enrol international students, but international education in these other sectors is dominated by private sector companies, not public institutions. Risk-taking is part and parcel of doing business in the private sector. State-supported higher education institutions like universities may be less well-prepared to understand, evaluate, and plan for financial risks than are for-profit companies. Moreover, universities are risking not their own money, but public money — and the public trust.

Australian universities' reliance on international students stands out in several ways that make their situation unique in comparison to their international

peers and particularly risky for their ultimate sponsors, the country's taxpayers. In Australia:

- 1) International student numbers have risen dramatically from an already-high base
- 2) International students are concentrated in government-funded public universities
- 3) More than 40% of all international students, and perhaps the majority of international student fee revenue, come from just one country: China

This report analyses the financial risk arising from Australian universities' financial dependence on fee-paying Chinese students. Since international students are overwhelmingly concentrated in Australia's public universities, this financial dependence constitutes a risk to Australian governments, and ultimately to taxpayers. This report establishes the scale and character of the risk, assesses the difficulty of addressing it, and proposes steps toward reducing the risk in a fiscally and educationally responsible way.

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## Seven leading Australian universities enrol extraordinary numbers of Chinese students

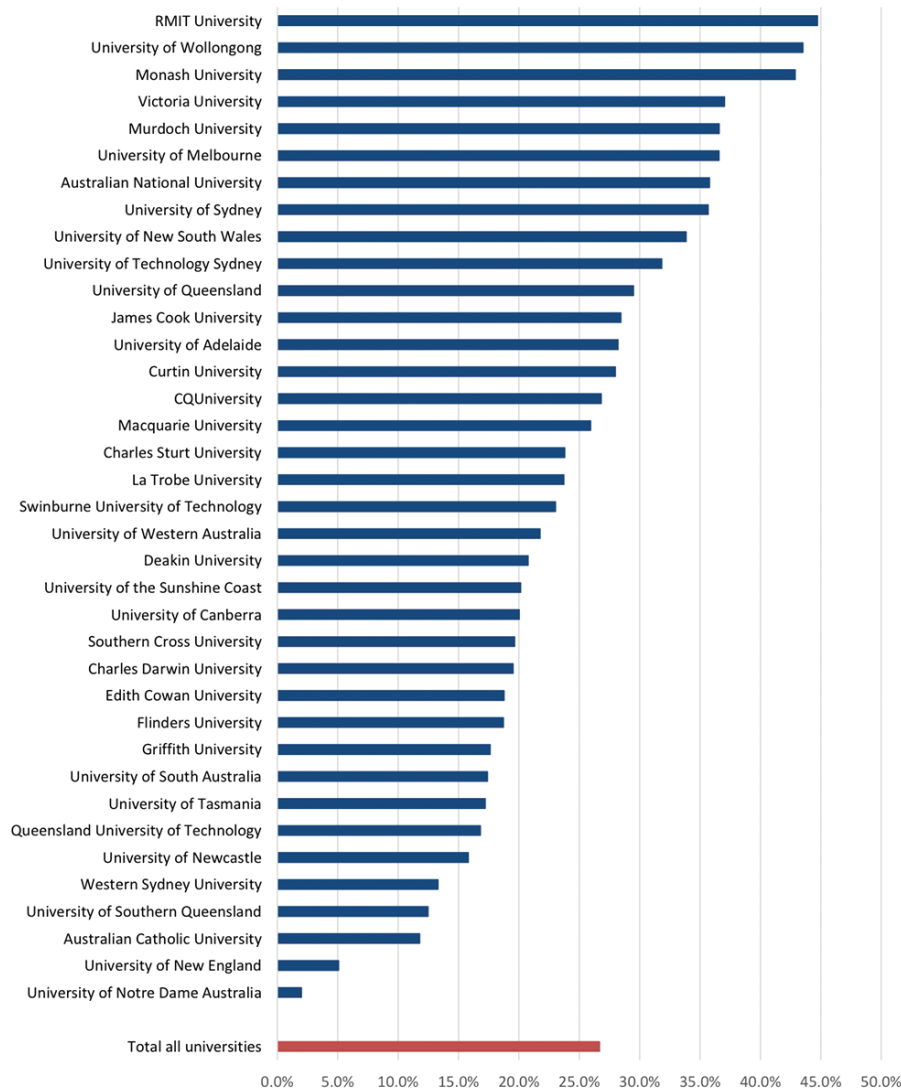
As Australian universities have become ever more dependent on international students, they have also become ever more dependent on China. But not all universities are equally dependent on international students, or on China. In fact, some are much more dependent on international students in general (and Chinese students in particular) than are others. International student enrolments, expressed as a percentage of all students, are reported for Australia's 37 comprehensive public universities in Figure 6, which has been constructed using DET data for 2017.<sup>29</sup> A detailed breakdown for undergraduate, postgraduate, and non-degree students is provided in Table 6 in the Appendix. Most Australian universities rely on international students for more than 20% of total enrolments, and all but two (the University of New England and Notre Dame) are above 10%. In terms of actual EFTSL student hours generated, Australian universities are even more dependent on international students than the numbers reported in Figure 6 indicate, since 86.5% of international higher education students are enrolled full-time, compared to only 65.2% of domestic students.<sup>30</sup> Across the entire Australian higher education sector (including both universities and other providers), international students accounted for 28.5% of all students in 2017, but 30.4% of EFTSL. And, of course, international

students generally pay much higher fees as well — in the case of undergraduate students, often more than three times higher.

At the top of the league of Australian universities enrolling international students are RMIT University, the University of Wollongong, Monash University, and Victoria University. The figures for these four universities are inflated by their large offshore programs. The offshore proportions for RMIT (50.6%), Wollongong (51.1%), Monash (39.0%), and Victoria University (55.2%) are all among the highest in Australia, according to 2017 data from the DET.<sup>31</sup> Rounding out the top five for international students is Murdoch University. Until as recently as 2017, Murdoch's international student cohort consisted almost entirely of offshore students (81.1% of all international students).<sup>32</sup> More recently, however, Murdoch has been criticised in the press for engaging in a rapid expansion in onshore international student recruitment from India.<sup>33</sup>

Though offshore campuses may be important sources of revenue for some Australian universities, statistically speaking they are somewhat opaque. It seems clear that for the five Australian universities at the top of the international student league table, most offshore student fee revenue is drawn

**Figure 6**  
**International Students as a % of Total**



from countries other than China. Thus, although offshore campuses persistently raise questions of financial and reputational risk, on balance they tend to diversify rather than concentrate Australian universities' exposure to the China market.<sup>34</sup> As of 2017, the DET reported that Australian universities' offshore campuses were limited to "Curtin University (Malaysia, Singapore & UAE), James Cook University (Singapore), Monash University (India, Italy, Malaysia & South Africa), Murdoch University (Singapore & UAE), University of Newcastle (Singapore), University of Wollongong (UAE), RMIT University (Vietnam x 2), and Swinburne University (Malaysia)."<sup>35</sup>

The Australian universities with the greatest exposure specifically to the Chinese international student market are probably the next five in the international enrolment league table: Melbourne, ANU, Sydney, UNSW, and UTS. International enrolments at these

universities all exceed 30% of the total student body, and all five universities host most of their international students onshore (although UNSW reported hosting 30.6% of its international students offshore in 2017 despite no longer having any international campuses).<sup>36</sup>

All five universities are clearly prime destinations for Chinese students, though none of them routinely reports its international student enrolments by country of origin. The University of Melbourne only notes in its 2018 annual report that China is its top source of international students, without providing any detailed numbers (surprisingly, India ranks only fourth).<sup>37</sup> In 2018, international students accounted for 42.1% of all EFTSL at Melbourne, a figure that the university highlights as an accomplishment.<sup>38</sup> The ANU does not even mention Chinese students in its 2017 annual report (the latest one available at time of writing),

although it does mention the need for “international student diversification” and plans to open “liaison offices” in India and Singapore to achieve this.<sup>39</sup> It has been reported in the press that Chinese students accounted for 59.1% of all international students at ANU in 2016, though it is not clear whether this refers to enrolments or commencements.<sup>40</sup>

The University of Sydney talks in similarly euphemistic terms about “its ambitions to diversify its international student cohort” in its 2018 annual report.<sup>41</sup> It does not mention China by name or provide any figures to illustrate the need for diversification, but it does mention that a “strategy to recruit high-calibre students from India was endorsed and an in-country team was appointed in early 2019”.<sup>42</sup> The UNSW 2018 annual report highlights the fact that it “attracted 23,148 international students from 137 countries” while making no mention of the home countries of the university’s international students.<sup>43</sup> This data was omitted despite the fact that UNSW lists “an increase in course fees from international students” as the only positive factor offsetting an otherwise worsening financial position in 2018.<sup>44</sup> According to its 2018 annual report, UTS “reached our target of 30 per cent of our student load to be international students”, of whom “more than fifty per cent come from China”.<sup>45</sup> The university’s “next goal is to diversify our international student body”.<sup>46</sup> India, Nepal, and Vietnam are mentioned, but the university says “we need to diversify further.”<sup>47</sup>

Although these three New South Wales universities are generally uncommunicative about the details of their international student cohorts, they did supply Chinese student percentages to the *Sydney Morning Herald* for a widely-cited infographic, which reports that in 2017, Chinese students accounted for 66.7% of international enrolments at the University of Sydney, 68.8% at UNSW, and 52.3% at UTS.<sup>48</sup> Meanwhile, indicative financial charts published by the Audit Office of New South Wales suggest that Chinese students accounted for approximately 71% of international student revenue at Sydney, 74% at UNSW, and 59% at UTS in 2017.<sup>49</sup>

The New South Wales audit office report is vague about many of its international student statistics, but it does provide some details that are not available in other published sources. Some other state audit offices have also expressed concerns about their universities’ over-reliance on revenue from international students (and Chinese students in particular), but they are even less forthcoming with hard data. The Queensland audit office states only

that China and India combined contribute “over 50 per cent” of international students in the state, and that two (unnamed) universities rely on one (unnamed) country “to provide more than 50 per cent of their international students.”<sup>50</sup> The Victorian and Western Australian audit office reports merely repackage international student EFTSL data published by the DET, without further elaboration.<sup>51</sup> Other state and territory audit offices have even less to say about the financial risks posed by their universities’ forays into international education.

It has been reported in the press that Chinese students account for 60% of combined international enrolments at Australia’s G8 group of research-intensive universities, which includes the ANU, Melbourne, Sydney, and UNSW (but not UTS).<sup>52</sup> In addition to these four universities, Monash, Adelaide, Western Australia, and Queensland round out the G8. The situation at Monash has been covered above. The University of Adelaide reports that Chinese students account for 53.8% of all international students and 15.8% of all students.<sup>53</sup> The university’s revenue from international student fees accounts for nearly one-quarter of its entire revenue from continuing operations.<sup>54</sup> These figures seem to put it in the same league as the NSW universities identified above. The final G8 university is the University of Western Australia, which falls in the middle of Table 6 (see Appendix). The university’s 2018 annual report makes no mention of international student numbers, despite the fact that the university draws 16% of its total revenues from onshore international student fees.<sup>55</sup> Although press reports suggest that “about half” of its international students hail from China, its total international student enrolments place it well behind other G8 universities.<sup>56</sup>

That leaves the University of Queensland. Falling just outside the top 10 in Table 6, UQ speaks vaguely in its 2018 annual report of widening “source country diversity” and lists (but does not rank) its top three sources of international students as China, Malaysia, and Singapore.<sup>57</sup> The University of Queensland’s chancellor Peter Varghese, however, has stated that “Chinese students will account for close to half of all international students in 2018”.<sup>58</sup> He has been forthright in warning about the financial risk, suggesting that Australian universities redirect excess China earnings into long-term future funds or endowments.<sup>59</sup> This suggests that UQ, like Melbourne, ANU, Sydney, UNSW, UTS, and Adelaide, may have a ‘China problem’ lurking in fiscal over-reliance on Chinese international students.

# International comparisons reveal the excessiveness of Australian universities' China exposure

As the difficulty of establishing the facts about international student cohorts demonstrates, Australian universities are remarkably vague about their China exposure. By contrast, most large American universities provide exact breakdowns for numbers of international students by country, while international student numbers by country and field of study are available online for UK universities from the *Complete University Guide*. The US university with the largest number of Chinese students is the University of Illinois at Urbana-Champaign, where 5725 Chinese students accounted for 54.1% of international students and 11.6% of all students in 2018.<sup>60</sup> The University of Illinois publishes these figures in a detailed 52-page annual international student report that provides international student counts by country and region, gender, and field of study for every country and region of the world.

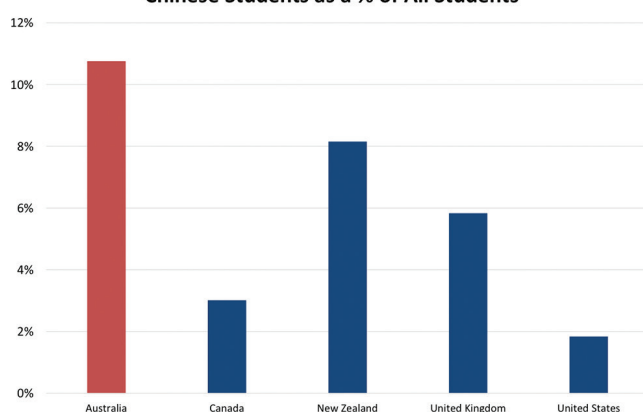
Only two major American universities have more than 30% international students: the Florida Institute of Technology and New York's New School, tied at 32%.<sup>61</sup> Aside from these two somewhat atypical private universities, no other major American university comes in at more than 24%.<sup>62</sup> No public university in the United States enrolls more than 20% international students, and only one (the University of California at San Diego) has more than 17%.<sup>63</sup> If Australian public universities were included in an international student league table alongside US public universities, the Australians would fill all 20 slots at the top of the table and 31 of the top 33. Not only do nearly all American universities have far lower international student enrolment ratios than those that prevail in Australia, but American universities' China concentration is slightly lower as well, with Chinese students accounting for 30% of international student commencements in the US in 2016, compared to 43% in Australia.<sup>64</sup>

Figure 7 draws together indicative statistics from a variety of sources to give a rough idea of the scale of Australia's international and China exposure. Further details are reported in Table 7 in the Appendix. Different definitions and reference years are used in each country, so these numbers are not strictly comparable, but they are roughly indicative. In Canada, international students accounted for 12.0% of post-secondary students in 2016-2017.<sup>65</sup> India is the largest source country, with 30.2% of enrolments, followed by China with 25.0%.<sup>66</sup> In New Zealand, international students accounted for 16% of 2017 enrolments at the country's eight universities.<sup>67</sup> Chinese students accounted for 50.9% of this total.<sup>68</sup> In the United Kingdom, international students accounted for 25.1% of higher education students in 2016-2017.<sup>69</sup> Chinese students accounted for 23.2% of international students.<sup>70</sup>

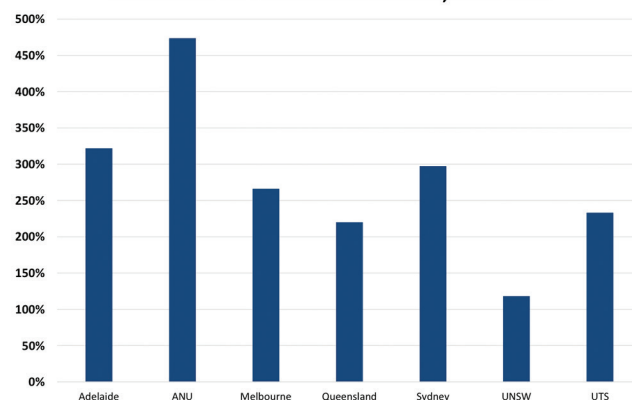
As these statistics make clear, Australian universities' China dependence is an extreme outlier among peer countries like the United States, the United Kingdom, and Canada, and is high even when compared to New Zealand. Dependence on Chinese students in particular seems extraordinarily large at Melbourne (though exact figures are not available), ANU, Sydney, UNSW, UTS, Adelaide, and perhaps UQ. These seven universities appear to be more dependent on fee-paying Chinese students than just about any other universities in the English-speaking world. It is presumably no coincidence that these are the very universities that have led Australia's march up the global university rankings. It thus makes sense to focus in detail on these seven universities as emblematic of Australian universities' China exposure.

All seven of these focus universities have had rapidly increasing international enrolments since 2001, as reported in Figure 8 using DET data.<sup>71</sup> Detailed annual data are provided in Table 8 (Appendix). Expanding

**Figure 7**  
Chinese Students as a % of All Students



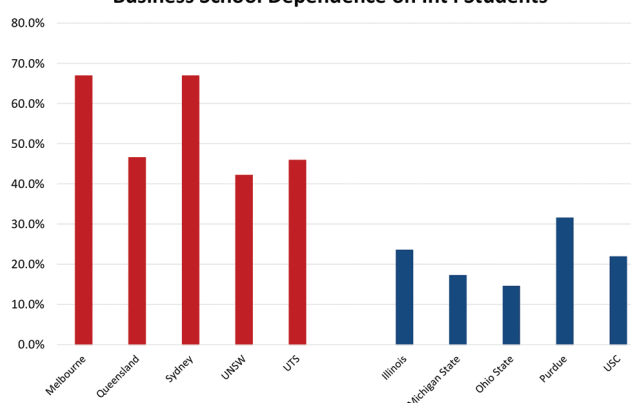
**Figure 8**  
Cumulative Int'l Enrollment Growth, 2001-2017



international enrolment was part of a broader growth strategy at ANU, where international enrolment increased by 473% from a low base, while domestic enrolments increased by 80%. The ANU has now declared an end to its enrolment growth, leaving open the question of whether future international enrolment gains might come at the expense of domestic spaces.<sup>72</sup> At the other six focus universities highlighted in Table 8 (Appendix), domestic student growth has been relatively modest in the 16 years since 2001, with domestic student growth ranging from a low of 22% at UQ to a high of 34% at Melbourne. International student numbers, however, have skyrocketed, more than doubling at UNSW and nearly quadrupling at Sydney.

Much of the growth in international student numbers at the seven focus universities has been directed into business education. At least four (and probably six) currently have more international students in their business schools than they had total international students in 2001.<sup>73</sup> As a result of this phenomenal growth in international business student numbers, international students outnumber domestic ones at all of the master's programs in business for which data are available at those universities, as depicted in Figure 9, which has been compiled using data from the international accrediting body AACSB.<sup>74</sup> Comparative data are provided for the business schools of the five US universities with the largest number of Chinese students.<sup>75</sup> Additional details are provided in Table 9 in the Appendix. All five Australian focus universities for which data are available draw more than 40% of their entire business student bodies from overseas; for Melbourne and Sydney, the figure is 66.9%. The American universities do not come close to these levels.

**Figure 9**  
**Business School Dependence on Int'l Students**



When more than half of the students in a particular program are drawn from overseas (or, in the case of Sydney's master's programs in business, 87.2%), the whole idea of international education as an immersive cultural experience breaks down. Although none of the Australian programs publishes data about the percentage of their international students who hail from China, a recent report claims it is large.<sup>76</sup> There have even been press reports about Chinese students conducting their tutorial and team meetings in Chinese rather than English.<sup>77</sup> It has also been reported in the press that some Chinese students even complete entire Australian degrees without ever mastering spoken English.<sup>78</sup> The international student statistics reported in Figure 9 are, by any standard, extreme.

## Australian universities routinely compromise standards to accommodate international students

The extraordinarily high levels of international students at Australian universities raise many questions, including questions about how well universities are performing their core academic missions. The fact that international students pay much higher fees than domestic ones for the same courses strongly incentivises universities to reduce admissions and academic standards to accommodate international students. Alternative admissions routes that allow international students to circumvent English language requirements and the widespread use of commission-based brokers invite willful negligence and outright abuse, as reported in the ABC *Four Corners* program 'Cash Cows'.<sup>79</sup> This program reported on issues at less-prestigious universities like Central

Queensland, Southern Cross and Murdoch, but similar issues exist even at Australia's most highly-respected institutions.

For example, the University of Sydney offers 'preparatory programs' that allow international students to circumvent the usual admissions criteria.<sup>80</sup> These programs are run by Taylor College, which is a 50-50 joint venture between the university and the for-profit education provider Study Group. The standard program costs \$34,300 plus fees for a 40-week course.<sup>81</sup> The University of Sydney has a university-wide minimum score of 6.5 on the International English Language Testing System (IELTS) test for direct admission, but its most popular degree programs require a minimum of 7.0 ("good

user" with "operational command of the language").<sup>82</sup> However, students can gain admittance through a Taylor College preparatory program with a much lower minimum IELTS score of 5.0 ("modest user" with "partial command of the language").<sup>83</sup> Taylor College advertises that "95% of USFP [University of Sydney Foundation Program] students received offers to the University of Sydney", which suggests that nearly all students who request an offer, receive one.<sup>84</sup>

The University of Sydney clearly telegraphs that the Taylor College programs are intended as a paid workaround for international students who do not meet the university's admissions standards when it states in large-font text on its website:<sup>85</sup>

If you're unable to meet the minimum academic requirements for undergraduate study, the University of Sydney Preparation Programs could be your ticket to study with us.

The ANU offers a similar alternative pathway for international students that allows them to gain admission with a IELTS score of just 4.0 ("not able to use complex language") on individual bands. The ANU programs are also administered by Study Group, trading under the potentially confusing name 'ANU College', which is especially troubling because ANU itself is organised into seven academic colleges. The ANU website advertises that "No additional IELTS is required to progress to the ... ANU Access English course", and the ANU Access English course advertises that students can progress to study at ANU with an overall grade of just 60% in its program.<sup>86</sup> As a result, by paying a minimum of \$10,650 plus fees, and committing to a minimum of 20 weeks of study (the period and fees could be higher if the student is starting from a low base competency), an international student who meets all of the ANU's admissions requirements except a good command of English can gain admission to ANU without ever certifying an adequate command of the language through external testing.<sup>87</sup>

Adelaide's English-language foundation programs are administered by Kaplan Higher Education, trading under the similarly confusing name 'University of Adelaide College'. It advertises that, due to their "unique partnership with the University of Adelaide, all our foundation studies graduates are guaranteed entry to their choice of the many degrees on offer."<sup>88</sup>

Other elite Australian universities offer similar programs. The UNSW Foundation Studies website leaves international students in no doubt that:<sup>89</sup>

International students who do not satisfy the entry requirements for an undergraduate degree can undertake a Foundation Studies program. You are guaranteed a place in your chosen undergraduate degree at UNSW on completion.

The University of Queensland offers international students with low IELTS scores 'package offers' that "include English language studies at UQ-ICTE and a conditional offer of admission to a UQ program."<sup>90</sup> The University of Melbourne website reassures international students that "If you don't meet requirements there are other pathways for entry to Melbourne undergraduate degrees."<sup>91</sup> At UTS, international students can make up for low IELTS results by completing courses at UTS Insearch (a 100% controlled external company) or even at partner institutions in six countries overseas (China, Indonesia, South Korea, Vietnam, Myanmar, and Nepal).<sup>92</sup> Many other Australian universities also offer special pathway programs for international students with a poor command of English.

On its face, it may seem like there is nothing inappropriate about Australian universities offering supplemental preparatory programs to international students, or in making money by doing so. After all, many of the same universities offer preparatory programs for underprepared domestic students as well. But domestic programs are usually targeted at students who have faced specific challenges — such as poverty, homelessness, geographic isolation, or Aboriginal or Torres Strait Islander disadvantage. They are not typically viewed or marketed as alternative pathways for ordinary students who simply do not meet the entry requirements. By prominently marketing alternative pathways to underprepared international students, Australian universities are, in effect, taking actions that reduce their financial risks by increasing their standards risks. A standards-first approach to international student admissions would apply the same criteria to the graduates of paid preparatory programs as they do to all other applicants.

Further evidence that Australian universities apply particularly low admissions standards to Chinese students comes from Chinese *Gaokao* examination scores. Both the University of Sydney in Australia and the University of Birmingham in the UK admit Chinese students on the basis of their domestic Chinese National College Entrance Examination (*Gaokao*) scores, both being the first in their respective countries to do so. But despite the fact that Sydney ranks substantially higher than Birmingham in all three major global ranking systems, Sydney's *Gaokao* cutoffs are substantially lower than Birmingham's. Birmingham generally requires a minimum *Gaokao* result of 80% for direct admission, whereas Sydney generally requires 70% for ordinary degrees, 75% for advanced degrees, and 80% only for its flagship Dalrymple Scholars program.<sup>93</sup> The fact that a Chinese student who meets the minimum admission threshold of a mid-ranked UK university would be considered a 'high-achieving student' at the University of Sydney should give Australian universities pause for thought.<sup>94</sup>

# Political factors, competitive factors, and macroeconomic factors could adversely affect Chinese enrolments at Australian universities

The most serious risks posed by over-reliance on international students at Australia's universities — and especially at the seven focus universities of Melbourne, ANU, Sydney, UNSW, UTS, Adelaide, and Queensland — are not academic, however, but financial. Unlike academic risk, financial risk management is not a university core competency, and the financial risks being run by these seven universities (and probably several others) are profound. Even Australia's chief education oversight body, the Tertiary Education Quality and Standards Agency (TEQSA), seems not to recognise these risks: TEQSA identifies only one Australian university as at "high risk" for financial sustainability, and three more as "moderate risk", while making no mention of Chinese or international student concentration in a 66-page "risk findings" report.<sup>95</sup> Yet the financial risks being run by many Australian universities are more extreme than the risks being run by comparable US universities that engage more publicly with the questions raised by their reliance on Chinese student enrolments. And the risks being run in Australia are likely to prove very difficult to manage using the ordinary tools at the disposal of university administrations.

In the United States, the University of Illinois enrolls more Chinese students than any other university. Despite the fact that its overall international exposure would put it in the bottom half of Table 6 in the Appendix, it has taken out a US\$60 million insurance policy against "a significant drop in tuition fee revenue from Chinese students" at its schools of business and engineering.<sup>96</sup> A payout will be triggered in the event of an 18.5% or greater fall in Chinese student revenue that occurs as a result of an (undisclosed) "specific set of identifiable events."<sup>97</sup> In fact, the university recently reported a minor year-on-year decline of 120 students (from 5845 Chinese students down to 5725), which it attributed to stricter visa requirements.<sup>98</sup> The widely reported murder of a Chinese student at the university may also have played a role.<sup>99</sup> The university mentions visa restrictions and pandemics as hypothetical policy triggers, and if the policy is really so restrictive, that would explain its relatively low price tag of US\$424,000 per year over three years.<sup>100</sup> Other much more likely risk factors would be harder to insure — and these may be more threatening to Australian institutions.

Australia's China-dependent universities face several risk factors — many of them unique to Australia — that are likely to prove uninsurable. Insurance policies are generally written so as to be triggered by well-defined external events, but the factors most likely to cause a large and sudden decline in the numbers of

Chinese students attending Australian universities are either diffuse and difficult to measure (like changes in broad immigration policy) or prohibitively expensive to insure against (like currency fluctuations). Nine potential risk factors that could adversely affect Chinese student numbers are detailed below, grouped under three headings: political factors, competitive factors, and macroeconomic factors. By far the most serious (from a financial perspective) are the macroeconomic factors that could lead to a sudden and severe fall in Chinese enrolments at Australian universities.

- Political factors
  - Potential political confrontations between Australia and China<sup>101</sup>
  - Chinese concerns about the safety of Chinese students in Australia<sup>102</sup>
  - Changes in Australian immigration policy<sup>103</sup>
- Competitive factors
  - Chinese concerns about the value of an international degree<sup>104</sup>
  - The rising quality of Chinese domestic degrees<sup>105</sup>
  - Higher admissions standards, particularly English language standards<sup>106</sup>
- Macroeconomic factors
  - The slowing of China's rate of economic growth<sup>107</sup>
  - The future convertibility of the Chinese Yuan<sup>108</sup>
  - Fluctuations in the value of the Australian Dollar<sup>109</sup>

## 5.1. Political factors — high likelihood / moderate impact

Political factors that could interrupt the flow of Chinese students to Australia include adverse international relations, Chinese government warnings about study in Australia, and shifts in Australian immigration policies. The key precedent for the effect of an international political confrontation is China's ban on package tours to South Korea, which was implemented in response to the latter's deployment of a US missile system in 2017.<sup>110</sup> But Chinese student numbers in South Korea continued to grow after the package tour ban — though perhaps more slowly than they otherwise might have.<sup>111</sup> Regarding the real or perceived safety of Chinese students in Australia, Chinese consular warnings have in fact been in place since 2017, with no reported effect on universities' recruitment efforts.<sup>112</sup>

Immigration policy is another political factor that could affect the attractiveness of Australia as a destination for international students, especially for students from poorer countries like China. In 2010, Australia's Labor government modestly tightened visa policies in ways that made it more difficult for university students to progress toward permanent residency, with the result that "the higher education sector was alarmed by the fall in international student numbers that was experienced in the wake of ... these reforms", according to a 2016 Parliamentary research paper.<sup>113</sup> International student enrolment growth across the higher education sector as a whole stalled between 2010 and 2013, only picking up again after the Coalition loosened policy again in late 2013.<sup>114</sup> The 2011-2012 stall is clearly visible in the international enrolment numbers for the seven focus universities reported in Table 8 in the Appendix, though it may have been due more to currency than to immigration issues, as argued below.

Immigration is a perennial issue in Australian politics, with the Liberal Party's 2019 election platform promising to freeze immigration levels for the next term of government.<sup>115</sup> The link between immigration policy and international student enrolment is not unique to Australia, but international comparisons are difficult to make because they are clouded by differences in immigration regimes. In the United Kingdom and the United States, there is no clear route from a student visa to permanent residency; so the link between immigration policy and international student demand is less direct than in Australia. At the other extreme, Canada has a formal educational route toward work permission, permanent residence, and citizenship.<sup>116</sup> Roughly 60% of all international students in Canada intend to apply for permanent residence.<sup>117</sup> Considering that 18% of international students in Canada hail from western Europe and the United States, the proportion of the remainder who intend to stay is presumably even higher.<sup>118</sup>

Australia sits between these two poles. The potential for small policy shifts to have large effects in Australia is reflected in the fact that the number of permanent migration places granted directly to international students fell precipitously from 30,170 in 2012-2013 to just 13,183 in 2017-2018.<sup>119</sup> Yet the fact that the student route to long-term residency in Australia is informal, and traces through many different pathways, makes it difficult to quantify with any certainty. The number of permanent migrants who once were in Australia on student visas — and whose student visas may have helped their migration cases — is almost certainly much larger than official statistics suggest.<sup>120</sup> A clear and sudden disruption in routes to permanent migration might dramatically reduce the flow of fee-paying international students, including students from China, but the likely effects of the kinds of modest changes Australian governments have made in the past are complex and unpredictable.

Although political factors may affect the calculations of some Chinese students considering studying in

Australia, they seem unlikely to be determinative. In particular, it seems unlikely that Chinese students already in Australia would withdraw due to political factors. Political factors thus are not likely to cause sudden or catastrophic declines in the number of Chinese international students coming to Australia. Their effect will likely be more muted, difficult to isolate, and thus difficult to measure and insure.

## 5.2. Competitive factors — low likelihood / low impact

Australian universities exude confidence about the quality of their degrees, but the perceived value of an Australian degree — whether compared to another international degree or a domestic Chinese degree — is necessarily subjective. Moreover, universities always face the dilemma that efforts to raise the perceived quality of their degrees by tightening admissions standards have the obvious effect of reducing the number of students who are eligible for admission. But in any case there is little evidence that educational quality plays much of a role in Chinese students' decisions to study in Australia.

A systematic review of 68 academic journal articles on Chinese students' motivations for studying in Australia listed reputation as only one of nine major decision factors.<sup>121</sup> The study, conducted by three UK-based graduate students (Keyu Zhai, Xing Gao, and Geng Wang), identified the imbalance "between high costs of studying in Australia and the low quality of teaching and learning" as "the main problem for Chinese students", but concluded that "the dilemma does not affect the enthusiastic pursuit of Australian higher education."<sup>122</sup> Reviewing both the English-language and Chinese-language literature on the topic, the authors concluded that the symbolic capital of studying abroad was more important than the actual quality of the degree, and that the Chinese labour market benefits of an international degree continued to drive students toward Australia.<sup>123</sup>

Questions are regularly raised about the job prospects of internationally-educated students who return to China, but in reality the Chinese graduate job market has recently become more challenging for all graduates, overseas and domestic.<sup>124</sup> Chinese graduates with international degrees continue to command a premium on the domestic job market.<sup>125</sup> The rising prestige of domestic Chinese degrees as top Chinese universities charge up the global rankings is unlikely to affect this differentiating factor. Admission to top Chinese universities is strictly limited and extremely competitive, so no matter how much more prestigious they become, they will always represent a tiny proportion of each year's total student intake.

It is possible, however, that Australian universities could drive away Chinese applicants by raising admissions standards in an effort to address perceived laxness. Recent press coverage in Australia has highlighted low admissions standards — particularly English language standards — for international

students. The ABC has recently reported on potentially compromised admissions standards at the University of Tasmania, Southern Cross University, and Murdoch University, while the *Sydney Morning Herald* has reported on potentially compromised standards at UNSW.<sup>126</sup> Two ABC *Four Corners* programs have pushed academic and admissions standard for international students to the top of the national news agenda: the 6 May 2019 program 'Cash Cows', which focused on admissions practices, and the 20 April 2015 program 'Degrees of Deception', which focused on academic standards.<sup>127</sup> The government has recently drafted legislation to criminalise contract cheating services, with press reports focusing on services marketed specifically to Chinese students via the social networking app WeChat.<sup>128</sup>

Although it is possible that quality issues coming from either side (worries about low standards or concerns about increased standards) could have an effect on Chinese student enrolments at Australian universities, any such effects are likely to be diffuse and unmeasurable. If political pressures arising from reports such as the recent *Four Corners* programs result in a substantial tightening of admissions requirements and academic standards at Australian universities, it will become correspondingly more difficult to fill international student places. But there seems only a slight prospect that a precipitous fall in Chinese or other international student numbers would result from the kinds of minor changes that Australian universities have made in the past.

### 5.3. Macroeconomic factors — moderate likelihood / high impact

Macroeconomic factors probably have the highest probability of prompting a sudden fall in Chinese student enrolments at Australian universities that could be so severe as to materially affect their fiscal health. Macroeconomic stresses like recessions, currency restrictions, and adverse exchange rate movements are routine occurrences that are certain to happen again in the future. And among the financial risk factors considered in this report, macroeconomic factors are those with the greatest potential to have a sudden, large-scale impact on outbound Chinese student flows.

At the broadest level, four decades of rapid economic growth in China seem to have come to an end. The Chinese government reports that economic growth remains above 6% per year, but few international experts take this figure at face value.<sup>129</sup> Slower economic growth means slower growth in the number of Chinese families who can afford to send their children to Australian universities. The boom in outbound Chinese students between 2000 and 2015 was driven both by overall economic growth and by threshold effects: during that period, China went from

being a country where virtually no-one could afford an international education to being a country where many middle-class professionals could afford it. Now that China has progressed from being a low-income country to being an upper-middle-income country, future increases in outbound student numbers are likely to be more muted. As shown in Table 3 (Appendix), China's number of outbound students to all countries grew by less than 0.4% in 2017, the lowest level ever recorded.

It is likely that the growth phase for Chinese outbound international students has now largely come to an end, both for Australia and for its competitors in the international education marketplace. A major recession could throw outbound student numbers into reverse, but both the probability of a major recession and its likely effect on international student flows are difficult to quantify. Perhaps the best historical comparison for the major recession scenario is the Asian Financial Crisis of 1997-1999. Among the countries represented in Table 3 (Appendix), South Korea and Malaysia were all severely affected. South Korea responded by floating its currency, which had previously been tightly controlled. Their numbers of international student numbers seem to have remained stable, probably because they had previously been limited more by access to foreign currency than by the level of the exchange rate. Malaysia, by contrast, responded to the crisis by introducing partial capital controls on its currency. As it became more difficult for Malaysians to access foreign currency, the number of outbound international students fell by roughly a quarter.

These experiences suggest the biggest macroeconomic threat to outbound Chinese international student numbers may not be a major recession as such, but the government's reaction to it. The Chinese government already imposes substantial controls on its people's ability to transfer money out of China, with special rules designed to cover educational expenses. If the Chinese government, faced with a currency crisis, were to suspend the convertibility of the yuan for educational purposes, this could result in a severe decline in Chinese student numbers at Australian (and other international) universities. It seems unlikely the Chinese government would take such a precipitate action, but there are no practical limits on its power to do so. The current Chinese leadership has no experience of dealing with a recession; it is impossible to predict what actions it might take, especially if faced with challenges to its authority resulting from economic distress.

More commonplace currency events could also have a substantial impact on the number of Chinese students studying in Australia. In what must have seemed like a bonanza for Chinese students (and their parents), in the second half of 2008, the Australian dollar lost one-third of its value relative to the Chinese yuan.

For prospective students deciding whether or not to start study in the 2009 school year, this represented the equivalent of a 33% tuition discount. But just six months later, the bonanza was over, as the Australian dollar bounced back. By the second half of 2011, the Australian dollar was at its highest level of the new millennium, two-thirds above its 2008-2009 low. It is surely no coincidence that Chinese student commencements at Australian universities stalled, as currency effects reinforced the impact of a tightening immigration policy discussed earlier.

Today, the Australian dollar is hovering near its January 2009 all-time low against the Chinese yuan. Following years of pursuing a 'strong yuan' policy (as China successfully lobbied to have its currency included in the International Monetary Fund's benchmark currency basket), the Chinese government has recently allowed the yuan to depreciate. The US-China 'trade war' has placed severe pressure on Chinese exports, which could be alleviated by a weakening in the yuan. Meanwhile, Australia's free-floating currency responds mainly to market dynamics and Reserve Bank interest rates. With the Reserve Bank cash rate target now (at the time of writing in July 2019) standing at a record low of 1%, there is not much room for further reductions. In the very reasonable 2020 scenario that the People's Bank of

China devalues the yuan while at the same time the Reserve Bank raises interest rates, the Australian dollar could skyrocket vis-a-vis the Chinese yuan. The yuan price of an Australian degree would rise dramatically as a result.

It is virtually impossible to quantify the probabilities and scales of the effect that macroeconomic factors could have on Chinese enrolments at Australian universities, and thus it would be very difficult to insure against them. The degree to which they affect enrolments at all would depend heavily on the Chinese government's actions. In free and democratic countries, government policies are widely discussed and transparently executed. Neither condition applies in China. This introduces a fundamental instability into Chinese enrolments at Australian universities that seems not to have been recognised in university planning or regulatory oversight. Now that China's period of rapid economic growth has come to an end and the United States has started to impose serious pressure on China's export economy, the possibility that a macroeconomic event might prompt a sudden and severe fall in outbound Chinese student numbers is no longer located in some remote future. It is now an immediate (though not necessarily imminent) threat that should be addressed sooner rather than later.

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## The financial risks of over-reliance on China are very large and cannot be mitigated by diversification

The rapid growth in Chinese student numbers slowed dramatically in 2018 and has now come to a virtual standstill.<sup>130</sup> The CEO of the International Education Association of Australia, Phil Honeywood, claims that growth can be restored by reducing "bilateral tensions" and getting "high-level government-to-government relations back on track."<sup>131</sup> Yet the flatlining of Chinese enrolments in Australia mirrors trends in the United States (also frequently attributed to bilateral tensions) and Canada.<sup>132</sup> Among major international education providers, only the United Kingdom attracted rapidly growing numbers of Chinese students in 2017-2018 — but that comes after three years of flat figures so it can hardly be taken as a trend.<sup>133</sup> Considering that global outbound Chinese student numbers have flatlined since 2016,

any further increase in Chinese international student enrolments must come from increasing market share, not from organic market growth.

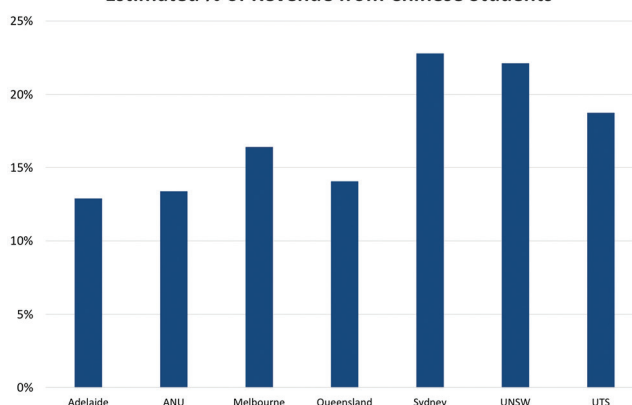
Although there may be minor shifts in market share in the future, it seems safe to say that Australian universities have now reached 'China max'. But is the current 'China max' actually safe? That question can only begin to be answered by estimating the actual revenues Australian universities generate from their Chinese students. Unfortunately, Australia's universities (and their regulators) do not make such figures available. Indeed, they make it very difficult for the public to estimate universities' China exposures, but it is possible to derive approximate figures by combining publicly available data from multiple sources.

Figure 10 depicts best estimates of 2017 Chinese student fee revenue for the seven focus universities of this report: Melbourne, ANU, Sydney, UNSW, UTS, Adelaide, and Queensland. Details of the calculations underlying these estimates are reported in Table 10 (Appendix). The estimates for the three New South Wales universities are based on actual data from press reports, the NSW Audit Office, and the Department of Education and Training, and should thus be considered fairly accurate. The estimates for Adelaide and ANU assume these universities generate 9% higher average revenue for Chinese students than for other international students, based on the average differential observed in NSW. These figures are thus subject to a modest level of uncertainty. In the absence of firm data on Chinese student numbers for Queensland, and the complete lack of such data for Melbourne, it has been further assumed that Chinese students account for roughly 50% of all international students at these two universities. This assumption introduces much greater uncertainty into the estimates for Queensland and Melbourne, particularly the latter.

The University of Sydney leads the country by generating more than half a billion dollars in 2017 from Chinese student course fees, which account for approximately 23% of its total revenues of over two billion dollars. The other NSW focus universities are not far behind, with UNSW generating 22% of its revenues from Chinese students and UTS coming in third with 19%. The Chinese student revenue estimates for these three universities are all based on published data. The other four focus universities likely generate between 13% and 16% of their total revenues from Chinese student course fees. These figures likely understate the seven focus universities' true China exposures, since they also generate substantial non-course revenue from Chinese students.

At these levels of exposure, even small percentage declines in Chinese student numbers could induce significant financial hardship as universities struggle to meet the fixed costs of infrastructure and permanent staff salaries in the midst of a revenue shortfall. Large percentage declines could be catastrophic. A 25% fall in Chinese student enrolment would likely hit annual revenues (at 2017 levels) by more than \$100 million at each of Sydney, UNSW, and (probably) Melbourne. Across the seven focus universities as a whole, the revenue decline would be in the order of half a billion dollars. A 50% fall — which is plausible if the Chinese government were to impose strict currency controls — would yield a billion-dollar revenue hit. Such scenarios are not purely hypothetical. As noted above, Malaysia's outbound student numbers fell by roughly a quarter when the country introduced capital controls in the wake of the Asian Financial Crisis, despite the fact that these did not directly prohibit families from paying overseas university tuition.

**Figure 10**  
**Estimated % of Revenue from Chinese Students**



Particularly noteworthy is the fact that, at least at the three NSW focus universities, Chinese students tend to generate more revenue per student than other international students. In 2017, the three NSW universities generated approximately 9% higher revenue per student for Chinese students than for other international students.<sup>134</sup> Moreover, these comparisons pit Chinese student revenues against revenues from all other international students, not just students from developing Asia. It stands to reason that a revenue analysis comparing Chinese students to those from developing Asian countries like India and Nepal — the next largest source countries for Australian international university students — would produce even more lopsided results. This is important, because India figures prominently in Australian universities' plans for future international student expansion.

The most obvious way for Australian universities to reduce their China exposure is for them to admit fewer international students, including fewer Chinese students. This could be done by raising standards to select only the best Chinese students, and it would bring Australian universities into closer alignment with global norms. The admissions standards issues highlighted earlier suggest that Australian universities may already be dipping too far into the pool of Chinese students who can afford to pursue (but might not be prepared to undertake) university studies in Australia. Any decision to scale back Chinese student numbers by tightening admissions standards would necessarily mean learning to live with lower international student fee revenues. So far, Australian universities have shown themselves unwilling or unable to take this step. They (and their regulators) routinely talk instead about continuing to expand international student numbers by 'diversifying' the source countries from which they recruit international students, with a focus on recruiting more students from South and Southeast Asia.

Such diversification strategies are doomed to fail. The countries of South and Southeast Asia are either too small or too poor to contribute the desired numbers of fee-paying students. In Southeast Asia, Singapore is very rich, but the entire country is the size of a single second-tier Chinese city. Neighbouring Malaysia has roughly the same income levels as China, but still only 2.2% of the population of China. Indonesia has less than 40% the income per capita of China, with less than 20% of the population. In any case, Australia seems to have already tapped out the potential ASEAN international education market, for which it also faces stiff competition from highly-ranked universities in Singapore.<sup>135</sup> South Asia offers no better prospects. India is growing rapidly, but is still very poor, and Nepal (Australia's third largest source of international students) is even poorer. In these conditions, diversifying from Chinese to South and Southeast Asian students while maintaining numbers and quality is simply not possible.

A comparative analysis of income levels in India and China makes this very clear. China has approximately 100 million adults with at least \$25,000 a year in annual income, compared with approximately 12 million in India.<sup>136</sup> Choosing a higher income threshold makes no difference to the relative sizes of the markets. There are around 24 million adults in China with incomes over \$50,000 a year, compared to just 3 million for India.<sup>137</sup> Either way, the potential Chinese international education market is roughly eight times the size of the Indian market, based on potential to pay. In fact, every province of China is richer, in terms of GDP per capita, than every state or territory of India with the exception Goa, and even Goa (population 1.5 million) is only slightly richer than the poorest province of China, Gansu.<sup>138</sup> From a purely financial perspective, Australian universities might as well recruit international students from the poor provinces of western China as set up liaison offices in Delhi and Mumbai.

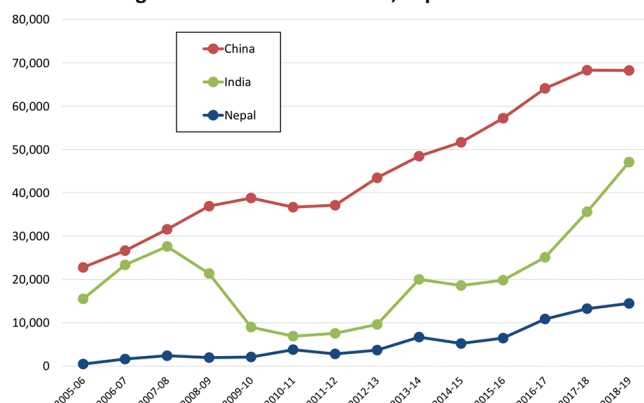
Notwithstanding these difficulties, Australian universities have started recruiting very aggressively in India. Figure 11 charts the number of new higher

education visas granted every fiscal year since 2005-2006, by country, using data from the Department of Home Affairs.<sup>139</sup> Actual numbers are reported in Table 11 (Appendix). Visa grants are a leading indicator for future enrolments. It is likely that higher education visa grants to Indian citizens in 2018-2019 will reach two-thirds of the number granted to Chinese citizens. New higher education visa grants for Indian citizens rose 42% in 2017-2018 and are on track to rise a further 35% in 2018-2019. Meanwhile, the 2018-2019 rejection rates for Indian and Nepalese higher education visa lodgments (12.2% and 8.0%, respectively) are many times higher than the rate for Chinese lodgments (1.0%).<sup>140</sup> The explosive growth in Indian higher education student visa grants reflects the fact that multiple China-dependent universities in Australia have simultaneously identified India as a potential alternative source of students they can tap into as a means of diversifying their international student populations. This crowd behavior shows signs of a bubble in the making, as each university calculates that India offers a sufficient reservoir of appropriate prospective students to meet its own needs, without accounting for the fact that its competitors are pursuing the same strategy.

Australian universities are so eager to demonstrate international student diversity that they have even started offering scholarships that are specifically targeted at Indian students. When the University of Sydney announced its first-ever scholarships for students from a specific country, that country was India.<sup>141</sup> A sister program at Sydney's business school is available to students from "non-traditional markets across Asia", specifically: "India, Indonesia, Thailand, Malaysia, Singapore, Bangladesh, the Philippines, Vietnam and South Korea."<sup>142</sup> Across town, UNSW has also announced targeted, India-only scholarship efforts.<sup>143</sup> At UTS, a similar program has been announced for students from India, Bangladesh, Pakistan, Nepal, and Sri Lanka.<sup>144</sup> These scholarship efforts should come as no surprise, given that the NSW Audit Office has recommended that "NSW universities should assess their student market concentration risk where they rely heavily on students from a single country of origin."<sup>145</sup>

These NSW universities seem to be ignoring the fact that although subsidising scholarship students from India may reduce the concentration of Chinese students in their courses, it will do nothing to reduce their financial dependence on China. In fact, it will increase the proportion of their net income derived from China. The fact that they must offer scholarships in order to attract more students from India and other "non-traditional markets across Asia" underscores the reality that the number of families in the region who can afford to pay full fees for an Australian university degree is not large enough to support Australian universities' international student enrolment ambitions. These NSW universities may be able to lure the best Indian students away from other

**Figure 11**  
**Higher Education Visa Grants, Top 3 Countries**



less generous universities, but they cannot expand the pool of Indian families who can afford to educate their children in Australia.

Even if a sufficient number of financially-capable Indian international students could be recruited to diversify Australian universities' dependence on Chinese students, recruiting them would likely require Australian universities to reach deep down into the talent pool, reducing standards still further. This has been amply illustrated by the *Four Corners* 'Cash Cows' revelations at Murdoch university, where a

rapid expansion in Indian student recruitment has reportedly been accompanied by a dramatic rise in academic misconduct by students who are poorly prepared to succeed in academically demanding English-language programs.<sup>146</sup> Australian universities are also increasingly admitting international students from India and Nepal on the basis that they have previously studied in English, without requiring them to take English-language exams to verify their knowledge.<sup>147</sup> But studying for a local South Asian degree in English does not in reality fully prepare students to study in Australia.

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## Four steps to restore sanity in international student enrolments

To sum up, over the past two decades, international students in general, and Chinese students in particular, have indeed become the 'cash cows' of Australian universities. Seven leading Australian universities — Melbourne, ANU, Sydney, UNSW, UTS, Adelaide, and Queensland — seem to enrol extraordinary and unsustainably risky numbers of Chinese students. International comparisons demonstrate the excessiveness of the international and China exposure of Australia's universities in general and their business schools in particular. Political factors, competitive factors, and macroeconomic factors all have the potential to adversely affect these outsized Chinese enrolments, with macroeconomic factors like exchange rate uncertainty posing the greatest risks. The financial risks of over-reliance on China at the seven focus universities run into the hundreds of millions of dollars annually, and cannot be mitigated or diversified by greater recruitment in India, because India is still too poor to supply the necessary number of financially-capable, well-prepared students.

These problems are serious, two decades in the making, of a large magnitude, and very difficult to solve. They are also hiding in plain sight. It doesn't take a *Four Corners* program or a heavily-footnoted think tank report to establish that Australian universities have enrolled excessive numbers of international students. All it takes is a walk around campus and some basic common sense.

In order to address the challenges identified in this report, Australia's universities should, at a minimum, take the following four steps:

- (1) Follow US and UK best practice in transparently reporting detailed student numbers by country, level of study, and field of study.
- (2) Make, publish, and implement plans to reduce their reliance on international students to

manageable levels, with targets set both for the university as a whole and for individual programs.

- (3) Make, publish, and implement plans to reduce the proportion of international students hailing from any one country to manageable levels, with targets set both for the university as a whole and for individual programs.
- (4) Apply the same admissions standards to international students who pass through their income-generating preparatory programs as they do to students who apply for ordinary direct admission.

Taking each of these steps in order:

- (1) It should be obvious that Australian universities (and their regulators) should be more forthcoming with data about their international student enrolments. Universities are not private sector companies with commercial trade secrets to protect. They are publicly funded and publicly accountable bodies. If the universities will not voluntarily publish detailed international student data by country of origin, the Department of Education and Training should do so on their behalf. Greater openness will give government, civil society, and the electorate at large the opportunity to properly scrutinise Australia's universities and hold them accountable. The current climate of secrecy around international student numbers at Australian universities is wholly inappropriate and must end.
- (2) The levels of international students at Australian universities today are locally and internationally unprecedented, and should be brought down to more manageable levels. The determination of what constitutes a 'manageable level' of international students for a particular university and program should be left to universities and

their regulators, but they should make this determination in a transparent and public manner. Universities should make a frank evaluation of the number of international students they would admit to each of their programs in the pursuit of entirely educational goals, then work to achieve that number through their future admissions policies. In most Australian universities, such an evaluation, fairly conducted, would almost certainly lead to the conclusion that their ideal number of international students is much lower than their current level.

- (3) Dependence on international students from a single country for more than a few percent of total revenues poses an inappropriate level of financial risk for a public university. Yet the seven focus universities highlighted in Table 10 (Appendix) draw anywhere from 12% to 23% of their revenues from Chinese students. This is very risky. By comparison, the University of Illinois, which has taken out insurance against a sudden fall in Chinese student numbers, generates less than 2.5% of its total revenue from Chinese students.<sup>148</sup>

As an initial rule of thumb, Australian universities should certainly seek to limit their revenues drawn from any one foreign country to less than 5%, and seek all-cause insurance on the open market for any foreign country revenue concentrations above 2.5%, the level that prevails at the most financially exposed public university in the entire United States. Insuring their international student revenue exposures (and publicly disclosing the price) would quantify the levels of financial risk currently being taken and mitigate the impact of any future decline. An inability to insure their risk would reveal just how large those risks are.

- (4) It is obvious to everyone, including even China's *Global Times* newspaper, that university-sponsored preparatory programs function in practice as an admissions back door for international students who do not have sufficient command of the English language to make the most out of an

Australian university education.<sup>149</sup> The widespread provision that students who complete these programs need not re-sit their English language exams is ripe for abuse. Requiring students to re-sit external exams (rather than demonstrate their English proficiency through class grades) would hold students, teachers, universities, and external program administrators accountable for successful outcomes. The current system incentivises all four groups to compromise on standards, and must be changed.

Many leading Australian universities, including — but not limited to — the seven focus universities spotlighted in this report, must begin to wean themselves off their addiction to international students. However, the public statements of university vice chancellors and their trade body, Universities Australia, strongly suggest that Australian universities intend to continue expanding international student enrolments. If they succeed in this ambition, they are likely to undermine academic standards even further, while at the same time increasing the risk of severe fiscal distress.

Instead of relying on international students as their 'cash cows', Australian universities (and especially those listed in the top half of Table 6 in the Appendix) must pursue alternative approaches to meeting their fiscal goals. Obvious areas for fiscal improvement are the reduction of deadweight administrative overheads, the increased use of technological multipliers, and the pursuit of private philanthropy. These are all areas where the route to solvency runs primarily through domestic territory. Yet administrators have proved reluctant to cut bureaucracy, academics have proved reluctant to embrace technology, and philanthropists have proved reluctant to invest in universities that refuse to be held externally accountable. Reversing all of these tendencies would be hard work, and it is surely much easier simply to patch and mend while relying on international students to help pay the bills. But this hard work is necessary, and if peer universities in other countries can manage it, Australian universities can too.

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## Conclusions: Universities reap the rewards, but taxpayers underwrite the risks

The peak trade body for the Australian university sector is Universities Australia. Addressing the National Press Club earlier this year in her role as chair of Universities Australia, Monash University vice-chancellor Margaret Gardner boasted that Australian universities have been "incredibly successful" competitors in the international education

marketplace.<sup>150</sup> Responding to reporters' questions about the risks inherent in Australian universities relying on international students for such a large proportion of their revenues, she asked rhetorically whether "We should be wringing our hands and tearing our hair out?" and answered "No, we should be celebrating that success."<sup>151</sup>

Seen from the perspective of Australia's million-dollar vice chancellors (and, in the case of the University of Sydney, provosts), international student fee revenue must indeed seem like a godsend.<sup>152</sup> The boom in Chinese international student enrolments, particularly over the past five years, has coincided with a substantial improvement in the financial positions of Australian universities, which, according to the DET, has been "mostly driven by increased international student fees."<sup>153</sup> The most successful Australian universities have been able to plow international student revenue back into improved facilities, technology investments, and executive salaries. The total stock of plant and equipment at Australian universities increased by a massive 18.8% between 2013 and 2017.<sup>154</sup> At the trend-setting University of Sydney, "key management personnel compensation" rose 74% over the same period.<sup>155</sup>

Yet seen from another perspective, Professor Gardner's lack of hand-wringing and hair-tearing can appear worryingly unreflective. Some of Australia's public universities have taken enormous financial risks by borrowing in anticipation of future revenues, with system-wide borrowings rising by 67.7% between 2013 and 2017 at Sydney University, for example.<sup>156</sup> The expansion of staff numbers needed to serve their rapidly increasing student numbers represents an even larger liability; in moral terms if not necessarily in accounting terms. If international student enrolments suffer a sudden fall, Australian universities would be hard pressed to meet their financial and moral obligations to creditors and employees. In the event of a crisis, Australian governments may not have a legal obligation to step in to resolve future revenue shortfalls, but they would come under strong political pressure to do so.

Just like the world's leading banks in 2008, those Australian universities that host extraordinarily high numbers of international students (and by international standards, that means a third to half of all Australian universities) are probably 'too big to fail'. Their current prosperity is based on a flood of international student money — Chinese money in particular. But in their potential future penury they will still be responsible for educating Australia's own students. Australian governments are unlikely to stand by as their local universities go out of business. Thus, like the CEOs of the big banks in 2008, the vice chancellors of Australia's big universities are, in effect, betting with other people's money. If their bets on the international student market pay off, they will reap the accolades and justify their outsized pay packages. If their bets go sour, Australian taxpayers may in all likelihood pick up the tab.

The universities and their regulators routinely speak of 'diversifying' international enrolments to 'reduce reliance on any single market'. These are obvious

euphemisms for China risk. No ASX-listed mining company could get away with obfuscating major risks with such generic language. Yet compared to the China risk in the university sector, Australia's dependence on the Chinese market for its mining exports is not so serious. If Chinese mineral demand were to fall, minerals currently bound for China could be directed elsewhere. And although a global slump in mineral demand might affect the Australian economy, it would not lead to calls for government intervention to rescue loss-making miners.

Australia must come to terms with the true cost of higher education, whether in an orderly fashion before the storm or in a crisis environment after. More than a quarter of all university students in Australia hail from overseas — and that doesn't even include New Zealanders or other foreigners who hold Australian permanent residence. It is probable that more than one in ten onshore university students in Australia hails from the People's Republic of China.<sup>157</sup> The average Chinese student concentration of the entire Australian university sector is similar to that of the single most exposed public university in the entire United States — and that university has seen fit to take out insurance against a sudden drop in Chinese enrolments.<sup>158</sup> Despite much higher China exposures, the seven Australian universities spotlighted in this report do not seem to share that sense of urgency.

Over-reliance on Chinese students is a sector-wide risk, but it is especially concentrated at a small number of elite universities. The seven focus universities examined in this report (Melbourne, ANU, Sydney, UNSW, UTS, Adelaide, and Queensland) may rely twice as much — or more — on Chinese student revenue as the sector as a whole. They rely on Chinese students for between 12% and 23% of their total revenues, with the greatest concentration found at the three NSW universities on the list. Yet despite the fact that these universities collectively take in more than \$2 billion from Chinese students, neither they nor their regulators regularly report statistics on Chinese student numbers or revenue. Of the seven focus universities, only Adelaide reports international student numbers by countries of origin in its annual report, and even Adelaide only starting doing so this year. Considering the scale of their China exposures, the China risk obfuscation practiced by Australia's universities and their regulators is unconscionable. As public and publicly-accountable institutions, they should know and do better.

When it comes to paying the costs of education in Australia, relying on international students may someday mean relying on Australia's taxpayers. The figures presented in this report suggest that the day of reckoning may not be far off. Australia's taxpayers would be well-advised to take note now, and force a change of course before it is too late.

## Glossary and Appendix

**Domestic student** — In Australia, a student enrolled in a higher education, VET, school, ELICOS, or non-award program in Australia who is a citizen or permanent resident of either Australia or New Zealand, or a holder of an Australian humanitarian visa.

**Tertiary education** — In Australia, this includes universities, TAFEs, non-university for-profit tertiary education providers, and non-university not-for-profit tertiary education providers that offer Australian Qualifications Framework (AQF) certifications, from Certificates through to Doctorates.

**International student** — In Australia, this refers to any student who is not a domestic student and who is enrolled in a higher education, VET, school, ELICOS, or non-award program in Australia.

**Offshore student** — A student who is enrolled at an Australian institution outside Australia.

**Onshore student** — A student who is enrolled at an Australian institution in Australia.

**Higher education** — Internationally, this refers to education at International Standard Classification

of Education (ISCED) Level 5 and above, which is a slightly more restrictive category than 'higher education' as defined in Australia.<sup>159</sup>

**University sector** — In Australia, this refers to the 38 self-accrediting universities listed in Table A of the Higher Education Support Act 2003, plus the University of Notre Dame.

### Schematic illustration of Australia's education industry sectors

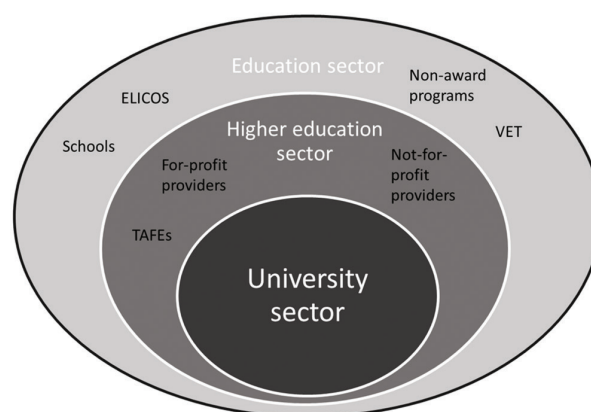


Table 1: International student enrolments in Australia, by sector, as reported for December of each year 2002-2018

Year	Higher education	VET	Schools	ELICOS	Non-award	All levels
2002	124,899	44,793	23,221	58,316	23,518	274,747
2003	146,398	45,987	26,946	62,992	25,613	307,936
2004	164,421	45,558	27,311	62,755	25,533	325,578
2005	178,255	50,982	25,088	65,625	25,658	345,608
2006	185,872	67,164	24,470	78,332	25,555	381,393
2007	192,559	102,381	26,758	103,655	26,774	452,127
2008	202,579	154,466	28,291	128,996	29,539	543,871
2009	226,129	208,305	27,348	139,269	30,938	631,989
2010	242,486	205,389	24,095	114,012	30,856	616,838
2011	241,429	169,624	20,723	94,955	27,568	554,299
2012	230,345	144,288	18,510	94,971	25,105	513,219
2013	230,723	134,261	17,739	113,944	27,920	524,587
2014	249,369	149,341	18,415	135,479	34,193	586,797
2015	271,664	168,301	20,524	144,153	37,589	642,231
2016	305,344	186,505	23,251	150,187	44,043	709,330
2017	349,152	216,123	25,664	155,212	49,979	796,130
2018	399,078	244,287	26,801	156,369	49,864	876,399

**Source:** Australian Government, Department of Education and Training, International Student Data 2018, 'Basic pivot table 2002 onwards', <https://internationaleducation.gov.au/research/International-Student-Data/Pages/InternationalStudentData2018.aspx>

Table 2: Top 25 destinations for international tertiary students in 2016-2017

Rank	Country	International students	International students per 100,000 population
1	United States	971,417	304
2	United Kingdom	432,001	653
3	Australia	381,202	1559
4	France	245,349	379
5	Germany	244,575	298
6	Russia	243,752	169
7	China	206,278	15
8	Canada	189,478	517
9	Japan	143,457	113
10	Malaysia	100,765	319
11	Italy	92,655	156
12	Netherlands	89,920	528
13	Turkey	87,903	109
14	Saudi Arabia	78,344	238
15	United Arab Emirates	77,463	824
16	Argentina	75,688	171
17	Austria	73,964	847
18	Republic of Korea	61,888	121
19	Belgium	61,102	535
20	Poland	54,734	143
21	Spain	53,409	115
22	Singapore	53,122	945
23	Ukraine	52,768	117
24	New Zealand	52,678	1119
25	Switzerland	51,911	612

**Source:** UNESCO Education dataset, February 2019 release, 'Inbound internationally mobile students by continent of origin / Total inbound internationally mobile students, both sexes (number)', plus related domestic student and population tables, <http://data.uis.unesco.org/Index.aspx?queryid=172>

**Note:** that student numbers do not exactly match Australian government statistics because the UNESCO figures are annual, while the DET figures are monthly. Note also that the UNESCO data are based on the number of 'tertiary education' students, not 'higher education' students as defined in Australia. This may account for the large discrepancy between UNESCO's figure for the Australian percent international (16.6%) and that reported by the Australian DET (28.5%). The difference is mainly to be found in the denominator; although UNESCO and DET report similar numbers of international students, UNESCO reports a much larger figure for the total number of students in Australia.

Table 3: Top 10 sources of outbound tertiary students in Asia, 1998-2017

Year	China	India	South Korea	Saudi Arabia	Vietnam
1998	134,407	59,033	62,010	10,139	7,768
1999	137,620	60,085	66,739	10,464	8,079
2000	154,600	66,713	69,494	10,820	9,130
2001	176,473	78,509	72,232	11,291	9,828
2002	230,398	103,746	84,074	12,352	12,152
2003	312,643	121,148	89,462	11,563	14,669
2004	360,674	135,266	94,962	11,879	16,440
2005	396,475	147,348	99,036	12,576	19,713
2006	403,172	147,608	104,509	13,875	23,005
2007	426,714	163,721	109,499	20,213	27,584
2008	458,100	186,033	117,533	24,930	36,076
2009	516,354	205,657	126,488	31,452	43,529
2010	567,979	210,649	126,187	42,696	46,831
2011	653,130	206,467	127,846	51,713	51,936
2012	698,401	191,779	121,198	64,611	53,835
2013	719,065	190,358	113,799	74,965	55,980
2014	770,516	215,611	110,024	84,193	59,468
2015	819,524	256,636	107,762	86,242	68,046
2016	866,072	301,406	104,992	90,178	82,159
2017	869,387	305,970	105,360	89,282	82,160

Year	Malaysia	Bangladesh	Pakistan	Iran	Nepal
1998	59,468	7,676	15,400	18,210	4,409
1999	54,777	8,049	15,853	17,980	4,444
2000	45,807	8,768	16,666	17,445	4,908
2001	44,719	10,275	17,290	17,149	5,328
2002	46,905	12,372	21,307	18,042	6,826
2003	49,294	16,100	22,505	19,290	7,606
2004	48,533	15,154	23,820	20,898	8,086
2005	47,491	15,091	24,615	23,362	9,727
2006	49,073	15,236	26,365	25,080	11,720
2007	52,566	16,494	28,499	29,541	16,192
2008	56,170	17,344	31,154	33,170	19,830
2009	59,769	20,041	35,027	39,735	24,897
2010	59,442	22,353	38,170	44,551	27,545
2011	59,706	23,138	39,939	50,401	29,640
2012	59,452	23,036	37,681	51,552	29,386
2013	59,844	37,243	40,334	49,457	32,167
2014	62,536	53,062	44,612	50,819	35,745
2015	64,767	55,990	48,554	51,134	40,560
2016	64,861	61,430	52,956	52,307	49,417
2017	64,187	55,787	52,297	50,392	49,451

**Source:** UNESCO Education dataset, February 2019 release, 'Outbound internationally mobile students by host region / Total outbound internationally mobile tertiary students studying abroad, all countries, both sexes (number)', <http://data.uis.unesco.org/Index.aspx?queryid=172>

Table 4: International student enrolments in Australia, by country of origin, December 2018

Country	Higher education	% by country	Other levels	% by country	Total	% by country
China	152,712	38.3%	103,184	21.6%	255,896	29.2%
India	72,050	18.1%	36,242	7.6%	108,292	12.4%
Nepal	28,279	7.1%	23,964	5.0%	52,243	6.0%
Vietnam	15,755	3.9%	14,234	3.0%	29,989	3.4%
Malaysia	13,992	3.5%	19,738	4.1%	33,730	3.8%
Pakistan	11,440	2.9%	5,226	1.1%	16,666	1.9%
Indonesia	9,883	2.5%	11,012	2.3%	20,895	2.4%
Sri Lanka	9,224	2.3%	3,816	0.8%	13,040	1.5%
Hong Kong	8,928	2.2%	7,797	1.6%	16,725	1.9%
Singapore	7,321	1.8%	1,138	0.2%	8,459	1.0%
Bangladesh	5,913	1.5%	1,290	0.3%	7,203	0.8%
Republic of Korea	5,116	1.3%	24,921	5.2%	30,037	3.4%
Philippines	4,183	1.0%	8,555	1.8%	12,738	1.5%
Saudi Arabia	3,668	0.9%	2,336	0.5%	6,004	0.7%
Taiwan	3,055	0.8%	15,800	3.3%	18,855	2.2%
United States	2,875	0.7%	9,024	1.9%	11,899	1.4%
Canada	2,789	0.7%	1,870	0.4%	4,659	0.5%
Thailand	2,530	0.6%	25,264	5.3%	27,794	3.2%
Kenya	2,446	0.6%	2,160	0.5%	4,606	0.5%
Iran	2,304	0.6%	487	0.1%	2,791	0.3%
Nigeria	1,930	0.5%	890	0.2%	2,820	0.3%
Brazil	1,914	0.5%	38,950	8.2%	40,864	4.7%
Japan	1,719	0.4%	14,566	3.1%	16,285	1.9%
Colombia	1,649	0.4%	24,562	5.1%	26,211	3.0%
United Kingdom	1,400	0.4%	6,278	1.3%	7,678	0.9%
All other countries	26,003	6.5%	74,017	15.5%	100,020	11.4%
<b>Total all countries</b>	<b>399,078</b>	<b>100.0%</b>	<b>477,321</b>	<b>100.0%</b>	<b>876,399</b>	<b>100.0%</b>

Source: Australian Government, Department of Education and Training, International Student Data 2018, 'Basic pivot table 2002 onwards', <https://internationaleducation.gov.au/research/International-Student-Data/Pages/InternationalStudentData2018.aspx>

Table 5: Australia's education and other exports by major category, expressed as a percentage of total Australian exports, 2002-2018

Year	Education-related	Other travel	All other services	Agriculture	Minerals	Manufactures	All other goods
2002	4.0%	7.4%	12.1%	18.5%	35.0%	22.3%	0.8%
2003	5.0%	8.0%	12.7%	15.3%	34.6%	23.7%	0.6%
2004	5.3%	7.7%	12.0%	17.0%	34.7%	22.7%	0.7%
2005	4.8%	7.5%	10.9%	13.5%	41.0%	21.6%	0.7%
2006	4.7%	6.4%	11.0%	12.3%	45.0%	19.8%	0.8%
2007	5.6%	6.4%	11.5%	10.6%	44.9%	20.2%	0.7%
2008	5.7%	5.2%	9.5%	10.0%	53.0%	16.0%	0.7%
2009	7.3%	5.8%	9.2%	10.7%	50.7%	15.6%	0.7%
2010	6.5%	5.0%	8.2%	9.5%	56.0%	14.3%	0.6%
2011	5.5%	4.5%	7.6%	10.6%	58.5%	12.7%	0.6%
2012	5.5%	4.7%	8.2%	11.4%	56.3%	13.2%	0.6%
2013	5.4%	4.9%	8.3%	11.7%	56.6%	12.5%	0.6%
2014	6.0%	5.2%	8.6%	12.2%	55.1%	12.4%	0.6%
2015	7.0%	6.1%	9.5%	14.0%	49.2%	13.6%	0.6%
2016	7.7%	6.3%	9.2%	12.6%	50.4%	13.3%	0.6%
2017	7.8%	5.5%	8.6%	12.5%	53.5%	11.5%	0.5%
2018	8.0%	5.2%	8.1%	10.8%	56.7%	10.8%	0.5%

Source: Australian Government, Australian Bureau of Statistics, catalog 5368.0: 'International trade in goods and services, Australia, February 2019', Tables 3 and 11a, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5368.0Feb%202019?OpenDocument>

Table 6: Percentage of enrolled students who are international students, by level of study, 37 Australian comprehensive universities, 2017 data

University	Undergraduate	Postgraduate	Other	Total
RMIT University	43.1%	47.3%	92.3%	44.7%
University of Wollongong	32.7%	68.3%	63.1%	43.5%
Monash University	38.5%	51.9%	41.6%	42.9%
Victoria University	34.6%	44.2%	65.9%	37.0%
Murdoch University	39.5%	33.7%	7.0%	36.6%
University of Melbourne	32.8%	39.3%	53.0%	36.6%
Australian National University	24.7%	47.0%	42.0%	35.8%
University of Sydney	24.5%	47.0%	85.3%	35.7%
University of New South Wales	24.0%	47.7%	57.5%	33.8%
University of Technology Sydney	20.9%	49.4%	95.8%	31.8%
University of Queensland	19.6%	48.5%	56.9%	29.5%
James Cook University	20.3%	43.4%	85.4%	28.4%
University of Adelaide	19.8%	50.2%	33.2%	28.2%
Curtin University	26.3%	38.9%	7.1%	28.0%
CQUniversity	5.5%	76.5%	2.6%	26.8%
Macquarie University	16.5%	48.8%	62.4%	25.9%
Charles Sturt University	8.9%	48.9%	2.9%	23.8%
La Trobe University	16.8%	47.9%	8.1%	23.7%
Swinburne University of Technology	17.8%	44.6%	76.0%	23.0%
University of Western Australia	17.2%	28.6%	0.0%	21.7%
Deakin University	13.0%	39.7%	53.2%	20.8%
University of the Sunshine Coast	12.8%	58.2%	17.4%	20.1%
University of Canberra	15.2%	37.6%	29.6%	20.0%
Southern Cross University	17.7%	32.4%	2.2%	19.6%
Charles Darwin University	14.3%	50.5%	0.0%	19.5%
Edith Cowan University	14.2%	37.2%	0.6%	18.8%
Flinders University	9.2%	35.9%	1.8%	18.7%
Griffith University	14.1%	25.6%	40.4%	17.6%
University of South Australia	14.5%	30.4%	5.5%	17.4%
University of Tasmania	11.8%	43.8%	8.2%	17.2%
Queensland University of Technology	12.3%	29.0%	60.1%	16.8%
University of Newcastle	12.7%	29.2%	8.4%	15.8%
Western Sydney University	8.1%	37.1%	29.4%	13.3%
University of Southern Queensland	5.3%	34.5%	8.6%	12.5%
Australian Catholic University	9.3%	11.6%	66.8%	11.8%
University of New England	2.2%	11.1%	7.3%	5.1%
University of Notre Dame Australia	1.1%	1.9%	10.0%	2.0%
<b>Total all universities</b>	<b>20.1%</b>	<b>42.6%</b>	<b>29.0%</b>	<b>26.7%</b>

Source: Calculations based on Australian Government, Department of Education and Training, uCube, 'Enrolment count by citizenship category by course level by state - institution', 2017 data. The release of 2018 data is expected in August, 2019, too late for inclusion in this report. <http://highereducationstatistics.education.gov.au/>

Table 7: International and Chinese students as a percentage of all students, selected countries

Country	% of students who are international	Chinese % of international students	Chinese % of all students
Australia	25%	43%	11%
Canada	12%	25%	3%
New Zealand	16%	51%	8%
United Kingdom	25%	23%	6%
United States	6%	33%	2%

Sources as noted in the main text.

Table 8: Increase in international student enrolments at seven focus universities, 2001-2017

Year	Adelaide	ANU	Melbourne	Queensland	Sydney	UNSW	UTS
2001	1,796	1,582	6,514	4,823	5,785	9,288	4,288
2002	2,484	2,012	7,827	5,621	7,364	10,328	5,240
2003	2,988	2,647	8,823	5,937	9,391	10,207	6,652
2004	3,738	3,078	9,229	6,412	9,776	9,487	7,393
2005	4,416	3,046	8,936	6,350	9,456	8,995	8,114
2006	4,931	3,269	10,372	6,621	9,670	8,620	8,963
2007	5,478	3,378	11,199	6,984	10,436	9,384	8,131
2008	5,846	3,702	11,724	7,548	11,293	10,377	7,587
2009	6,263	4,299	12,029	8,818	11,999	11,480	8,289
2010	6,978	4,952	11,873	10,518	12,147	13,217	9,129
2011	7,119	5,363	11,946	11,348	11,754	13,701	9,733
2012	7,114	5,405	12,805	11,334	11,447	13,301	9,477
2013	6,935	5,566	14,166	11,519	12,278	13,132	10,054
2014	7,284	6,106	16,130	12,193	13,888	13,637	10,741
2015	7,057	6,292	18,375	12,672	15,958	14,379	11,519
2016	7,366	7,426	20,899	13,382	19,296	16,698	12,874
2017	7,571	9,070	23,833	15,409	22,967	20,217	14,269
<b>International increase 2001-2017:</b>	<b>322%</b>	<b>473%</b>	<b>266%</b>	<b>219%</b>	<b>297%</b>	<b>118%</b>	<b>233%</b>
<b>Domestic increase 2001-2017:</b>	<b>49%</b>	<b>80%</b>	<b>34%</b>	<b>22%</b>	<b>24%</b>	<b>32%</b>	<b>30%</b>

Source: Australian Government, Department of Education and Training, uCube, 'Enrolment count by state - institution by citizenship category by year', 2017 data, <http://highereducationstatistics.education.gov.au/>

**Table 9: International student enrolments at the business schools of five focus universities and five American comparison universities, by level of study**

Business School	Undergraduate	Master's	Doctoral	Total
Adelaide	Not AACSB accredited -- data not available			
ANU	Not AACSB accredited -- data not available			
Melbourne	54.3%	82.7%	48.1%	66.9%
Queensland	32.9%	80.4%	40.7%	46.6%
Sydney	40.0%	87.2%	25.0%	66.9%
UNSW	31.5%	62.1%	42.9%	42.2%
UTS	34.6%	71.3%	41.7%	45.9%
Illinois	16.1%	37.1%	75.7%	23.5%
Michigan State	18.6%	12.7%	42.9%	17.2%
Ohio State	13.3%	22.1%	53.3%	14.5%
Purdue	27.7%	45.3%	76.7%	31.5%
USC	18.7%	25.9%	66.2%	21.9%

**Source:** AACSB, 'AACSB-accredited universities and business schools: Australia', 2017-2018 data. [https://www.aacsb.edu/accreditation/accredited-schools?F\\_Country=Australia](https://www.aacsb.edu/accreditation/accredited-schools?F_Country=Australia); the calculation of total percentages involved the substitution of official total undergraduate student numbers for the University of Melbourne, since these numbers were not reported in the AACSB survey. <https://fbe.unimelb.edu.au/about/at-a-glance>

Table 10: Estimated Chinese student fee revenue for seven focus universities

	(1)	(2)	(3)	(4)
University	International students as a % of all students (DET data for 2017)	Chinese students as a % of international students (best available data)	% of international student revenue generated by Chinese students†	International student fee revenue (DET data for 2017)
Adelaide	28.2%	53.8%	58.6%	\$204,088,000
ANU	35.8%	59.1%	64.4%	\$254,396,000
Melbourne	36.6%	50%*	54.5%	\$752,354,000
Queensland	29.5%	50%*	54.5%	\$471,327,000
Sydney	35.7%	66.7%	71%	\$752,210,000
UNSW	33.8%	68.8%	74%	\$603,063,000
UTS	31.8%	52.3%	59%	\$302,662,000

	(5)	(6)	(7)	(8)
University	Total university revenue from continuing operations (DET data for 2017)	Estimated Chinese student fee revenue	Estimated Chinese student fee revenue as a % of university revenue	Level of confidence in the estimate
Adelaide	\$929,210,000	\$119,681,285	13%	High
ANU	\$1,225,585,000	\$163,879,359	13%	High
Melbourne	\$2,501,975,000	\$410,032,930	16%	Very low
Queensland	\$1,828,356,000	\$256,873,215	14%	Medium
Sydney	\$2,345,182,000	\$534,069,100	23%	Very high
UNSW	\$2,018,976,000	\$446,266,620	22%	Very high
UTS	\$953,561,000	\$178,570,580	19%	Very high

\* Data are not publicly available for UQ and UM; the number is probably slightly over 50% for UQ but is unknown for UM.

† Based on auditor data for the three NSW universities; assessed at 9% higher than column (2) for others, based on the average difference for NSW universities.

Source: as cited in the text and table

Table 11: Number of new higher education sector student visas granted, by country of citizenship

Fiscal year	China	India	Nepal	All countries
2005-06	22,786	15,521	479	86,976
2006-07	26,656	23,370	1,636	102,019
2007-08	31,577	27,615	2,398	115,403
2008-09	36,922	21,362	1,970	118,289
2009-10	38,806	9,011	2,093	107,183
2010-11	36,685	6,909	3,797	100,114
2011-12	37,144	7,553	2,820	99,421
2012-13	43,466	9,619	3,688	112,790
2013-14	48,456	20,027	6,694	134,139
2014-15	51,674	18,605	5,218	132,870
2015-16	57,221	19,831	6,462	139,864
2016-17	64,098	25,118	10,868	155,285
2017-18	68,316	35,606	13,256	174,934
2018-19	68,248	47,097	14,470	189,477

Source: Australian Government, Department of Home Affairs, 'Student visas granted pivot table', June 30, 2019, <https://data.gov.au/dataset/ds-dga-324aa4f7-46bb-4d56-bc2d-772333a2317e/details>

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# About the Author



## Salvatore Babones

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Salvatore Babones is an Adjunct Scholar at the Centre for Independent Studies and an Associate Professor at the University of Sydney. He is the author of ten books including *The American Tianxia: Chinese Money, American Power* (2017) and writes regularly for leading foreign policy journals such as *Foreign Affairs*, *The National Interest* and *Foreign Policy*.



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