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Tensions in the Evolving Australian Higher Education System: A Complex, Evolving Mix

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Abstract

The Australian university system, originally based on the Oxbridge model, has largely outgrown its British roots, and now confronts a very different context. A significant challenge stems from tensions between its history, with a rich indigenous heritage, and establishment as a series of British colonies; and its geography, at the heel of South East Asia, with all its major neighbours from East and Southeast Asia. Reflecting the growing trend of greater engagement with Asia, and greater migration from the region, Asian academics now form a significant proportion of academic staff, but it is argued that while their disciplinary expertise is recognized, their additional cultural and linguistic skills are often not acknowledged, and their Asian cultural capital undervalued. A trend towards greater managerialism and increasingly intricate and burdensome regulatory architecture, is traced and critiqued, in relation to governance, at both system and institutional levels. The distinctive makeup of higher education funding is explained, notably the innovative income-contingent loans scheme, and the longstanding underfunding of the higher education system, which pushed universities to diversify their income sources, particularly via international student fees. The extreme dependence on the latter is argued to have been dramatically highlighted by the COVID-19 pandemic, with huge losses predicted across the system. It is argued, that while there are considerable strengths evident in the overall system, major challenges of underfunding and an overly entrepreneurial approach to internationalisation, as well as increasing casualisation, and substantial inequalities of participation, remain as significant challenges.

Keywords: Higher education system, Australian higher education, evolving higher education, tensions of complex system, complex higher education system

Introduction

Beginning by sketching the historical background to current developments, the article outlines key themes re-shaping contemporary higher education. These underscore both continuity and change. It is firstly argued that the legacy of unresolved tensions between Australia's history and geography continue to shape developments in contemporary higher education policy and practice. Secondly, major institutional forms are outlined, while pointing out how the trend towards privatisation, including comparatively high levels of private funding, are re-shaping the landscape of higher education. Thirdly, moves towards a more managerial model of university governance and management are argued to be a further element afflicting the operation of institutions. Fourthly, despite having achieved high participation rates, the article reveals the Australian system to still be highly unequal, along class, gender and racial lines. This argument is continued in the treatment of internationalisation, which shows that despite increasing staff diversity, the additional cultural knowledge and skills they bring are not always valued. Finally, the article argues that despite considerable achievements, the current obsession with rankings and league tables, and over-dependence on international student income are points of vulnerability.

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For tens of thousands of years, sophisticated forms of higher learning were practised among Australia's indigenous population. Shaped by both the local environment and deeply-held, integrated spiritual cosmologies, the process of an individual's induction into the highest levels of culture and kinship encompassed oral forms of both spiritual and practical learning, that were lifelong (Berndt & Berndt, 1988; Hart, 1974; Marett, 2005; Welch 1996, pp. 26-27; Welch, Königsberg, Collard, & Rochecouste, 2015). However, when the first University was established in 1850, it ignored the rich array of diverse cultures and languages that made up indigenous Australia.

The constitution of each of the earliest universities reflected the fact that white Australia had been established as a series of British colonies, thus the earliest Australian universities were "… transplantation(s) of British settlers, values and culture of Empire" (Horne & Sherington, 2013, pp. 284-285). Nowhere was this intellectual and institutional obeisance to the Oxbridge tradition expressed more clearly than in the Latin motto of the first such institution, the University of Sydney (1850): *Mens Sidere, Eadem Mutato* (broadly, The Same Mind, Under Different Stars)[1]. The overwhelmingly male staff of these early institutions were also almost entirely British: "The German, French and American universities seem to have been beyond the pale" (Smith, 2001, p. 4; see also Sherington, 2019; Welch, 2020a). At the University of Sydney, until around WWI, a selection committee based in the UK made recommendations regarding Chairs. It was not until around then, that any Australians were appointed to Chairs (and largely on the basis of qualifications gained overseas). Further imperial ties, including schemes such as the Rhodes scholarship, also connected Australian scholars to the 'mother country' and later to the (British) Commonwealth of Nations (Horne & Sherington, 2013; Pietsch, 2010; 2013).

When, at Federation in 1901, Australia's population totalled a mere 3,788,100, there were a mere 2,652 university students (0.07% of the population, and almost all white males). Rather like the UK, women did not gain entry to universities until the 1870s (despite attempts by the University of Adelaide [1874], for example, that were disallowed by the British government). However, by the 1920s, the proportion of women in higher education was a little higher than in the UK, and from a broad set of socio-economic backgrounds. (Bowen, 1985; Horne, 2016) Teaching was the main activity at the time: research was not a core function, and the first home-grown Ph. Ds. were not awarded until 1948 (CBCS, 1952; Dobson, 2012). At the onset of WWII, by which time the national population had reached 6,967,754, of a total university enrolment of 14,236, fewer than 100 were higher degree candidates.

Institutional Forms

The dominant institutional model continues to be the comprehensive public university (Davis, 2017). Among these, the top-tier Go8 *(a coalition of eight major research-intensive universities in Australia)* category, which broadly parallels the UK's Russell Group, or the American Association of Universities, leads most performance indicators, albeit less so than previously. Of Australia's 43 universities, only 3 smaller private institutions exist (Bond, Notre Dame, and the recently accredited University of Divinity), although there are also one or two small outposts of US-based private universities (Carnegie Mellon Australia, and Torrens[2]). This apparently public profile, however, ignores two elements. First is the increasing privatisation of public universities, whose dependence on fee income, notably from international students, is exceptionally high, relative to other countries, and which arguably impinges on their public standing, and which has also been criticised for leading them to behave more like enterprises (Marginson & Considine, 2000). While, on average across the OECD, around 32 percent of total expenditure on tertiary institutions is sourced from the private sector, in Australia, the proportion is almost double, at 62 percent (McGowan, 2018; OECD, 2019a; n.d.).

Second is the proliferation of smaller, private higher education (niche) providers. Some provide high-level, specialist professional education, others a mix of vocational and higher education offerings,

[1] The Universities of Queensland, and Western Australia, however, rejected the Oxbridge model as unsuitable for their conditions, where populations were more rural and dispersed.
[2] Torrens forms one of the Laureate International chain.

while still others are religious and denominational. More than 120 such private higher education providers, mostly small, are registered (TEQSA, 2020). Of the 43 universities, 6 are dual-sector higher education institutions (HEIs), providing both mainstream higher education qualifications, and mid-level technical qualifications. (Maddocks et al., 2019; Swinburne University, 2019)

Governance and Management

The governance and management of Australian universities has seen significant changes over recent decades. Governance is defined as the authority to develop organisational models, policies, and plans and decisions, and account for their probity, responsiveness and cost-effectiveness. Management refers to the achievement of goals through assigning responsibilities and resources, as well as monitoring their efficiency and effectiveness (Gallagher, 2001).

For public universities, governance forms relate to the federal structure of the Australian polity: with only two exceptions, all universities were established via legislative Acts of individual state parliaments[3]. Yet, although state parliaments were important in the early decades of university establishment, their influence is now somewhat vestigial. In practice, unlike all other education sectors, higher education is governed by federal, rather than state, authority, and related agencies. In addition to the federal department of education, key federal agencies include the Tertiary Education Quality and Standards Agency (TEQSA), which is responsible for higher education quality assurance, and Excellence in Research Australia (ERA) which collects, analyses and monitors research output and quality (see, *inter alia*, Welch, 2016; 2020b; 2020c).

While some regulatory architecture still reflects its British origins, much has changed. Despite repeated allusions to contemporary managerial mantras such as 'Steering from a Distance', in practice the overall result has been more steering, and less distance. In the name of quality assurance, ever-increasing, and ever more detailed demands for performance data now consume substantial amounts of time and resources at institutional level. Vice-Chancellors' complaints about the burden imposed at institutional levels, however, is undercut by their enthusiastic implementation of detailed regulatory apparatus internally. Together with institutional enlargement (a number of universities now have enrolments of over 60,000), it has helped accentuate corporate, line-management forms of governance, and the associated proliferation of senior, high-salaried positions, responsible for governing one or other aspect of institutional performance, and all ultimately responsible to the Vice-Chancellor. Revelling in titles such as Vice-President, Deputy Vice-Chancellor, Pro Vice-Chancellor and Provost, each is in turn supported by a growing number of appointees.

A key site to observe changes to institutional governance patterns is seen in the evolution of the role of faculty Dean, now regarded as part of the executive management team, rather than the earlier, and more collegial, *primus inter pares*. Resistance by academics, including to further corporatisation and managerialism now tends to be seen as inhibiting effective management, and a form of recalcitrance, rather than an instance of democratic dissent. Systematic differences regarding the importance of collegiality, and centralised control now distinguish management from academic staff (Marginson & Considine, 2000, pp. 64-66). An audit culture now increasingly governs most aspects of academic work and performance (Welch, 2016).

Financing Higher Education

The growth of the Australian higher education system to over 1.5 million students has been sustained by a changing mix of both public and private funding (APH, 2003). Over the decade 1996-2006, the share of funds from the federal government fell, hence the share of funding from private sources, particularly from student fees rose appreciably. By the turn of the century, OECD data showed private contributions to higher education in Australia, at around 46 percent of total funding, higher than most comparable countries, while the proportion of Gross Domestic Product devoted to higher education had also fallen, and was low, relative to most other OECD countries (DEST, 2002; Productivity

[3] The two exceptions are the Australian National University (ANU) and Charles Darwin University (sited in the Northern Territory, a federally administered region)

Commission, 2002, pp. 32-34). By 2016, OECD data shows private expenditure had increased to 62.2 percent of the total (OECD, 2019a; 2019b).

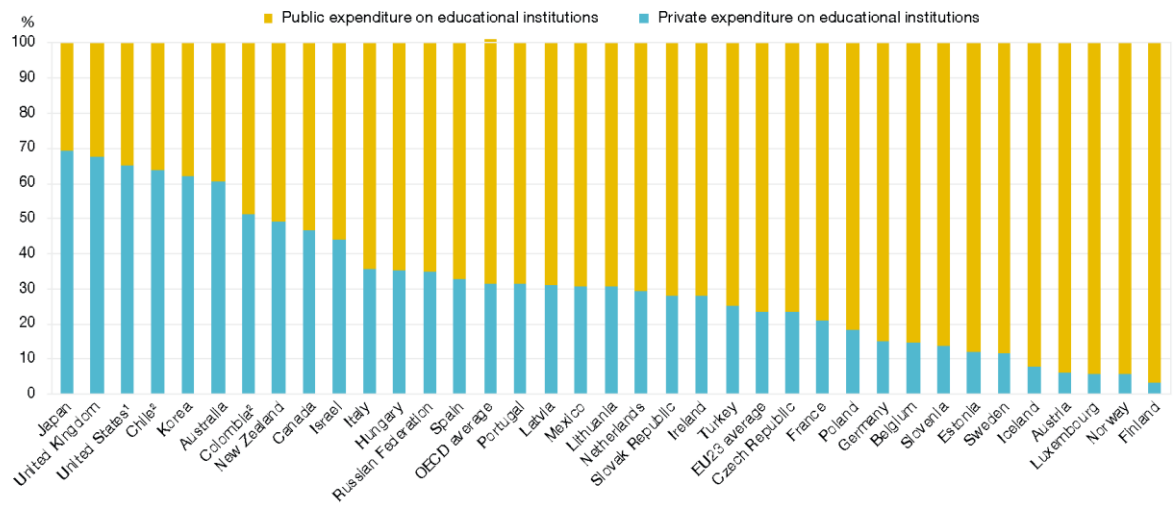

Figure 1. Public and private expenditure on higher education – selected countries 2016 (OECD, 2019a)

Over recent years, the massification of Australian higher education has been driven by two principal financial elements: the demand driven system, and the national income-contingent loans scheme. The first was a government scheme that, over the years 2012-2017, provided universities a fixed sum of money for teaching. Effectively, this ensured that universities could enrol as many undergraduate students as desired (other than in Medicine), since funding was assured. The aim of the scheme was to boost overall participation in higher education, as well as boost access for under-represented groups in society. Evidence revealed that participation increased significantly, and many of the non-traditional students succeeded in their studies, although students with lower literacy and numeracy backgrounds, fared less well: "By age 23 years, 21 percent of the additional students had left university without receiving a qualification, compared with 12 percent of other students" (Productivity Commission, 2019, p. 2, see also p. 9). In order to reduce such inequities, modest additional funds were provided to universities under the Higher Education Participation and Partnerships Program (HEPPP), to raise aspirations of disadvantaged children and to provide additional support services.

The demand driven system replaced the supply driven, or 'block-grant' scheme, whereby the government provided a block amount of funding to universities, (for which they were required to deliver a certain number of places), and then decided on how many places, and how much funding was to be applied to each university. While some parodied this rather bureaucratic system as 'Moscow on the Molonglo'[4], it did deliver an additional loading, for example, to students at regional universities, in the interests of equity (Carrington & Pratt, 2003).

However, facing a substantially rising demand for funding (needed to sustain the demand-driven system), it was substantially amended. The potential 50 percent rise in funding in real terms over the period 2008-2017, led the government to freeze undergraduate funding in late 2017, with the proviso that universities meeting specified performance criteria might have their funds adjusted from 2020 to take account of changes in populations. (DESE, n.d.) Effectively, this meant a return to block funding, albeit minus enrolment targets (Norton, 2019). Universities were able to reduce the number of places. However, pressure on the system was scheduled to increase in the early 2020s, as the number of school leavers rises to its highest level ever.

Australia's innovative income-contingent loans scheme has been the other important pillar of higher education funding. Widely seen as a success, versions have now been adopted in a number of countries. The Australian version allows universities to set fees within three government-set bands.

[4] The Molonglo is the name of a river near Canberra, the nation's capital.

These bands, and associated fees, vary according to discipline, with the highest levels (Medicine, Dentistry) set on the basis that these professions earn the highest incomes. The current three bands reflect such disciplinary differences, as seen in Table 1:

Table 1. 2020 student fees by disciplinary band

Band 3: Law, dentistry, medicine, veterinary science, accounting, administration, economics, commerce.	$0 - $11,155
Band 2: Computing, built environment, other health, allied health, engineering, surveying, agriculture, mathematics, statistics, science.	$0 - $9,527
Band 1: Humanities, behavioural science, social studies, education, clinical psychology, foreign languages, visual and performing arts, nursing.	$0 – $6,684

Source: Study Assist (2020); **Note:** All prices in Australian dollars

Unlike mortgage type student loans such as exist in the US, the income contingent loan does not become repayable until three specific conditions have been met: graduation, employment, and an earned income above the threshold ($45,881 in 2018-19). Once these conditions have all been met, the loan is repaid over time, via the tax system, with higher incomes necessitating higher repayments. Students who do not meet the three conditions are not required to repay the loan. The Australian government, as well as each university, make some scholarships available to post-graduate scholars, both domestic and international, while a range of countries, including China, Saudi Arabia, Chile and Brazil, provide research scholarships tenable in Australia (among a number of countries). A domestic Ph. D. scholarship is currently valued at $30,000, tax free[5].

Participation and Equity

Australia is a high-participation system, reflecting government policy target of 40 percent of those aged 25-34 holding a degree by 2025. Of a total population of a mere 25 million, overall higher education enrolments had reached 1,562,520 by 2018, including a 30 percent increase at the undergraduate level over the years 2009-2015 (Czarnecki, 2018, p. 502; Norton, 2019). The largely older Go8 HEIs tend to be somewhat more selective, while newer universities reflect a stronger equity profile. Nonetheless, it is still the case overall that having parents with a university level education and/or a professional occupation are the best predictors of the likelihood of university graduation (Czarnecki, 2018; Lee, 2014). Other research also shows that class also differentiates the choice of institution, field or discipline, with lower socio-economic status families tending to choose lower status fields, and HEIs. The process of entrenching class divisions begins well before higher education, and deepens throughout schooling: data from the Universities Admissions Centre show that, at the end of the secondary school stage, 1.3 percent of lowest SES (socio-economic status) students gain an admission score of 90 (of a possible 100), compared to 9.4 percent of pupils from the highest SES. Australia's large private secondary higher education sector, particularly the elite, high-fee schools, are also disproportionately represented among university students (Marginson, 2016). Other things being equal, coming from a middle-class family, and / or going to the 'right school' is an advantage. A survey in 2016 revealed that, whereas 25 percent of children of skilled and unskilled labourers were either attending university or held a degree, the rate for children of managers and professionals was 61 percent (Norton, 2019).

As seen below (Figure 2), women now outnumber men in higher education, albeit there is still work to be done to lift rates of female participation in key STEM (Science, Technology, Engineering and Mathematics) fields. By 2010, overall gender parity had been reached, including at the doctoral level: women's share of all Ph. Ds, including in science disciplines, had reached 50 percent (AAS, 2020a; Dobson, 2012, p. 95) This did not mean, however, that parity obtained in all such disciplines. Women are still over-represented in fields such as Education, and Social Work (and Social Sciences and Humanities more generally), but remain under-represented in Engineering.

[5] At the time of writing, around US$20,000.

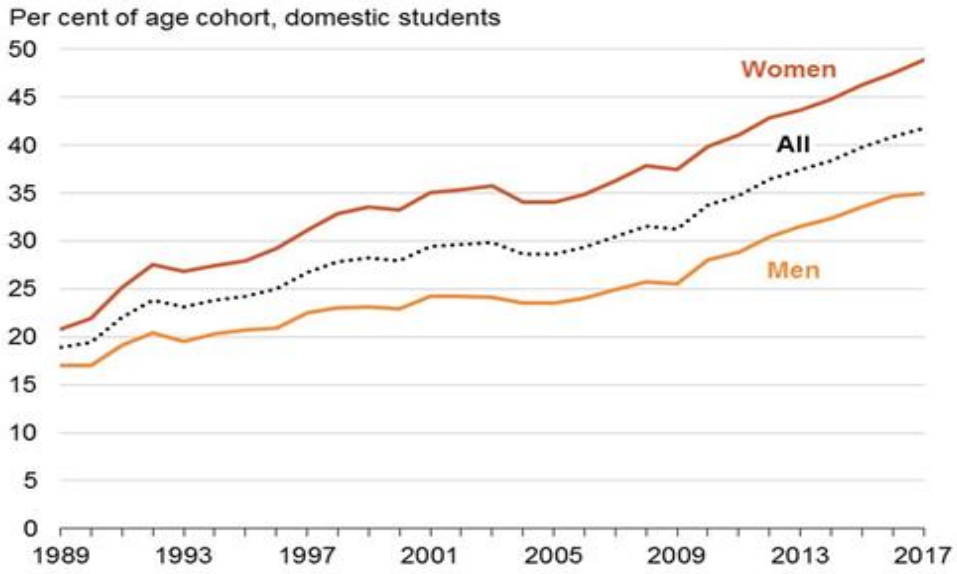

Figure 2. Participation rates by gender, 1989-2017 (Norton, 2019)

It is important to acknowledge that gender disparities are not limited to students: although women now comprise over half of all Ph. D. graduates and early career researchers, including in the sciences, representation among senior academic ranks still lags, at less than 20 percent (AAS, 2020a; Carrington & Pratt, 2003) Overall, 44 percent of academic staff in Australia are female, yet women are underrepresented above Senior Lecturer level and in leadership positions: only 25 percent of university Vice-Chancellors, for example, are women (Jarboe, 2017, p. 16). Overall differences in participation are seen in Figure 3, following:

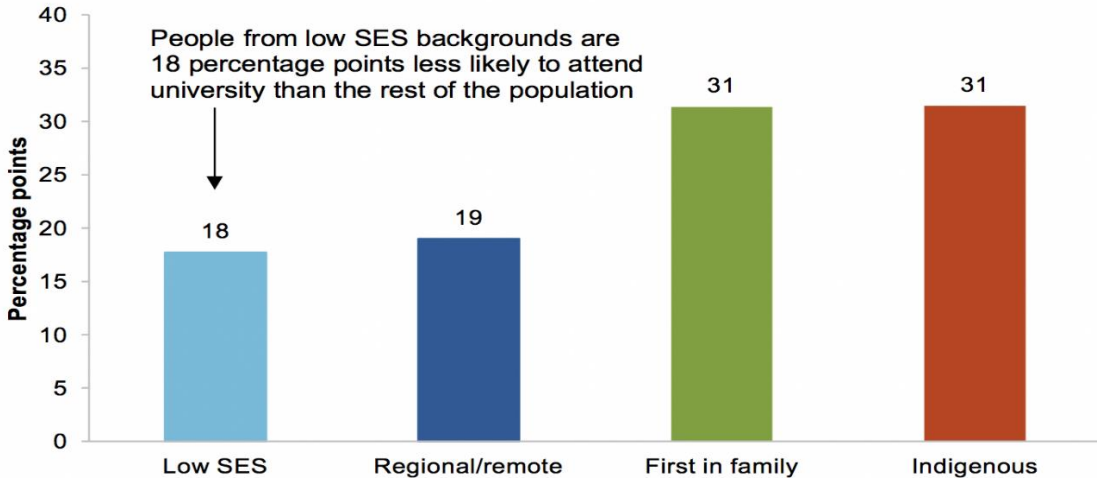

Figure 3. Higher education participation rates, by equity groups (Productivity Commission, 2019, p. 12)

In effect, while total enrolments by indigenous and rural and remote students have increased recently, all equity groups remain significantly under-represented in Australian universities. Unsurprisingly, some research relates this to lower school achievement levels, which also positions such individuals less well, when entering university. Together with higher rates of participation in part time work, it results in higher drop out and non-completion rates (Productivity Commission, 2019, p. 13). Although there are limitations to the data regarding indigenous higher education participation (Wilks & Wilson, 2015), the above chart demonstrates that, of all equity groups, indigenous students, and first-in-family, are by far the most disadvantaged, with rates of higher education participation a full 31 percent lower than the rest of the population. The Behrendt report on indigenous education (Behrendt, Larkin, Griew, & Kelly, 2012) outlined major disparities: despite forming 3.3 percent percent of the overall

population, Aboriginal and Torres Strait Islander students made up a mere 1.4 percent of university enrolments, with women outnumbering men. The Report outlined three key factors in maintaining such patterns of persistent disadvantage: inadequate respect by non-Aboriginal Australians; the dependence of higher education success on school achievement; and a related need for major improvements in health, housing and poverty. The legacy of colonialism, longstanding racism, and the lingering effects on the Stolen Generation[6], must also be acknowledged (Behrendt et al., 2012, p. 8; Welch et al., 2015). While recent schemes such as the *Indigenous Scholars Success Programme* provide scholarships to numerous indigenous higher education students, much remains to be done to undo decades of disadvantage (NIAA, n.d.). Among university staff, a mere 1.0 percent of total full-time equivalent university staff were indigenous in 2010; and just 0.8 percent of academic staff (Behrendt et al., 2012).

Internationalisation

As a longstanding country of migration, with settlers from 200 countries, it should be no surprise that Australian student and staff cohorts are both very diverse (Oishi, 2017; Sheehan & Welch, 1996; Welch, 2020a). However, the international profile has changed substantially, from the narrowly British, to vibrantly global, with a growing Asian influence; again reflecting the fact that some 40 percent of Australian migrants now originate from Asia. Together with generally competitive salaries (Welch, 2012a), this has helped generate significant (Asian) knowledge diasporas in the Australian higher education system, of which the Chinese is the largest, with Indian and Vietnamese also prominent.

The earliest major international scheme to offer scholarships to international students was the Colombo Plan, providing degree level education at Australian universities to students from developing countries in the region. Established in 1950, in the aftermath of WWII, it was both a recognition that the British empire no longer guaranteed Australia's security, as also that more attention needed to be paid to the region, Australia's Asian neighbours in particular. Cold war tensions were another feature of the post-war context, and framed much international scholarly mobility, including the Colombo Plan (Oakman, 2004, pp. 43-44). A third, contradictory element was the persistence of an explicitly racist immigration policy, the so-called 'White Australia Policy', that was not finally abandoned until the early 1970s, and was the source of much resentment among Australia's neighbours. Research networks also expanded in the post-war years: "university research was constructed more through international networks, … beyond … older attachment to Britain and Empire" (Horne & Sherington, 2013, p. 285; Welch, 2020a).

Colombo Plan students from the region studied Public Administration, Agriculture, and Engineering, for example, but had to return home after graduation. The aims were to reduce poverty in the region, boost levels of human capital, and regional goodwill, although the plan has also been characterised as 'a complex mix of self-interest, condescension and humanitarianism' (Oakman, 2004, p. 4; see also Megarrity, 2007). Even at the time, however, private international students were part of the mix: indeed, in 1955, just 23 percent of international students were from the Colombo Plan, and in 1965, this had fallen to 16 percent. Among recipients, students from ASEAN (Association of Southeast Asian Nations) member states figured strongly: in 1974–75, for example, of a total of 2,780 awardees, Indonesia accounted for 428 Australian scholarships, Malaysia 455, Singapore 224, Thailand 331, and South Vietnam 422 - a subtotal of 1,860 or 67 percent. (Welch, 2014, p. 153) A notable exception at the time was North Viet Nam, a product of a Cold War mentality, that excluded students from Communist countries. Although having originally joined in 1951, the Socialist Republic of Viet Nam withdrew in 1978, and was only added again, in 2004. Then, as now, private students from ASEAN were an important cohort of Australia's international student intake, as seen in Table 2.

[6] The term 'Stolen Generation' refers to Aboriginal people forcibly removed from their families, who often grew up with little or no knowledge of their family's whereabouts, and their own origins.

However, an important change to Australia's rationale for international higher education occurred in the mid-1980s, with the simultaneous publication, in 1984, of the Goldring, and Jackson, reports, each of which drew opposite conclusions (Goldring, 1984; Jackson, 1984). The former favoured a continuing cap on the number of subsidised international students, while the latter called for the existing Overseas Student Charge (OSC) to be steadily increased, such that by the mid-1990s overseas students would pay the full costs of their education, Jackson's view ultimately prevailed, marking the beginning of the development of international higher education as an industry.

Table 2. ASEAN private overseas post-secondary & higher education students – 1976-1984

Country	1976	1977	1978	1979	1980	1981	1982	1983	1984
Indonesia	490	538	514	488	423	365	371	593	943
Malaysia	3,139	3,094	3,123	3,580	4,001	4,619	5,353	6,016	7,341
Philippines	28	28	27	23	17	18	17	26	30
Thailand	258	270	257	241	214	191	170	151	152
Viet Nam	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other Asia	396	361	345	394	366	419	428	449	559
National TOTAL	5,486	5,852	6,004	6,745	7,383	8,103	9,125	10,656	13,047

Source: Welch (2014, p. 154)

As result, international student numbers mushroomed, from 84,000 in 1993, to almost 160,000 in 1999 (of which higher education occupied more than half). Branch campuses were established by a number of Australian universities, in Viet Nam, South Africa and Malaysia, and, in addition, growing offshore enrolments at Australian universities were fuelled by the development of online education (Macdonald, 2006; Welch, 2012b). By 2011, international higher education enrolments totalled 242, 351, with China accounting for more than a quarter of that total. A stark contrast was revealed in the meagre number of outbound students, with a mere 11,000 Australian students studying abroad, and no ASEAN member state among the top five destinations. By 2019, international enrolments had skyrocketed (DESE, 2020a), with numbers of universities becoming overly dependent on international student fee income to sustain operations, particularly in research.

Table 3. International student enrolments, higher education – 2002-2019*

	2002	2011	2019
Higher education	124,992	241,440	442,219
English language programs (ELICOS)	58,435	94,853	156,880
Non-award	23,518	27,568	48,217
Total	206,945	363,861	647,316

Source: DESE (2020a)

* Some universities maintain their own English language training facility, others use outside organisations.

Although some had long pointed to the problem (Altbach & Welch, 2011; Babones, 2019; Welch, 2012c), the vulnerability of this international profile was dramatically underscored in 2020, as the Coronavirus (COVID-19) spread worldwide. The substantial decline in federal per-student funding (see above) that had long afflicted Australian universities, spurred them to energetically seek diverse income sources, most particularly via fee-paying international students. By far the largest cohort were mainland Chinese, numbering around 150,000 in 2019, hence not merely was the overall proportion of international students (25 percent) extremely high by comparison with other higher education systems, but mainland Chinese students comprised almost 40 percent of all onshore international students (Babones, 2019). At a small number of universities, Chinese students accounted for two-thirds of all international enrolments in 2017, with the University of Sydney alone, earning $752 million from international student fees in 2017[7] (Audit Office, 2018; Koslowski, 2019). Hence, when international travel was banned in early 2020, including bans on returning from China, tens of thousands of mainland students who had returned home for Spring Festival, or to undertake fieldwork for their degrees, were unable to return to Australia, to resume their studies.

[7] All figures are expressed in Australian dollars. Substantial fluctuations in the exchange rate with the US$, over time, make coversions to that currency misleading. Recognition of the over-dependence on Chinese students led many universities to attempt to diversify intake, especially to increase students from South and Southeast Asia.

This posed a profound disruption to their study routines. However, it also had systemic effects, threatening the bottom line of virtually all Australian universities, especially the Go8 which had by far the highest number and proportion of mainland students enrolled, and in the two most populous states, New South Wales and Victoria. The extent of risk was obvious: of the eight Go8 institutions, at least four earned around a third of their total income from international students (Koslowski, 2019; Wade, 2018) While, at the time of writing, it was not possible to be certain how long the travel bans would remain in place, it was estimated that the nett loss to universities around the country could total $2.5-4.6 billion Australian dollars, with at least one university claiming it alone could well lose $600 million in 2020n alone.[8] In response, immediate plans were instituted to suspend or reduce capital expenditure, project spending, contractors and consultants, international travel, and staff recruitment. (VC Email, 2020) The federal government's initial stimulus package, announced in March 2020, and designed to mitigate the economic fallout from the Covid19, deliberately took no account of the profound effects on university budgets, which according to modelling by Universities Australia, potentially threatened $23 billion in income over ensuing years (AAS, 2020b; Maslen, 2020).

However, changing student flows are by no means the whole story. Australian universities' staff profile reveals a rich mix of both academic and administrative personnel, from a wide range of countries. The dominance of UK academics in Australian universities gradually broke down after WWII, initially due to an unexpected influx of European Jewish refugees post-war (numbers of whom were highly qualified, and went on to make "notable contributors to that nation's scientific, business, academic and cultural communities" (Cacciottolo, 2010). The gradual dismantling of the White Australia policy, formally abandoned in the early 1970s, also opened up the system (Balint, 2018; Sherington, 1990; Welch, 2020a). Current estimates are that that the proportion of overseas-born academics in Australian universities is 45 percent, much higher than in the overall Australian population (26.8%)[9] (Oishi, 2017, p. 11), and much higher than the equivalent in almost all other academic systems.

While the ageing of the Australian professoriate is one factor, of greater importance is the rise of Asia, most notably the two giants of China and India, each of which, and particularly the former, are making significant contributions to the Australian higher education system[10]. Not only are Asian Australians now almost 15 percent of the population, but OECD research showed Australia to have the highest nett brain gain among member countries, in part due to its emphasis on high-skilled migrants (OECD, 2007; Welch & Zhang, 2008a; 2008b; Yang & Welch, 2010; 2012). International studies of the academic profession show the country to be one of the most diverse worldwide, with the proportion of academics born in Asia having grown by over 50 percent during 2005-2015, from 10 percent to 15.4 percent overall (Oishi, 2017). The following chart illustrates the diverse composition of Australian academic staff, particularly the origins and proportions of Asian born staff.

The rising numbers of Asian born academic staff has created substantial knowledge diasporas, of which the Chinese and Indian are the most notable (Hao & Welch, 2012; Hao, Wen, & Welch, 2016; Welch & Hao, 2015). A 2015 survey of Asian academics in the system revealed that the most common countries of birth were, in descending order, China (32.1%), India (15.8%), Malaysia (8.5%) and Sri Lanka (6.3%). This has yielded not merely a rich array of cultural and linguistic capital, but extensive, and enduring, ethnic intellectual networks, both national and international. Fields such as Engineering, IT and Business had the highest proportions of Asian-born staff, with Agriculture and Environment (5.6%), Education (5.3%) and Creative Arts (5.3%) less well represented.

Significantly, more than three quarters (76.1%) of Asian-born academics have collaborated with scholars from an Asian country; indeed, survey results showed two-thirds (66.3%) reported working on joint research projects. Among such international partnerships, national origin was particularly

[8] The Australian academic year, unlike the northern calendar, begins at the beginning of March.
[9] Although, if it were to include individuals with one overseas born parent, the proportion would be around 50 per cent.
[10] Of Australia's total population of 25 million, around 1.2 million are now of Chinese heritage, while settlers from India tripled from 2006-2016.

important: 34.6 percent had helped to develop exchange programs with their country of origin (Oishi, 2017, p. 18). China, in particular, is now one of Australia's key knowledge partners, with active research collaborations across a range of fields, both in the natural and applied sciences, and social sciences and humanities (Chief Scientist, 2013).

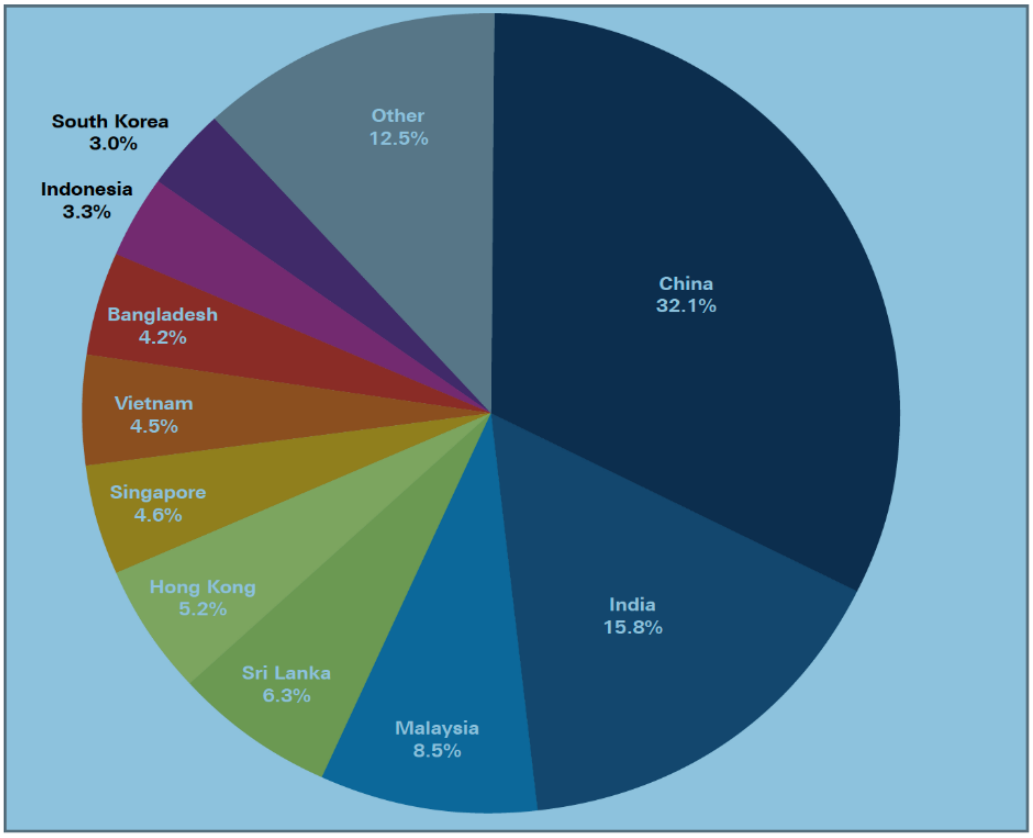

Figure 4. Asian born academics in Australian universities, by place of birth* – 2015 (Department of Education & Training data 2016, as cited in Oishi, 2017, p. 16)

* If Hong Kong's reversion to China in 1997 were to be included in the above, it would further increase the Chinese contribution.

However, the growing presence of Asian-born academics in Australian universities, did not always translate into equivalent recognition, with respondents often reporting feelings that their contributions were not always acknowledged and that, at times, their cultural background constituted a disadvantage: "I often feel that I am non-existent in meetings. People don't even see my face or talk to me" (Oishi, 2017, p. 38). Gender could constitute a double disadvantage, with gender gaps evident across numerous fields. The same survey revealed that Asian-born women academics held 4.8% of Engineering posts, for example (their male peers 28.5%). In IT, gender disparities were almost as large: female Asian-born academics occupied 9.4% of the total, but their male peers, 25.1%. Asian-born academics were also under-represented at the more senior academic levels. One in four of the lowest staff tier (Level A) were found to be Asian-born, but only one in ten at Level E (Professor), and less than one in thirty at Deputy Vice Chancellor level (Oishi, 2017, p. 30).

The problem is not isolated to the academic profession, but arguably reflects wider patterns of power and privilege in Australian society: "Asian Australians account for 9.6 percent of the Australian population but only 3.1 percent of partners in law firms, 1.6 percent of barristers, and 0.8 percent of the judiciary" (AHRC, 2019). Less than two percent of members of the federal parliament are from an Asian cultural background, leading some to argue the presence of a 'Bamboo Ceiling' confronting Asian Australians (Soutphommasane, 2014).

Higher Education Research

No treatment of Australian higher education could be complete without reference to research, which is increasingly linked with internationalisation. A vibrant, diverse set of academics across the country are engaged in higher education research: some are more interested in teaching and learning, others in administrative aspects, while still others focus on policy-related research (Marginson, 2013). Much research is focused on domestic issues, but there is a vibrant stream of internationally focused research, boosted by both several decades of internationalisation of the Australian system, and the large number and proportion of international students, and faculty. Co-publication with international researchers from a range of countries is a particular feature, reflecting, *inter alia*, the high proportion of international academics employed within the system, including a growing number from Asia (particularly China and India). Although co-publication with traditional partners in the USA, UK and Europe still figures large, China is now a major knowledge partner, particularly in key STEM areas such as artificial intelligence, nanotechnology, and radio astronomy (Chief Scientist, 2013; DIISRTE, 2012; Radloff, 2016; Welch, 2014; 2020c). The fact that each university hosts a version of a Teaching and Learning unit, devoted to improving higher education teaching and learning on campus, gives this theme a certain prominence within the wider field of higher education research, although higher education administration continues to be a major theme.

An array of journals supports higher education research. While other journals such as the *Australian Educational Researcher* and the *Australian Journal of Education* also publish some work with a higher education focus, journals specific to the field include *Higher Education Research and Development* (HERD), established by the Higher Education Research and Development Studies Association in 1982, and which publishes seven issues annually, and the *Journal of Educational Administration*, which was founded at the University of New England in 1963, with claims to be the first journal specific to the field. It has now become part of the Emerald publishing stable. The *Journal of University Teaching and Learning Practice* (JUTLP), hosted at the University of Wollongong, was founded in 2004. The *Journal of Tertiary Education Administration*, first published in 1979, was established by the Australian Institute of Tertiary Education Administrators.

Although higher education researchers span the country, there is only one dedicated centre: Melbourne University's Centre for the Study of Higher Education (CSHE). Founded in 1968, and with 18 researchers, it conducts basic and applied research, the latter including bidding for government contracts for related research, and learning and teaching projects. The LH Martin Institute conducts professional development programmes, but some of its members also conduct research. Australia's national educational research body, the Australian Council for Educational Research (ACER), also conducts research in higher education, including on indigenous issues, transition from school to tertiary education, international student issues, student outcomes and benchmarking, as well as undertaking applied research, surveys and programme evaluations (ACER, n.d.). With the LH Martin Institute, it has participated in international surveys such as *The Changing Academic Profession*, and also makes regular submissions to national inquiries related to higher education. Among other elements, the federal department of Education maintains a Research and Economic Group, that is responsible for collecting statistics on many aspects of higher education in Australia (Briggs, 2020; DESE, 2020b; 2020c).

Finally, the impact of the COVID-19 pandemic on the Australian research engine must also be acknowledged. The estimated $2.5-4.6 billion in lost income from international student fees pointed to above had greatest impact on the research intensive Go8 tier, and was compounded by a decline in philanthropic and business funding. Overall, it was predicted to have a profound effect on the research workforce: job losses were estimated at 7,000 researchers, and 9,000 Post-graduate researchers, the latter of whose contributions are critical to the overall research effort (AAS, 2020b)

Conclusion – A Mixed Picture

The Australian higher education system, now 170 years old, reveals both continuities and change. Anyone wandering the grounds of the University of Sydney could not help but be reminded of its

institutional fountainhead, Oxbridge. At the same time, the original and singular function of teaching (again reflecting Oxbridge at the time) has now been widely supplanted by a major emphasis on research performance, albeit often with a view to boosting institutional ranks on an ever-wider range of national and international league tables (Welch, 2016). The fact that a far-flung, modest-sized academic system, remote from the major knowledge centres of Europe, UK and North America, boasts six universities among the top 100 worldwide, is, *prima facie*, a sign of success. A string of Nobel prizes, and other achievements, adds to this picture (AAS, 2020c). A further strength is the rich cultural diversity evident among both academic and administrative staff, although much work remains to dismantle longstanding disadvantage and racism in the system, most particularly with respect to indigenous Australians, but also affecting Asian-Australians and women (Walker, 2019; Welch, 2020a; 2020c; Yosso, 2005). Schemes such as the *New Colombo Plan* offer hope of further extending academic relations between Australia and its Asian neighbours, on a much more reciprocal basis than the earlier scheme (DFAT, n.d.).

However, league tables, and diverse student and staff profiles, cannot be the only measures of success. The increased size of many universities, (some of which enrol more than 60,000 students), has helped fuel a steep rise in managerialism, a proliferation of administrative staff, and a widening fissure separating academic staff and management. Wholesale casualisation has divided academic staff into two tiers, and led to significant exploitation (Fathi & Megarrity, 2019; Welch, 2012a). Longstanding, significant inequities still persist in rates of student participation, while the enduring government underfunding of the system has driven an entrepreneurial approach to international student recruitment. Universities have become too dependent on international student fees to sustain their operation, most particularly research performance. While there is much to celebrate in the evolution and accomplishments of Australian higher education, much remains to be achieved.

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