



THE UNIVERSITY OF  
MELBOURNE

—  
Melbourne Centre for the Study of Higher Education

Occasional Paper

# THREE DECADES OF CHANGE IN AUSTRALIA'S UNIVERSITY WORKFORCE

Gwilym Croucher





Publisher: Melbourne Centre for the Study of Higher Education

Occasional Paper title: Three Decades of Change in Australia's University Workforce

Author: Gwilym Croucher

DOI: 10.26188/23995704

Year of publication: 2023

© Melbourne Centre for the Study of Higher Education, The University of Melbourne

## EXECUTIVE SUMMARY

The Australian higher education workforce has been reshaped in recent decades. Changes to management practices and rules around industrial relations, the creation of new universities in the 1990s and the growth of international education markets have all influenced the academic and professional workforce in Australia. This paper examines national-level data on university workforce changes from 1989 to 2021. It highlights that despite the relative stability, there have been sector-wide shifts with clear implications for the future of Australian universities.

Between 1989 and 2021 the total growth in the number of academic employees largely followed student enrolments, especially in high-growth areas such as medical, health and allied health related disciplines. As the academic workforce expanded during this period it became more polarised. The professoriate increased in number to become a quarter of all academics at the same time as the middle ranks diminished in number. Part of this ‘hollowing out’ of the workforce followed the merger during the 1990s of Colleges of Advanced Education (CAE) that created new universities. The CAEs had a smaller proportion of senior academic staff, many of whom were steadily promoted to the professoriate after the creation of new universities.

The polarisation of the academy has also been driven by the growth in the number of junior academics, many in teaching-focused roles, and largely employed on a casual basis. This trend has been associated with ongoing inequalities for women in the academic ranks. In 2021 there were many more men in the professoriate than women: women constituted 37 per cent of the professoriate despite making up half of the total academic workforce in Australian universities. While the majority of senior academic staff continued to be employed on an ongoing basis (those with a form of ‘tenure’), their proportion steadily reduced from the 1990s. Two decades later few junior staff were employed in ongoing roles and many (if not most) early career academics were employed on either short-term or casual contracts. These changes are linked to universities rewarding and promoting ongoing academics, as well as deliberately seeking flexibility and cost reductions.

From 1989 to 2021 there was an ongoing transformation of the professional staff workforce, which is classified as those university employees with a wide variety of roles, including but not limited to administrative functions. Professional and academic staff numbers have grown roughly in proportion to each other, with professional staff remaining the majority. There has been a significant shift in the composition of the professional staff workforce. After 1989 women came to make up nearly two-thirds of professional staff, marking a departure from academic staffing patterns. During the same period, professional staff cohorts became more ‘top heavy’. The most junior classifications of Higher Education Worker (or HEW, a classification used to capture cross-university data for employee level) all but disappeared between 1994 and 2020. The proportion of HEW 1 to 3 reduced from a third of the workforce to one-thirtieth in this period. Across the sector, an increase in the average HEW level appears to reflect the emergence of new professional staff roles, such as *third space professionals* (those staff whose role is part-academic and part-professional), along with the impacts of technological change reducing the need for less skilled roles and the greater use of external contractors. At the same time, there was an increase in the proportion of the most senior leadership roles within universities, with the number of senior executives per staff member more than doubling.

What is clearer is that changes to Australian higher education during the late 1980s cast a long shadow on university workforces, with most of these trends systemwide and not confined to any particular university groups or types.

### Summary of key national trends between 1989 and 2021:

- Growth in academic and professional staff numbers largely followed patterns of growth in student numbers.
- There was a significant increase in the number of academics working in the broad *Health* disciplines grouping (including *Allied Health*), while other areas only had modest increases in staff numbers, and Education reduced its staff numbers.
- The professoriate made up 1 in 4 academic staff in 2020, up from 1 in 7 in 1989, with the growth mainly in the number of full Professors.
- There was a steady reduction in the proportion of academic roles employed on an ongoing basis (tenured) for all levels, with Level C, D and E reducing from around 9-in-10 academics with tenure to 7-in-10. During the period Level B went from 6-in-10 to 5-in-10 and Level A remained at 1-in-10.
- On a full-time equivalent (FTE) basis, the proportion of academics employed on casual contracts went from 1-in-10 to 2-in-10, with the vast majority of these casual in teaching-focused roles, and a majority occupied by women. On a headcount basis, the number of casual staff increased significantly.
- In 2020 women were underrepresented in senior academic roles (levels D and E) despite making up half of the academic workforce (and making up roughly 60 per cent of the total higher education workforce).
- A significant majority, nearly two-thirds, of professional staff were women in 2021 in contrast to academic staff.
- A growing proportion of professional staff were in more senior roles in 2020 than they were in 1989, as measured by the average HEW level, with the more junior classifications disappearing.
- While the number of deputy vice-chancellors remained consistent, there were more than twice the number of other senior executives per staff member at Australian universities in 2020 than in 1994.

# 1. INTRODUCTION

Since the early 1990s, the Australian higher education sector has grown significantly. The number of full-time equivalent students (EFTSL) in public universities has more than tripled since 1989, with Commonwealth Supported Places increasing by over 200 per cent and international students by 1800 per cent in this time. In 2021 international students made up nearly a third of the 1.6 million higher education students in Australia despite a slight reduction in their number following the impacts of COVID-19. Alongside the growth in the scale of Australian higher education have been significant changes to the composition and characteristics of the workforce in universities. Between 1989 and 2020 the university workforce doubled in size, growing by 209 per cent (Figure 1). Measured on an FTE basis professional staff numbers increased from around 20,000 to 74,000 and academic staff increased from around 33,000 to 62,000. This paper examines these trends using the Commonwealth Department of Education staff data collections between 1989 and 2021 unless otherwise specified (DoE 2022). Due to data limitations and some changes in classification during this period 1989 to 2021, several trends are examined over a shorter period.

The characteristics of the academic workforce have changed during the period from 1989 to 2021. There has been a polarisation of academic ranks, a ‘hollowing out’, through an increase in the proportion of both senior and junior staff at the expense of mid-level academics (Bexley et al 2011; Coates et al 2009a). Many of the employment opportunities for junior academic ranks have been in casual contracts, with gender discrepancies evident and a disproportionate number of women in teaching-focused junior roles (see also Kimber 2003; Coates & Goedegebuure 2012).

Professional staff referred to as ‘general’ staff for many years, have come to fulfil a variety of roles to support the work of public universities. The contributions of professional staff include roles that would be traditionally considered administrative, as well as others that enhance and enable the teaching and research that is core to universities and would have once been considered academic roles (see Whitchurch 2008; 2015; 2018 for a discussion of the rise of *third space* roles; see also Locke 2014). Along with this change was an increase in the number of more senior staff within professional ranks and a reduction in the number of junior staff (Croucher & Woelert 2022). The ratio of professional to academic staff has been largely consistent in Australia since the 1990s. This paper examines patterns for these two groups that make up the university workforce, extending and updating previous research examining staffing patterns and demographics (Hugo 2005a; 2005b; Hugo 2014).

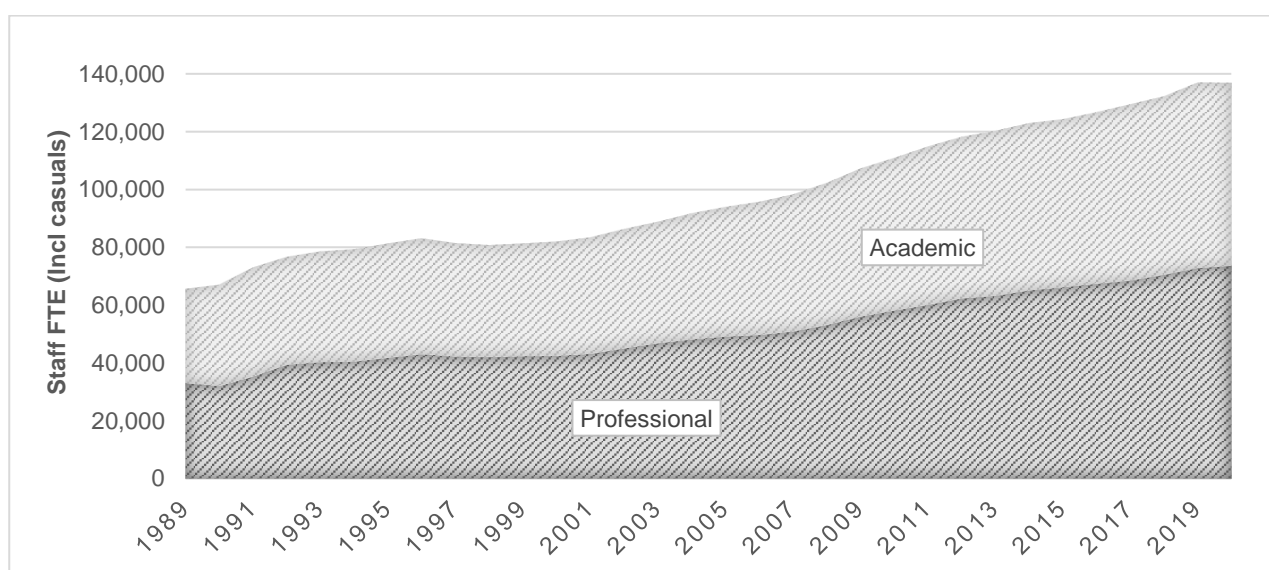


Figure 1: Australian university staff - 1989 to 2020

## 2. ACADEMIC STAFF

This section examines academic staffing trends, changes to staff functions, demographics, seniority and employment contract type. It also examines trends in casual employment and gender imbalance in academic ranks.

### 2.1. CHANGE IN THE NUMBER OF ‘TEACHING’ AND ‘TEACHING AND RESEARCH’ ACADEMIC STAFF IN SOME AREAS

After 2001 the number of full-time and fractional full-time ‘teaching’ and ‘teaching and research’ academic staff increased consistently with student enrolments, but this growth was uneven across different broad disciplinary groupings known as Academic Organisational Units (AOU) as Figure 2 shows. While AOU do not directly correlate to faculty, school and department structures they indicate the broad areas in which academics are employed. However, care needs to be taken in their interpretation as these AOU do not include all academic staff, such as research-only staff or other duties.

There has been significant growth in the broad AOU category of *Health* (which includes medical and allied health disciplines), mirroring the strong expansion in enrolments in these areas. In Arts faculties and Law faculties, and others mainly grouped in the broad AOU classification of *Society and Culture*, there has also been an increase in the number of full-time and fractional academics employed which has also followed growth in student numbers. However, many other broad discipline areas have only had modest changes in the total number of academic employees, despite an increase in the number of students. Of note is the broad area of *Education*, which has had a reduction by this measure in the total number of staff between 2001 and 2020. Several AOU have seen temporary reductions, such as *Management and Commerce* between 2012 to 2018.

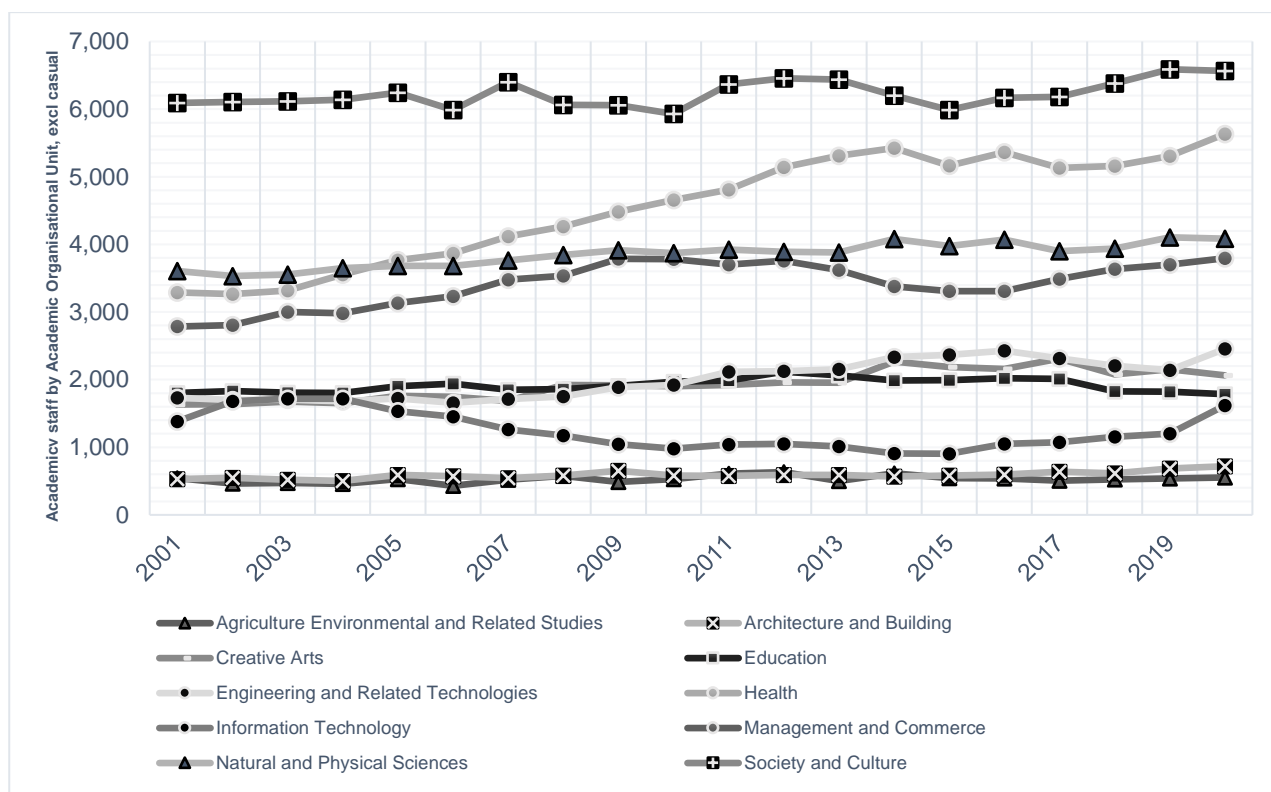


Figure 2: ‘Teaching’ and ‘teaching and research’ staff, FTE, located in Academic Organisation Units (excluding research-only staff, some unclassified academic staff and all casual academic staff) – 2001 to 2020

Despite the fact that the number of full-time and fractional ‘teaching’ (T) and ‘teaching and research’ (T&R) staff increased along with the growth in student numbers at an aggregate level, this has not been consistent across different disciplines and subject areas. As Table 1 shows there has been a marked variation between changes in academic staff and enrolments. Despite growing by over 61 per cent the *Education* AOU has marginally reduced its workforce on an FTE basis. Despite only moderate growth in student numbers, this constitutes a greater reduction in the number of staff FTE per student for *Education* than in other areas. For example, the *Health* broad field of education has more than tripled its number of enrolments between 2001 and 2020, while the number of FTE staff in AOU has increased by 71 per cent.

Academic Organisational Unit	T and T&R Academic FTE 2001 (excl casual)	T and T&R Academic FTE 2020 (excl casual)	FTE change	Enrolment (headcount) 2001	Enrolment (headcount) 2020	Enrolment change (headcount)	
Agriculture Environmental and Related Studies	543	553	+1.8%	18,484	21,916	+18.6%	
Architecture and Building	528	719	+36.2%	17,057	43,478	+154.9%	
Creative Arts	1,632	2,065	+26.5%	49,895	97,745	+95.9%	
Education	1,802	1,785	-0.9%	83,662	135,250	+61.7%	
Engineering and Related Technologies	1,730	2,454	+41.8%	58,298	118,229	+102.8%	
Health	3,288	5,633	+71.3%	92,266	277,590	+200.9%	
Information Technology	1,383	1,618	+17.0%	73,031	120,916	+65.6%	
Management and Commerce	2,785	3,795	+36.3%	221,858	380,050	+71.3%	-35%
Natural and Physical Sciences	3,604	4,086	+13.4%	66,222	136,733	+106.5%	-93%
Society and Culture	6,093	6,564	+7.7%	190,033	343,667	+80.8%	-73%

**Table 1: FTE of academic staff (‘teaching’ and ‘teaching and research’ classification, full-time and fractional full-time, excluding casual) in broad AOU: Enrolment growth headcount by FOE - 2001 and 2020**

These changes suggest shifts in the overall makeup of the teaching workforce in Australian higher education in recent decades, as reflected in the growing dominance of some disciplines and the retreat of others as measured for academics employed on an ongoing or fixed-term basis (see Table 2). Along with the *Health* AOU's 71 per cent increase in academic staff numbers as a proportion of the academic workforce, it grew to account for an additional 5 -percentage points of the academic workforce between 2001 and 2020, going from 14 per cent to over 19 per cent.

<b>Academic Organisational Unit</b>	<b>Proportion T and T&amp;R Academic FTE 2001 (excl casual)</b>	<b>Proportion T and T&amp;R Academic FTE 2020 (excl casual)</b>	<b>Difference</b>
Society and Culture	26.05%	22.42%	-3.63%
Education	7.70%	6.10%	-1.61%
Natural and Physical Sciences	15.41%	13.96%	-1.45%
Agriculture Environmental and Related Studies	2.32%	1.89%	-0.43%
Information Technology	5.91%	5.53%	-0.39%
Creative Arts	6.98%	7.05%	0.08%
Architecture and Building	2.26%	2.46%	0.20%
Engineering and Related Technologies	7.40%	8.38%	0.99%
Management and Commerce	11.91%	12.96%	1.06%
Health	14.06%	19.24%	5.19%

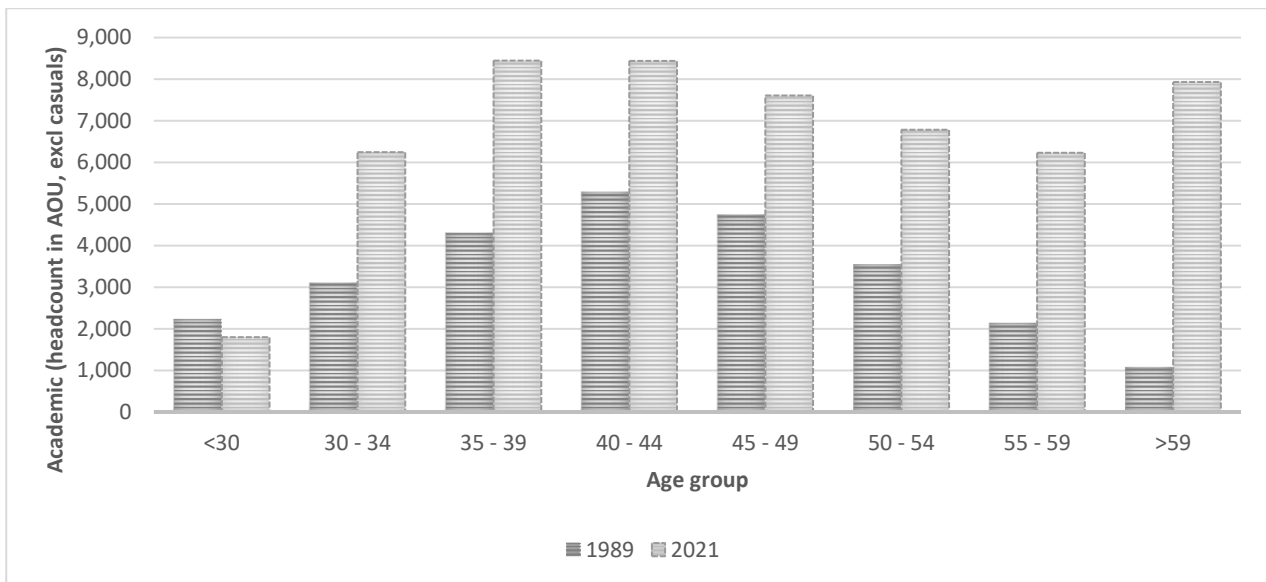
**Table 2: Proportion of ‘teaching’ and ‘teaching and research’ staff in broad groups of Academic Organisation Units (excluding research-only staff, some unclassified academic staff and all casual academic staff) - 2001 and 2020**

While the growth in student numbers appears to be (roughly and very unevenly) correlated with staff numbers, and hence a likely driver of it, this needs to be viewed in the wider context of the capacity of universities to employ new staff based on their different revenue streams. In particular, the growth in fee-paying international students has provided significant funds to employ academics at some universities in both teaching and research capacities. Based on the principle that not-for-profit universities tend to reinvest what they earn this has likely bolstered research-focused academic numbers in many universities.

## **2.2. AN AGEING ACADEMIC WORKFORCE THAT LACKS GENDER BALANCE**

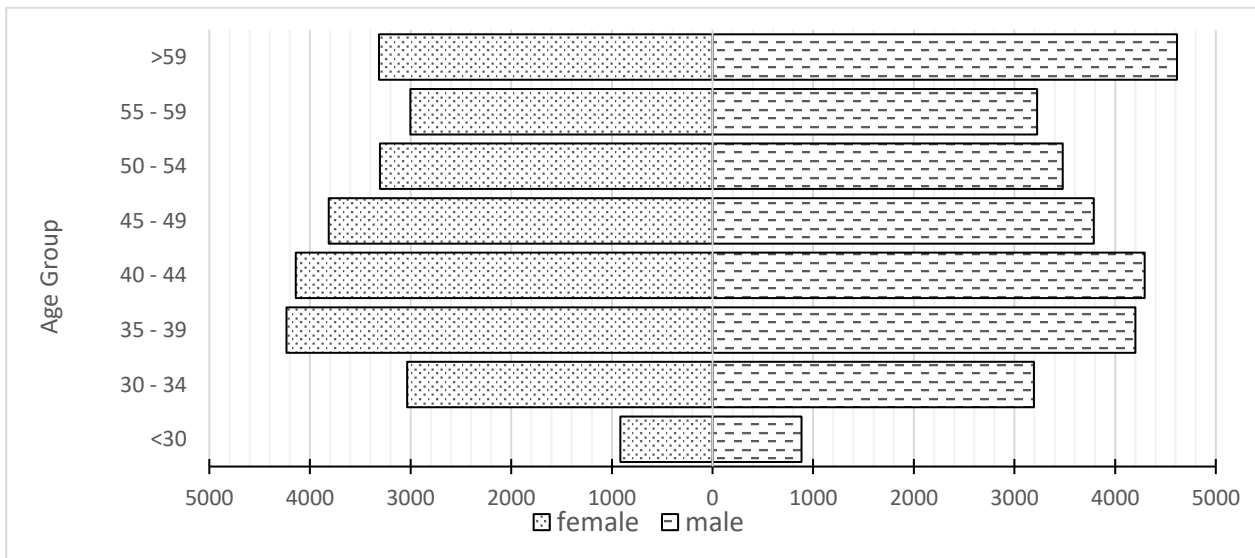
The age profile of the ongoing and fixed-term academic workforce changed between 1989 and 2021 (Figure 3). In 1989 just over 1 in 3 academic staff were aged over 45, and by 2021 this had grown closer to 1 in 2, matching patterns in other countries (Larkin and Neumann 2012). This reflects an expansion of the higher education system and the creation of new universities, which brought younger staff into universities during the 1990s and early 2000s (Croucher and Waghorne 2020). By 2020 many of these staff were in ongoing (tenured) and fixed-term roles, while new staff were often employed on a casual basis.





**Figure 3: Academic staff age distribution by age group, headcount, excludes casual academic staff and nonbinary/unspecified staff – 1989 and 2021**

As Figure 4 shows, in 2021 the majority of the ongoing (tenured) and fixed-term academic staff in AOU were male, with women only the clear majority in the 45-49 and 35-39 age cohorts. This suggests that despite the significant imbalance right now, in future years the gender split in higher education should be more even. However, as detailed in the next section, in 2021 women remained underrepresented in professorial academic ranks.



**Figure 4: Age profile of tenured (ongoing) and fixed-term academic workforce excluding casual academics and nonbinary/unspecified staff – 2021**

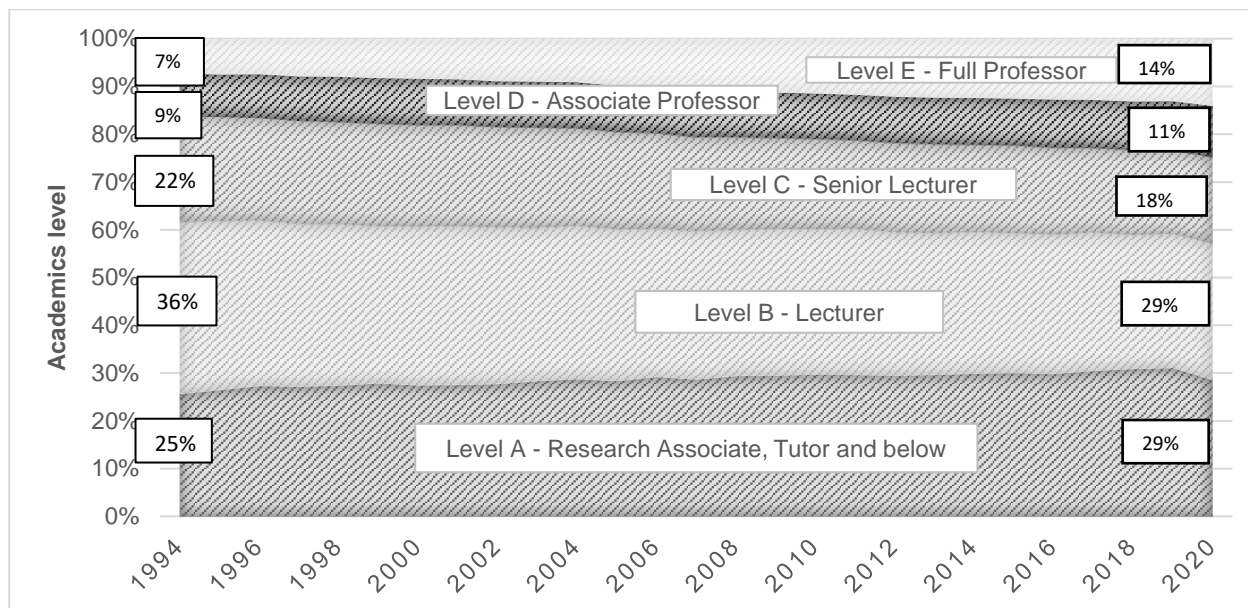
### 2.3. GROWTH OF THE PROFESSORIATE AS A PROPORTION OF THE ACADEMIC WORKFORCE

The proportion of senior academic staff at Australian universities increased after the 1990s. For most of the 20th century, the majority of the academic workforce was composed of junior teaching and research staff (those classified as lecturer or below lecturer level). While this was still largely the case in 2020, from 1994 onwards there was a diminishing proportion of mid-ranked academic staff, with the effect that the academic workforce became more polarised (see also Kimber 2003), and to an extent ‘hollowed’ it out.

Between 1994 and 2020, the number of full Professors (level E) increased from less than 8 per cent of the total full-time equivalent academic workforce to over 14 per cent (Figure 5). This may reflect several factors, most prominently an ageing academic workforce (discussed below), but also structural changes that came about from the merger of universities in the late 1980s and early 1990s. The creation of new universities by merging former Colleges of Advanced Education (CAEs) appears a key change, as these institutions only had a small proportion of senior teaching staff. The senior CAE academic staff were called *Principal Lecturers* or similar, a rank that was converted to *Associate Professors* when these staff became part of the new universities (Macintyre et al. 2017). Before the 1990s, the difference in the number of senior academic staff in universities and CAEs was pronounced. In the CAEs, 1 in 15 academic staff were senior versus 1 in 5 in the universities (CTEC 1987; Croucher and Waghorne 2020). The increase in the proportion of the academic workforce constituted by the professoriate between 1994 and 2021 has returned universities to an overall staffing profile closer to that existing in the 1980s though still higher.

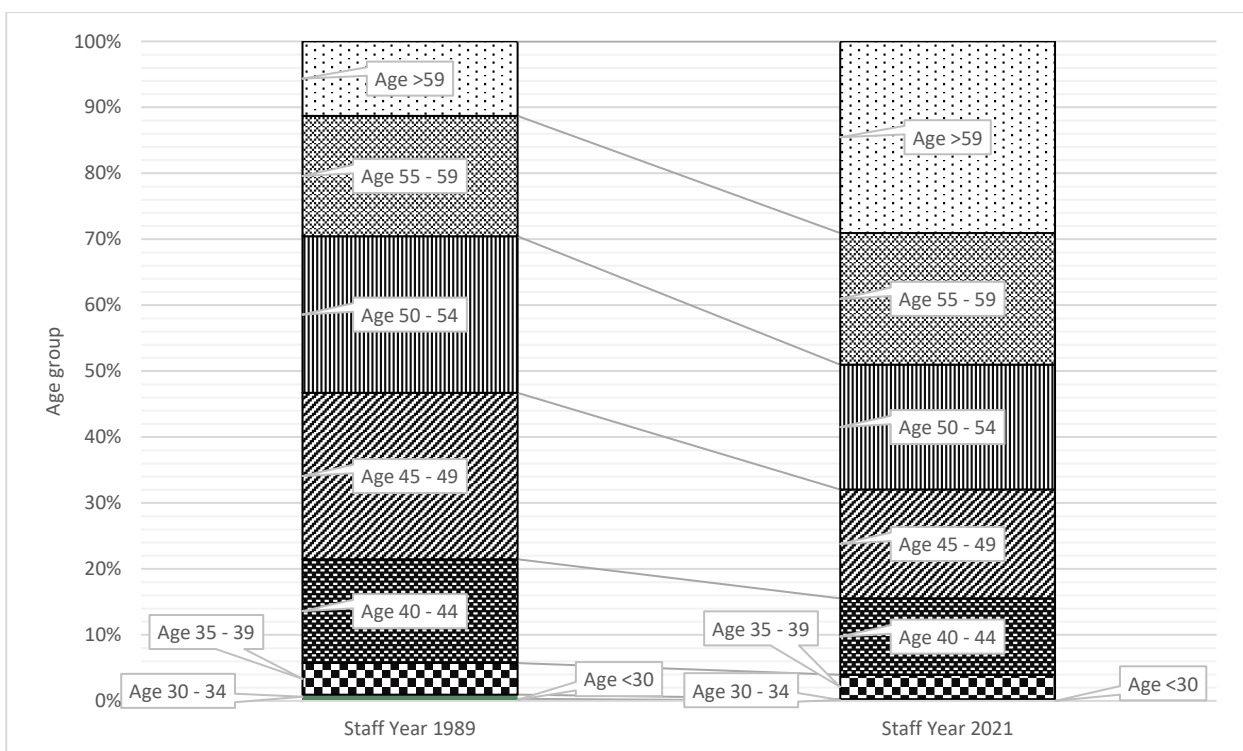
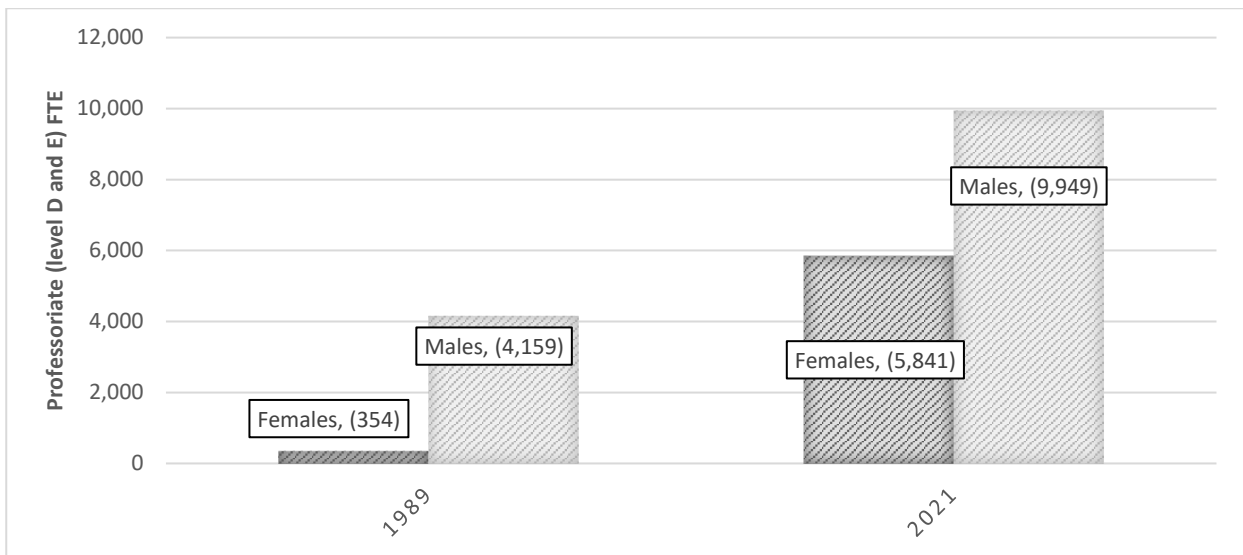
Notably, the growth in the professoriate was at the level of full Professor (level E). In contrast, Associate Professor, level D, remained around 1 in 10 academics after 1994. It is conceivable that Associate Professor is a transitory rank for many academics, though this cannot be inferred from the data presented here, and there may be other confounding factors.

In 2020 the professoriate came to make up almost a quarter of the workforce and the most junior academics (level A) remained just under a third of the workforce. The proportion of level B and level C academics, however, reduced from 1994 onwards such that by 2020 the permanent academic workforce in Australia became more ‘top heavy’ as Figure 5 shows.



**Figure 5: Australian academic staff by level – 1994 to 2021**

While the proportion of senior academics grew in all public universities, this was particularly pronounced at some institutions and especially at the large research universities. The historical factors that have led to growth in the proportion of professors, such as the rapid expansion of the system and the creation of new institutions, have correlated with an ageing professorial workforce. As Figure 6 shows, the average age of the professoriate increased between 1989 and 2021. Over 30 per cent of Professors and Associate Professors were over the age of 59 in 2021 and were disproportionately male, reflecting structural employment issues and longer-term patterns (e.g. Dunkin 1991; Probert 2005; Parker et al. 2018). While this ratio is skewed, it was a marked improvement over 1989, where fewer than 1 in 10 senior academic staff were women.



**Figure 6: Professoriate (level D and E) demographics, age grouping and split between male and female – 1989 and 2021**

## 2.4. REDUCTION IN THE NUMBER OF ACADEMIC ROLES THAT ARE EMPLOYED ON AN ONGOING BASIS (THAT ARE ‘TENURED’)

Traditionally those in the professorial ranks have had more permanent ‘ongoing’ positions. Sometimes referred to as ‘tenured’ (a term used here in the general sense and also a descriptor in the Australian national data collection), this form of more permanent employment has been common for senior and middle-rank academics. It has also been a feature of junior academic ranks although not to the same extent. Academic staff that do not have an ongoing position are either employed on fixed-term contracts or, as detailed below, on ‘casual’ contracts. While there was an increase in the number of senior academic



staff between 1989 and 2020, there was a simultaneous reduction in the proportion of these staff who had ongoing positions (Figure 7). In 1989 almost 86 per cent of level D and E and 90 per cent of those at level C had ongoing positions. Middle-rank academics (level C) appear to have had consistently more secure employment than level D or E, although this likely reflects the fact that a growing number of professors during the period were employed on fixed-term contracts, especially those in medical fields funded by fixed-term competitive fellowships, such as offered through the NHMRC.

In 1989 58 per cent of level B academics were in ongoing employment and less than 7 per cent of level A had an ongoing position. By 2020, 71 per cent of level C, 67 per cent of the professoriate and 45 per cent of level B were in ongoing employment. The proportion of Level A academics with ongoing employment remained consistently low, reflecting the fact that most staff at this level are on short-term or casual contracts and in junior roles, such as ‘training’ teaching positions adjunctive to PhD candidature.

Between 1994 and 2020 the overall proportion of academic staff on continuing academics at Australian universities declined from 52% to 44%, due to the increase in limited-term and casual contracts.

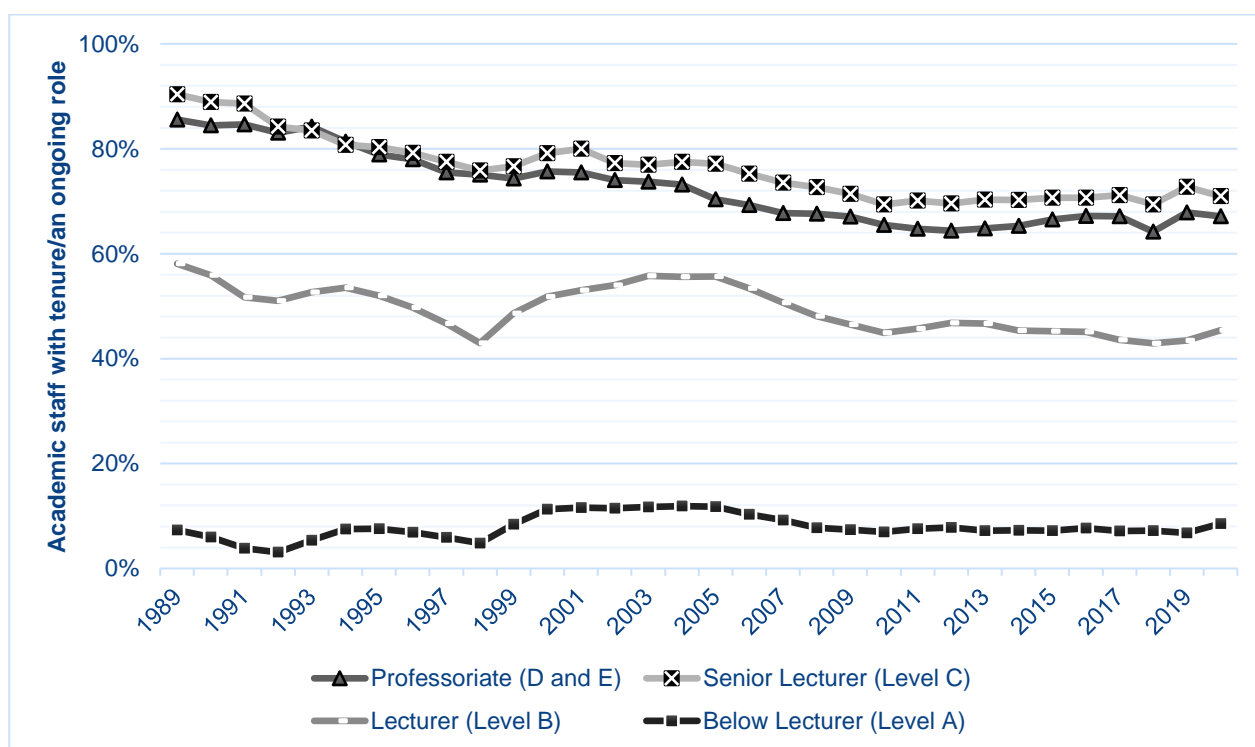


Figure 7: Academic employment status – 1989 to 2021

The proportion of all academic staff with ongoing employment varies between universities, as Figure 8 shows for three different subsets of universities in the period 1989 to 2020. The first grouping shown are those universities that are members of the Group of Eight (Go8) research universities, which are labelled as the large research-intensive institutions on the chart. The second group is made up of those universities not members of the Go8 that were established before 1980. The third group is made up of those universities established after 1980, largely through the merger of smaller higher education institutions, such as CAEs and TAFEs. Despite the common perception that the Go8 universities have higher levels of tenured staff, from 1989 onwards they consistently had a lower proportion of academics in ongoing roles. This in part reflects the fact that these universities employed the majority of professors who were recipients of competitive fixed-term research fellowships (e.g. NHMRC Fellowships). Nonetheless, the proportion of tenured academics changed consistently for the three groupings over the period, suggesting that the

reduction in tenure is a systemwide trend, as with other changes to the workforce, rather than a change confined to particular institutions or types of universities.

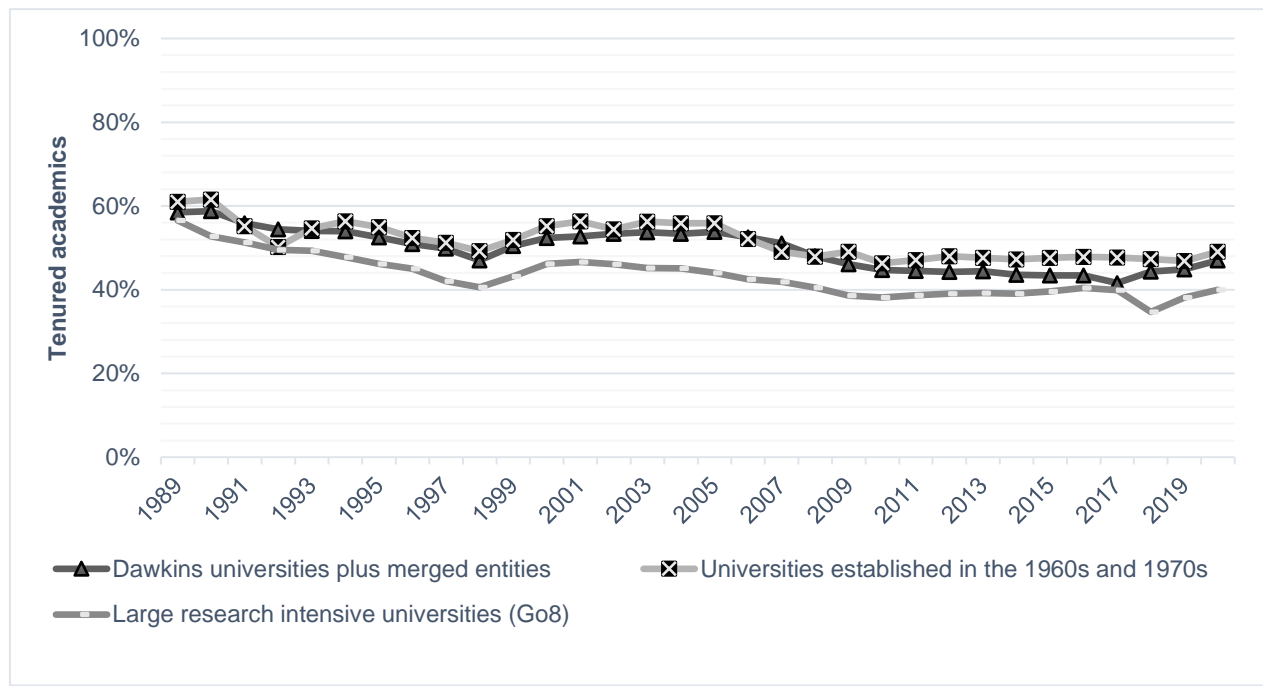


Figure 8: Proportion of academics with tenure by university grouping - 1989 to 2020

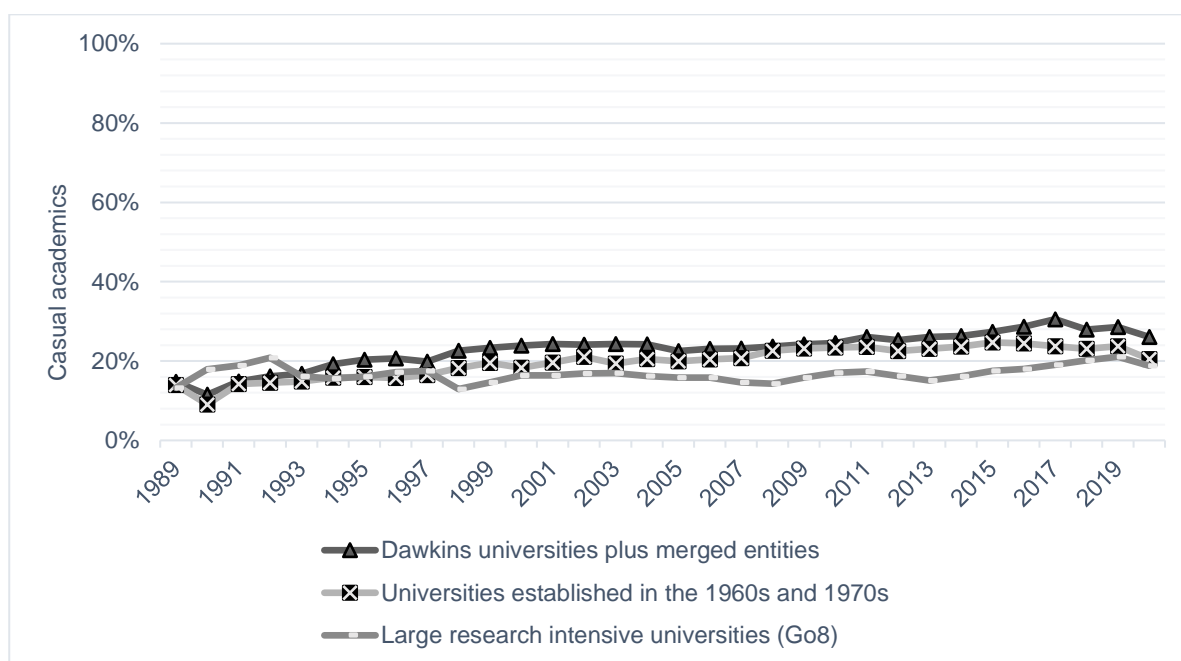
## 2.5. ‘CASUALISATION’ CENTRES AROUND THE TEACHING WORKFORCE

One of the most significant trends for the academic workforce in Australia has been the significant growth in the number of staff that are employed on casual contracts. Between 1990 and 2020 the number of casual staff increased from 10 per cent to over 20 per cent of academic FTE positions (Table 3). As most casual staff do not work the equivalent of a full-time number of hours each week, the actual number of people (headcount) working in academia who are employed as casuals is certainly a much higher proportion of the overall workforce than the FTE numbers suggest (Probert 2013; Ryan et al 2013). Unpublished data suggests that headcount numbers are 4-5 times higher than FTE, though many of these individuals only work a few hours over a year (giving guest lectures, for example).

Year	All university staff (including actual casuals) FTE	All academic staff (including actual casuals) FTE	Actual casual academic staff FTE	Proportion- actual casual/all academic staff
1990	57,094	26,530	2,972	10.1%
1995	81,296	29,892	5,777	16.2%
2000	81,988	30,797	7,106	18.7%
2005	93,994	34,277	7,979	18.9%
2010	110,929	40,100	10,691	21.0%
2015	124,356	43,903	12,943	22.8%
2020	136,951	49,150	13,358	21.4%

**Table 3: Academic staff employed on a casual basis – 1990 to 2020**

As Figure 9 shows for university subsets, between 1989 and 2020 the large research-intensive universities (the Go8 members) consistently had a marginally lower proportion of casual academic staff than the newer universities created by the 1990s CAE mergers. This latter group has had a slightly higher proportion of teaching-focused staff than the older universities, many of whom are employed on a casual basis.



**Figure 9: Casual academic roles as a proportion of all academics - 1989 to 2020**

As Figure 10 shows, casual academics have been concentrated at the junior levels of the workforce, with most of those employed on academic level A being on a casual contract and over half of those at level B. In 2019 there was a small number of staff at senior levels employed on a casual basis, however, these appointments were often ‘adjunct’ and undertaken by those working in the professions (such as the legal profession) and in industry. In this case, academic employment is a complement to another substantive role, such as the solicitor, where the adjunct teaching position relates to their professional expertise (Coates et al 2009b) and is not particularly constitutive of employment security.

During the period most casual staff were in roles classified as ‘teaching only’. Notably, as measured on an FTE basis there were sizable differences in the number of casual positions classified as ‘teaching only’ and



‘teaching and research’ and those classified as ‘research only’ positions. The data suggests that researchers and research assistants tend to be employed on fixed-term contracts rather than having ongoing positions, although caution is needed here when interpreting the data due to the likely misclassification of some casual academic work.

The root causes for the growth in casualisation are challenging to fully explain and are likely linked to several factors. These include universities seeking to reward and promote permanent academics, which has increased salary costs while seeking to manage a turbulent funding and international education environment that has incentivised managers at all levels to seek cost reductions and flexibility through permitting widespread casual employment for teaching purposes. Equally, the practice of employing casuals has potentially been normalised through faculties, departments and schools and so is a phenomenon that cannot be explained by looking for causes in university-wide management decisions. While key pathologies have been widely acknowledged, such as the underpayment of casual employees (Cahill 2020), more research is required to fully explain the rapid growth between 1990 and 2020 leading to widespread casualisation across the sector.

Equally important is the need to more fully understand the extent that fixed-term employment contracts are associated with suboptimal outcomes for staff and institutions. Fixed-term contracts can be experienced by staff as nearly as tenuous a position as casual employment contracts. Due to limitations in the data further analysis is not possible, but there is an insight to be gained from systemwide analysis of continuing (both full and part-time) employment versus fixed-term and casual employment in higher education.

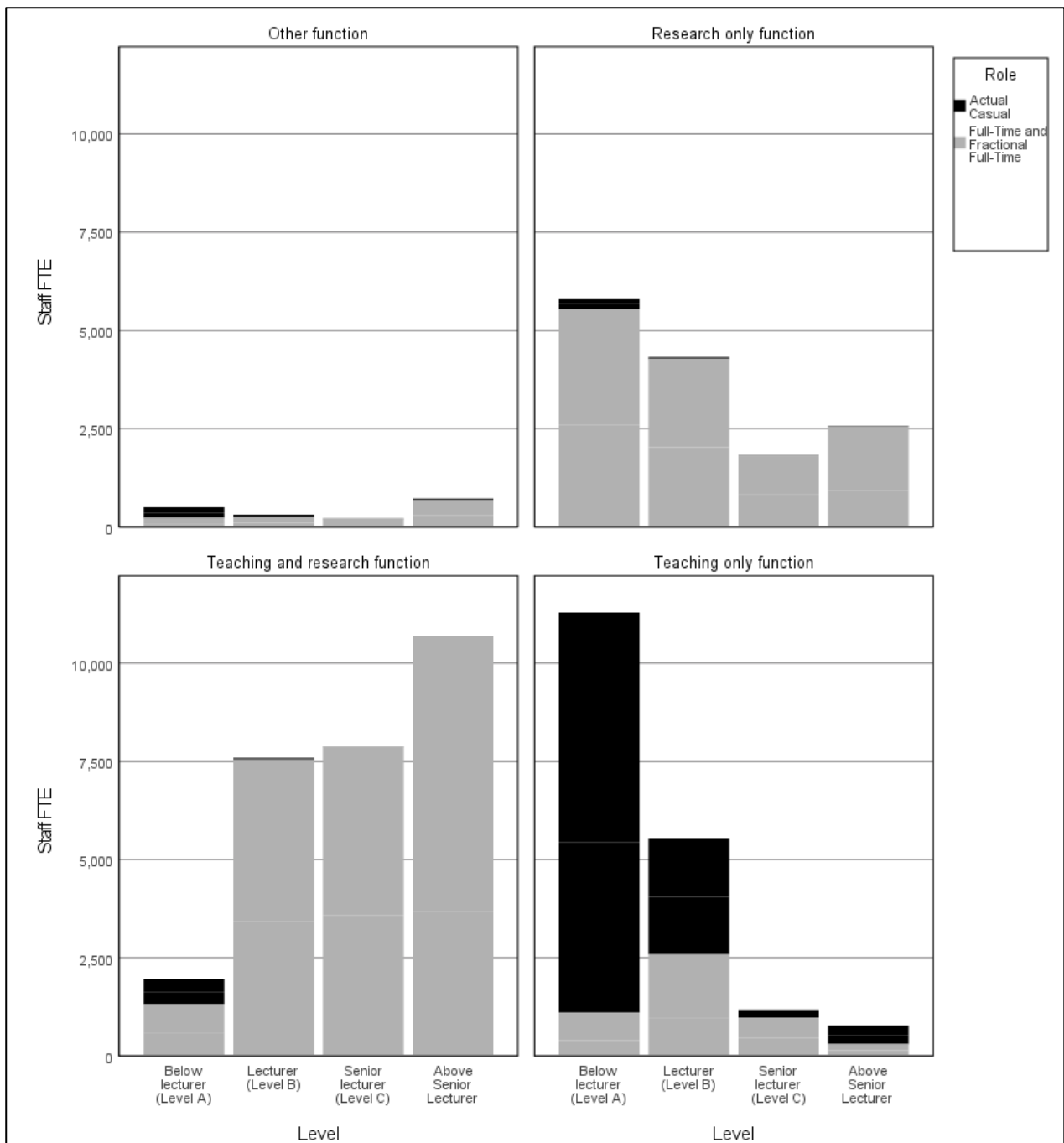
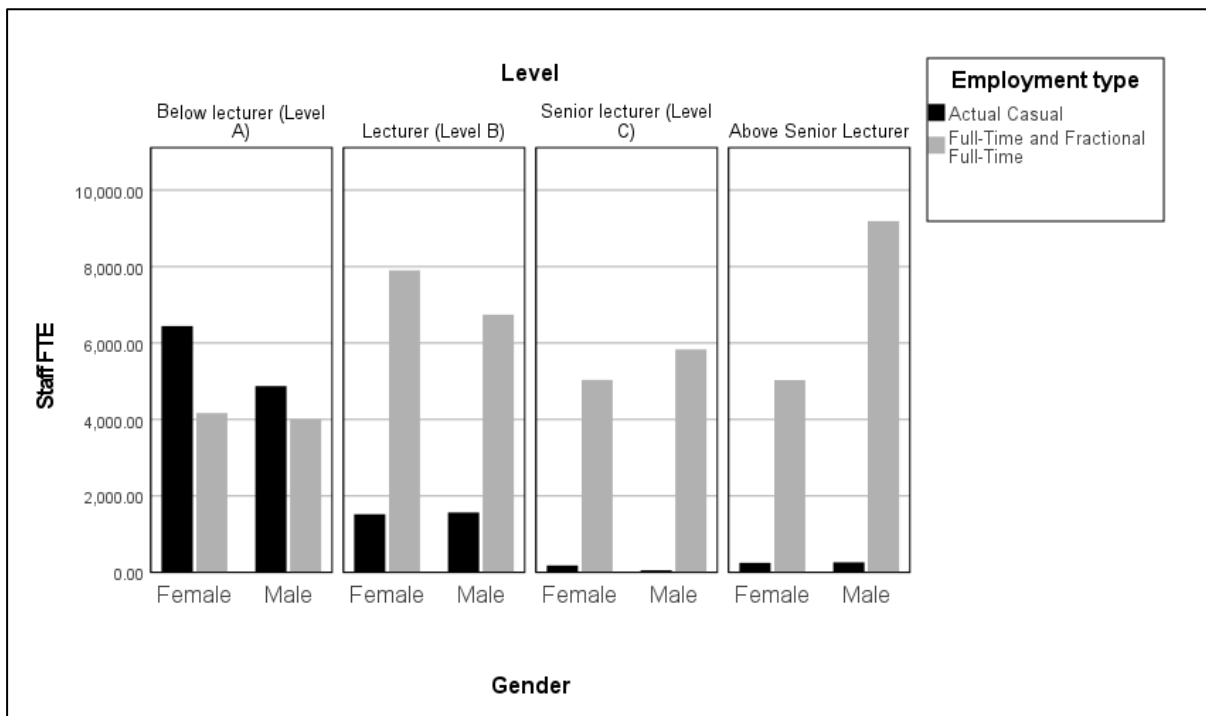


Figure 10: Academic staff by level and function – 2019 (estimated)

## 2.6. WOMEN ARE UNDERREPRESENTED IN SENIOR ACADEMIC ROLES WHILE BEING OVERREPRESENTED IN CASUAL ACADEMIC ROLES

For most of the twentieth century academic ranks were dominated by men with this beginning to change during the 1970s and 80s (Croucher and Waghorne 2020). However, as Figure 11 shows, despite women making up more than half of total university employees on an FTE basis in 2019, they were still underrepresented in the more senior academic ranks in Australia, a pattern fitting international experience (Baker 2012; Probert 2005). The majority of employees in level A and level B were women, while at levels C, D and E the majority remained men. Male full Professors (level E) outnumbered female full Professors by a wide margin.



**Figure 11: Academic staff by gender and level, excluding nonbinary/unspecified staff – 2019 (estimated) – note Above Senior Lecture include level D, E and other senior academic positions such as vice-chancellors.**

As figures 12 and 13 show, the disproportionate number of women in casual academic employment can be starkly seen in the more granular data on levels A and B. The majority of level A casual academics in 2019 were women in teaching-focused roles, reflecting established patterns (May et al 2013a; b). Junior academics in research-focused roles were largely employed on a fixed-term basis rather than a casual basis, with the majority of these men.



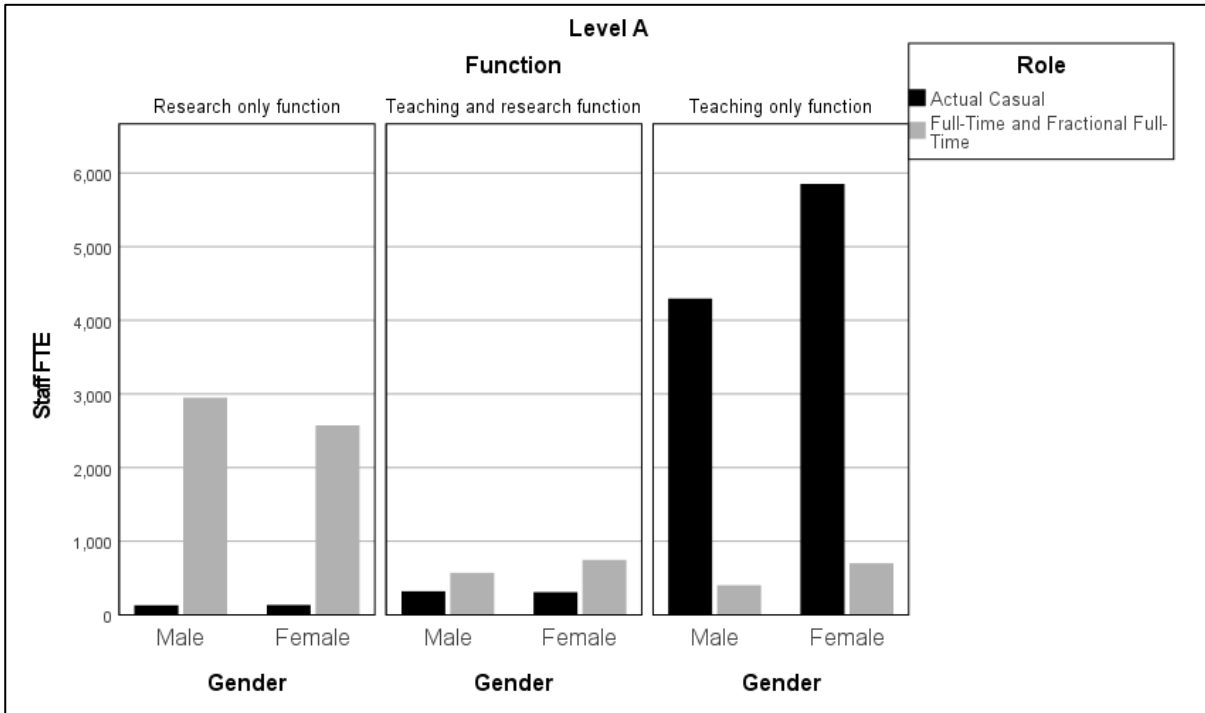


Figure 12: Academic staff at Level A by gender and function – 2019 (estimated)

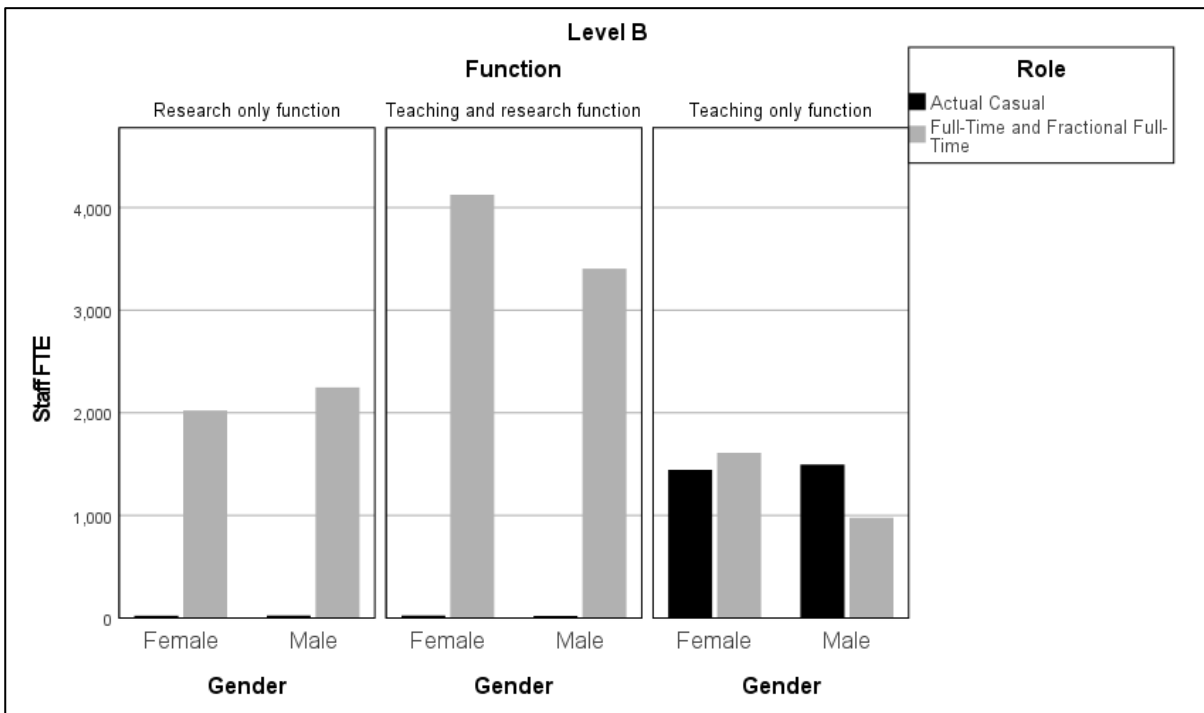


Figure 13: Academic staff at Level B by gender and function – 2019 (estimated)

### 3. PROFESSIONAL STAFF

This section details some trends in the makeup of professional staff in Australian higher education. It outlines changes to demographics and workforce composition, as well as patterns of centralisation for universities of different scales.

#### 3.1. A GROWING PROPORTION OF PROFESSIONAL STAFF ARE IN SENIOR ROLES

The demographic and classification mix of professional staff in Australian universities has changed significantly in the decades to 2020. Much as there has been an increasing proportion of senior staff in academic ranks, there has also been a trend towards a greater proportion of senior positions in professional staff ranks. Starting in the early 1990s professional staff were classified using the Higher Education Worker (HEW) scale, which formed part of industrial awards and is currently used in the staff data collections. The most junior roles in this ten-level scale are roles without significant responsibility, while those at higher levels are roles with management responsibilities or significant technical and specialised expertise. In 1994, a third of professional staff were in the most junior roles (HEW level 1 to 3), with 42 per cent in the middle rank of HEW 4 to 6 and 15 per cent in the higher rank of HEW 7 to 9. Only 3 per cent of the professional staff workforce in universities were in senior advisory, management and executive roles, with another 8 per cent employed on contracts outside the industrial award, such as some interns, sub-contractors or some senior staff on negotiated contracts.

By 2020, the composition of the professional staff workforce had changed markedly. As Figure 14 shows, the proportion of junior professional staff reduced to 3 per cent, with the proportion of HEW 4 to 6 remaining roughly the same as in 1994 while the proportion of total professional staff at levels HEW 7 to 9 more than doubled. The proportion of senior professionals, managers and executives close to tripled in the quarter of a century after 1994, and in 2020 they made up almost 1 in 10 professional staff. This reflected a variety of factors, including changing role complexity and as a mechanism to increase remuneration (reclassification). In addition, the reduction in lower-level staff reflected the impact of technology and outsourcing of relatively basic administrative and property services functions (making many roles redundant) as well as the increase in the number of managers per staff (Croucher and Woelert 2022).

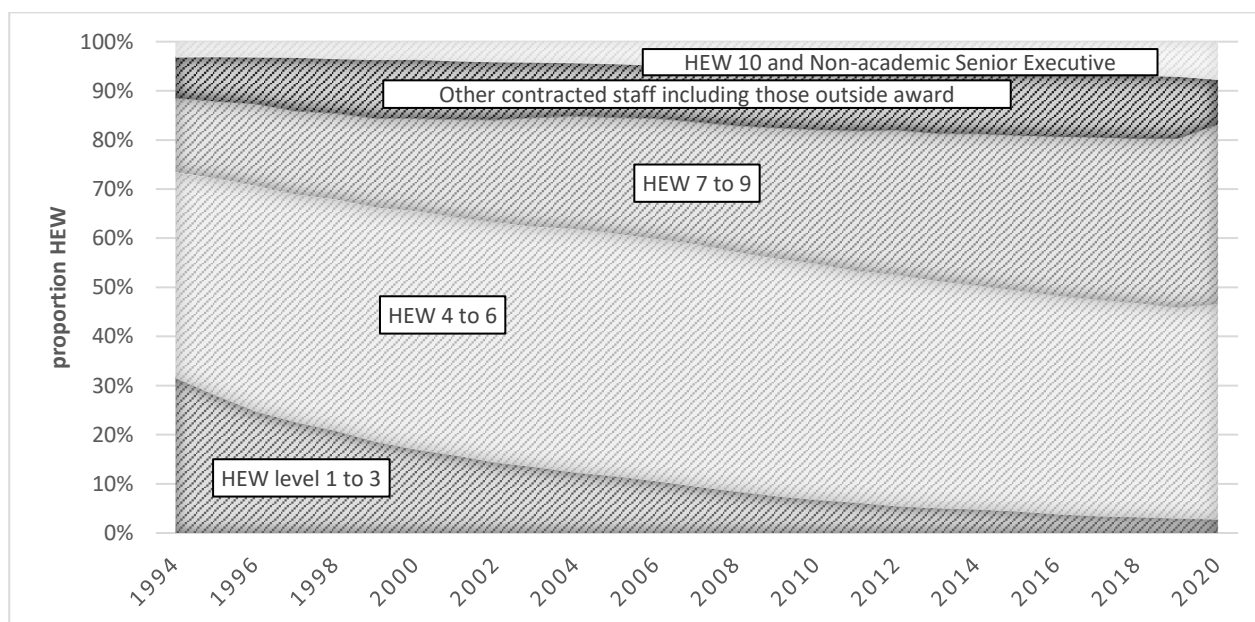


Figure 14: Professional staff by HEW level, 1989 to 2020

### 3.2. PROFESSIONAL STAFF DEMOGRAPHICS

In 2021 women were the majority of professional staff, as Figure 15 shows. Their median age was estimated to be around 37 years old. There are significantly fewer men employed in professional staff ranks than women, by a ratio of almost 1 to 2. Figure 16 shows that the age profile of professional staff employed on an ongoing or fixed-term basis changed significantly between 1989 and 2021. In particular, there was a reduction in the proportion of staff below the age of 30. This in part reflects a consistent increase in the average age of the professional workforce, and likely that some junior roles held by younger staff have, over time, come to be replaced with casual contracts as the workforce expanded. The absolute number of professional staff below the age of 30 who were not on a casual contract grew much slower between 1989 and 2021 than the number of professional staff older than 30. Significantly, the professional staff workforce is more feminised when compared to the academic workforce, reflecting different patterns of retirement for academic staff, as well as the long tail of a historically male workforce. The aggregate data likely hides potential gender distortions for more senior professional roles but further analysis is required to confirm this supposition.

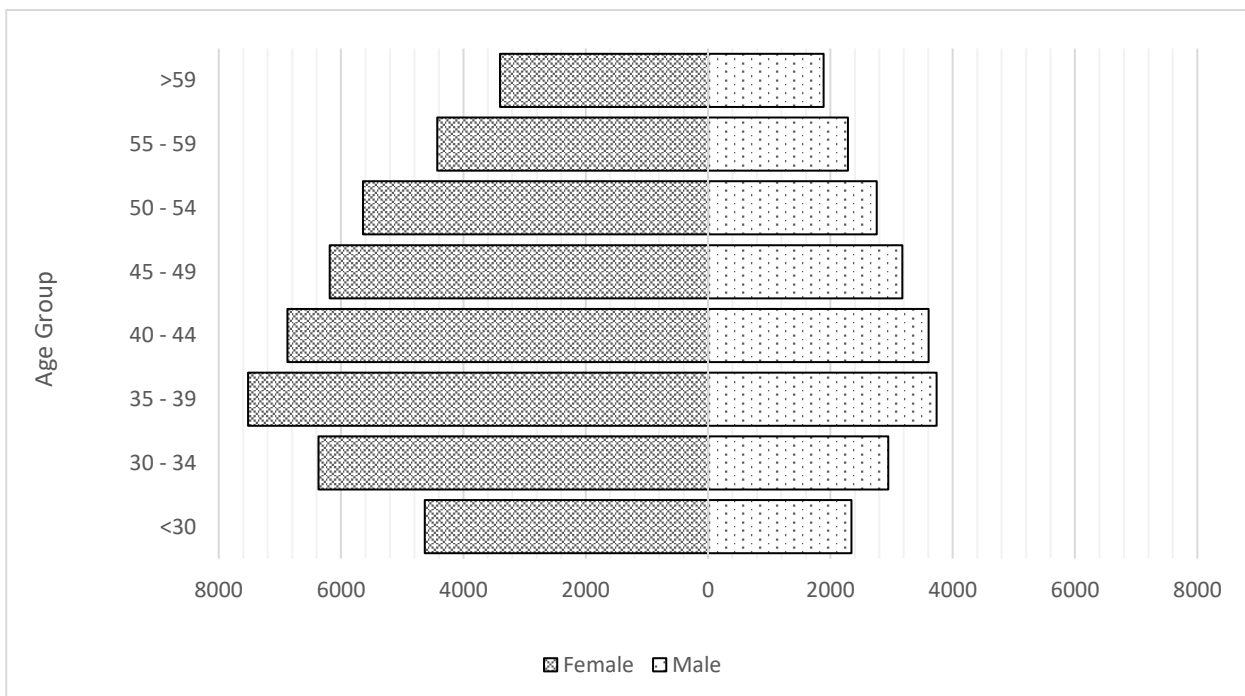


Figure 15: Professional staff, headcount, excluding casuals - 2021

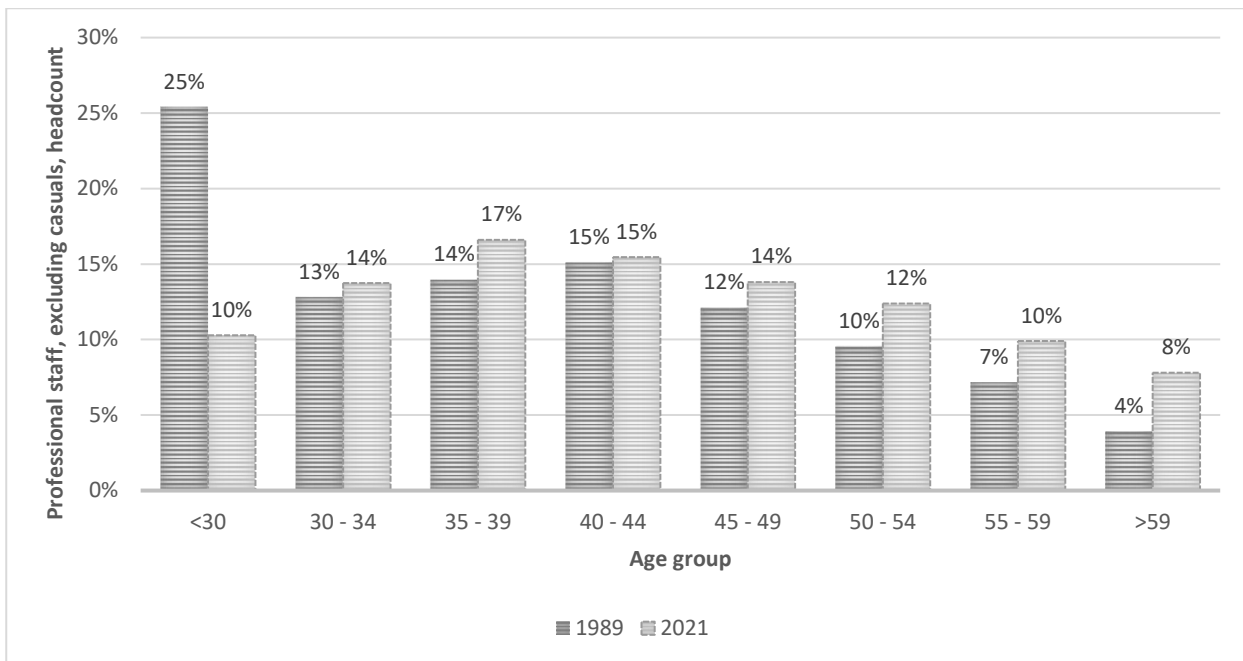


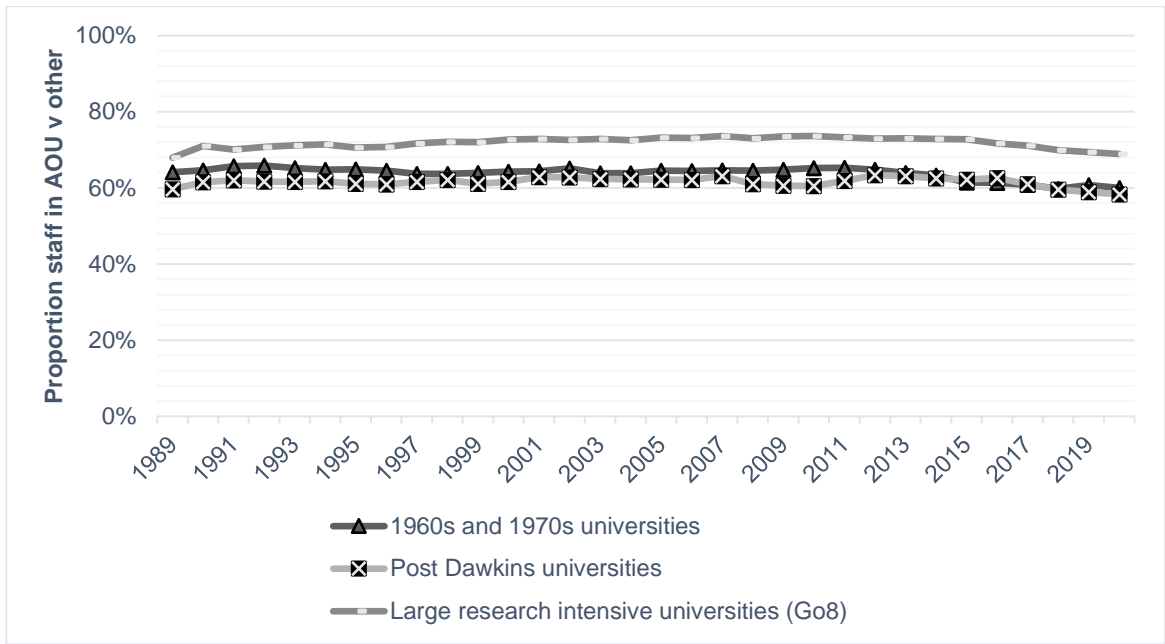
Figure 16: Professional staff by age group, headcount, excluding casuals – 1989 and 2021

### 3.3. UNIVERSITIES OF THE SAME SCALE HAVE DIFFERENT NUMBERS OF PROFESSIONAL STAFF

The growth in the number of professional staff has largely followed that of academic staff, with both categories increasing at a steady rate in line with the growth in the total number of students. While this has been accurate at an aggregate level across the sector, the number of professional staff per student varies significantly for different public universities in Australia. There is little obvious correlation between the overall size of a university as measured in EFTSL (Figure 17). For example, data from 2017 indicates that some larger universities had high numbers of professional staff per student while some did not. This is noticeable for both older and younger universities, and both those that are research-intensive and those that are teaching-intensive. There appears no obvious pattern to explain the ratio of professional staff to enrolments, nor obvious evidence for diseconomies of scale where larger institutions become more complex and hence require greater numbers of professional staff.

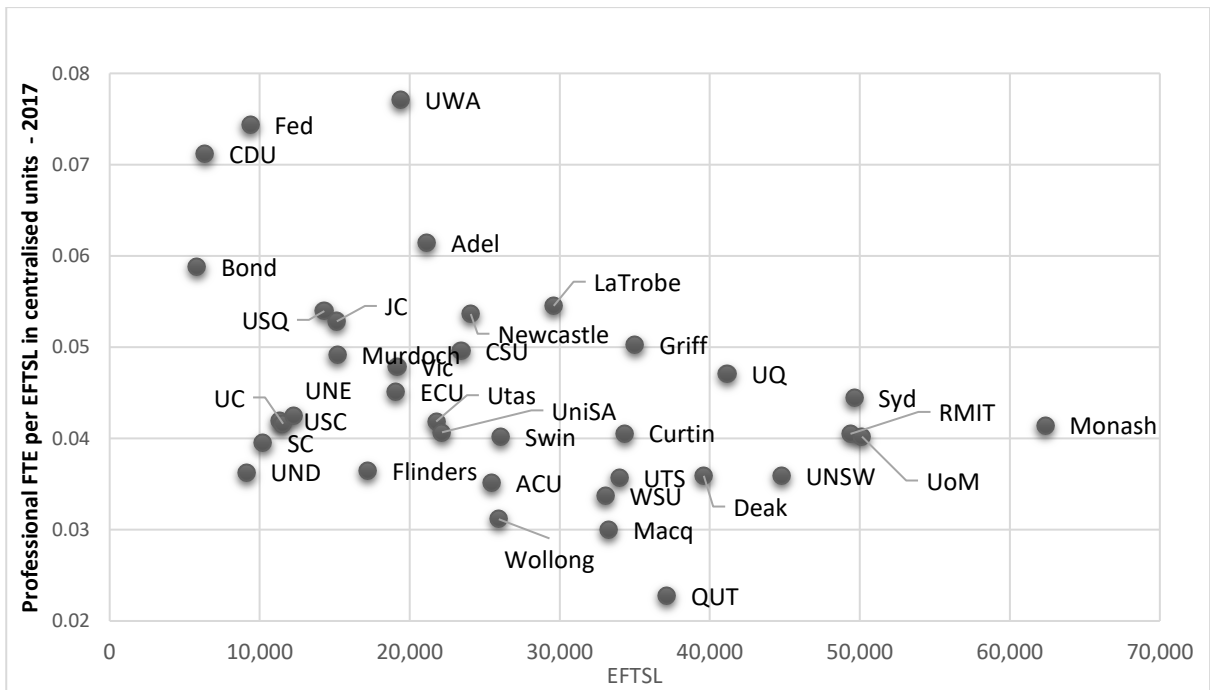






**Figure 18: Proportion of staff in Academic Organisational Units (faculties) versus in other organisational units – 1989 to 2020**

The growth of central units occurred in universities of different ages, scales and research intensity. As Figure 19 shows for 2017, the number of students enrolled at a university does not imply that it will have either a larger or a smaller centralised unit.

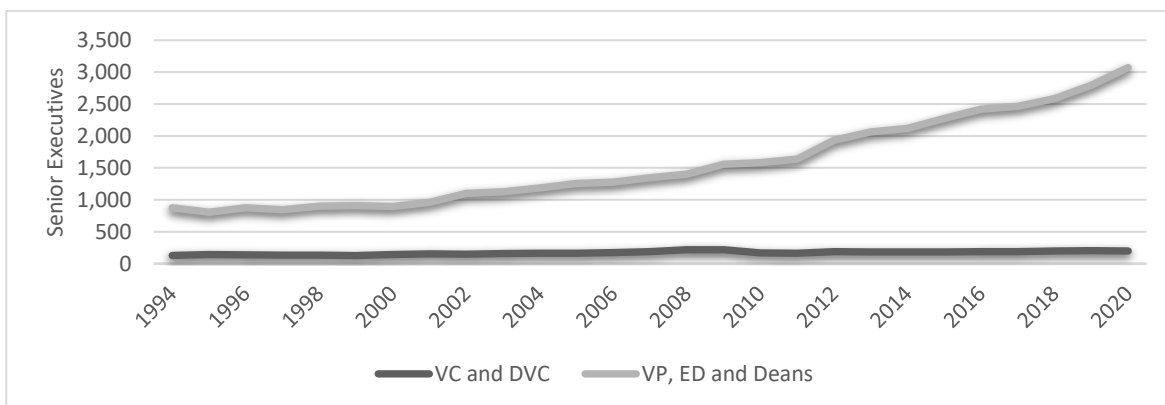


**Figure 19: Concentration of professional staff in central units plotted against the number of students enrolled - 2017**

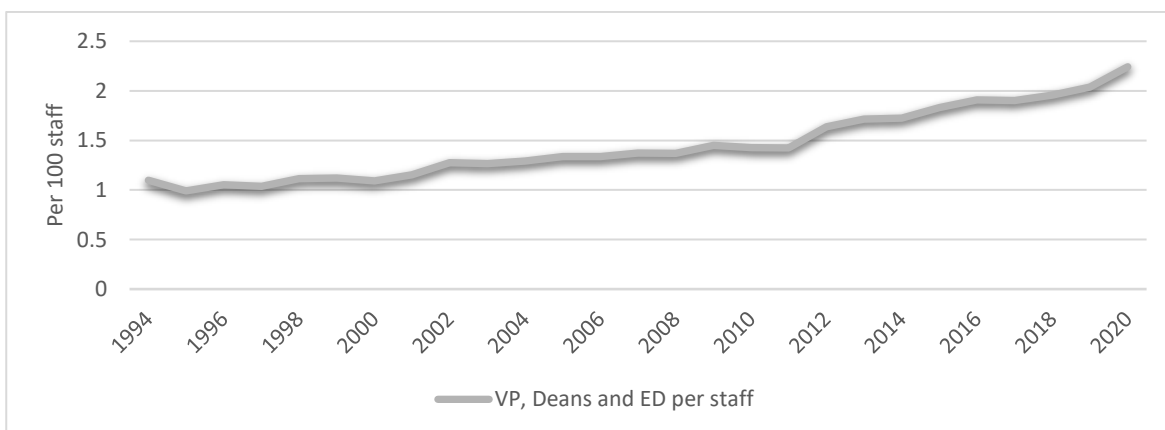
### 3.5. GROWING NUMBERS OF SENIOR LEADERS AT AUSTRALIAN UNIVERSITIES

The number of senior academic leadership roles— vice-chancellors and their deputies— in Australian universities remained relatively consistent between 1994 and 2020. However, there has been significant growth in other senior executive roles within universities during the same period. Figure 20 aggregates these senior roles (e.g. Vice-Presidents and Executive Directors) with deans and their equivalents to show that senior executive numbers increased from under 1,000 in 1994 to over 3,000 by 2020. The number of senior roles has increased at a greater rate than the growth in overall staff numbers. As Figure 21 illustrates, the number of executive roles per hundred staff has more than doubled, going from one per hundred staff to almost 2.5 per hundred staff between 1994 and 2020. This reflects both structural changes as well as patterns of recruitment (Loomes et al. 2019; Oishi 2017).

The increase in executive roles is on the face of it a potentially startling observation. While the most senior academic management roles (VC and DVC or equivalent roles) remained largely constant the per capita growth in other faculty-based executives, such as Deans, and other central executives such as Pro Vice-Chancellors, Assistant Vice-Chancellors and professional staff executives suggests that some executive roles may be replicated at different levels. Further data collection is required to fully explain what is driving this trend, nonetheless, growth in total higher education workforce and student numbers, and associated larger financial turnover has meant increased complexity and the scale of the management task, which may explain some of this trend.



**Figure 20: Senior executive in universities – 1994 to 2020**



**Figure 21: VPs, Deans and EDs per 100 staff in universities – 1994 to 2020**

## 4. THE CHANGING UNIVERSITY WORKFORCE IN AUSTRALIA

Examining key staffing characteristics for the period from 1989 to 2021 indicates significant and consistent changes to the workforce in Australian universities.

The system expansion that occurred in the late 1980s following the creation of new universities and additional funding for domestic higher education students, as well as the growth in international education, has altered the makeup of the workforce.

In general, the staffing mix has mirrored changes in enrolments, such as for the *Health* broad AOU disciplines, and with a high level of consistency between the growth in both academic and professional staff roles, across institutions of different size and character. However, other significant trends related less directly to expansion in enrolments, such as fee income, have likely driven increased staff numbers.

The Australian higher education workforce was overall more ‘top heavy’ in 2020 than in 1989 with more senior staff in both academic and professional roles. This change likely reflects a variety of structural factors, including an ageing workforce and the long tail of mergers during the 1990s. It also reflects the widespread casualisation of the junior academic workforce, which is a pressing and confounding development given the inequalities it embodies especially for many women. This does not represent a return to early patterns of employment in the sector and implies the need for careful assessment of its causes and consequences.

That there is a strong and longstanding gendered effect, with women overrepresented in precarious academic roles and underrepresented in more senior academic positions, suggests that sector-wide interventions may be needed if individual universities prove they are not up to the task. This can be seen in the context of a ‘hollowing out’ and polarisation of the academic workforce that promotes an increase in the overall level of inequality within universities.

There was a higher proportion of professional staff in more senior roles in 2021 than in 1989, with the lower higher education worker (HEW) classification levels disappearing, which indicates a major readjustment of the professional staff workforce in universities. This requires further systematic investigation to understand its sector-wide implications. While the number of Vice-Chancellors and Deputy Vice-Chancellors has remained consistent, the fact that there is more than twice the number of other senior executives per staff member indicates a major system-wide change that warrants further investigation.

What the patterns identified in this paper show is that public policy change in higher education can have long-term consequences in ways that are not always easy to foresee for areas such as the workforce.

## 5. BIBLIOGRAPHY

- Baker, M. (2012). *Academic careers and the gender gap*. UBC Press.
- Bexley, E., James, R., & Arkoudis, S. (2011). *The Australian academic profession in transition*. Canberra: Department of education, employment and workplace relations, Commonwealth of Australia.
- Cahill, D. (2020) "Wage theft and casual work are built into university business models" *The Conversation*. 27 October 2020
- Coates, H., Dobson, I., Edwards, D., Friedman, T., Goedegebuure, L., & Meek, L. (2009a). The attractiveness of the Australian academic profession: A comparative analysis.
- Coates, H., Dobson, I. R., Goedegebuure, L., & Meek, L. (2009b). Australia's casual approach to its academic teaching workforce. *People and Place*, 17(4), 47-54.
- Coates, H., & Goedegebuure, L. (2012). Recasting the academic workforce: Why the attractiveness of the academic profession needs to be increased and eight possible strategies for how to go about this from an Australian perspective. *Higher Education*, 64(6), 875-889.
- CTEC-Commonwealth Tertiary Education Commission (1987). *Selected Higher Education Statistics*. Canberra: AGPS
- Croucher, G., & Waghorne, J. (2020). *Australian universities: a history of common cause*. NewSouth Publishing.
- Croucher, G., & Woelert, P. (2022). Administrative transformation and managerial growth: A longitudinal analysis of changes in the non-academic workforce at Australian universities. *Higher Education*, 84(1), 159-175.
- DoE-Department of Education (2022). *Selected Staff Statistics*. Commonwealth Department of Education
- Dunkin, M. (1991). Determinants of academic career advancement at an Australian university. *Higher Education Research and Development*, 10(2), 115-131.
- Edwards, D., Bexley, E., & Richardson, S. (2011). Regenerating the academic workforce: The careers, intentions and motivations of higher degree research students in Australia: Findings of the National Research Student Survey (NRSS).
- Hugo, G. (2005a). Demographic trends in Australia's academic workforce. *Journal of Higher Education Policy and Management*, 27(3), 327-343.
- Hugo, G. (2005b). Some emerging demographic issues on Australia's teaching academic workforce. *Higher Education Policy*, 18(3), 207-229.
- Hugo, G. (2014). The role of international migration in Australia's research workforce. *Asian and Pacific Migration Journal*, 23(1), 27-54.
- Kimber, M. (2003). The tenured 'core' and the tenuous 'periphery': the casualisation of academic work in Australian universities. *Journal of Higher Education Policy and Management*, 25(1), 41-50.
- Larkin, J., & Neumann, R. (2012). Ageing academics: Workforce priorities for universities. *International Journal of Employment Studies*, 20(1), 3-24.
- Locke, W. (2014). *Shifting academic careers: implications for enhancing professionalism in teaching and supporting learning*.
- Loomes, S., Owens, A., & McCarthy, G. (2019). Patterns of recruitment of academic leaders to Australian universities and implications for the future of higher education. *Journal of Higher Education Policy and Management*, 41(2), 137-152.
- Macintyre, S., Croucher, G., & Brett, A. (2017). *No end of a lesson: Australia's unified national system of higher education*. Melbourne University Publishing.

- May, R., Peetz, D., & Strachan, G. (2013a). The casual academic workforce and labour market segmentation in Australia. *Labour & Industry: A journal of the social and economic relations of work*, 23(3), 258-275.
- May, R., Strachan, G., & Peetz, D. (2013b). Workforce development and renewal in Australian universities and the management of casual academic staff. *Journal of University Teaching & Learning Practice*, 10(3), 3.
- Oishi, N. (2017). *Workforce diversity in higher education: The experiences of Asian academics in Australian universities*. Parkville: The University of Melbourne.
- Parker, P., Hewitt, B., Witheriff, J., & Cooper, A. (2018). Frank and fearless: Supporting academic career progression for women in an Australian program. *Administrative Sciences*, 8(1), 5.
- Probert, B. (2005). 'I just couldn't fit it in': Gender and unequal outcomes in academic careers. *Gender, Work & Organization*, 12(1), 50-72.
- Probert, B. (2013). *Teaching-focused academic appointments in Australian universities: recognition, specialisation, or stratification?* Office for Learning and Teaching Canberra, Australia.
- Ryan, S., Burgess, J., Connell, J., & Groen, E. (2013). Casual academic staff in an Australian university: Marginalised and excluded. *Tertiary education and management*, 19(2), 161-175.
- Whitchurch, C. (2008). Shifting Identities and Blurring Boundaries: the Emergence of Third Space Professionals in UK Higher Education. *Higher Education Quarterly*, 62(4), 377-396. <https://doi.org/10.1111/j.1468-2273.2008.00387.x>
- Whitchurch, C. (2015). The Rise of Third Space Professionals: Paradoxes and Dilemmas. *Forming, Recruiting and Managing the Academic Profession*, 14, 79-99. [https://doi.org/10.1007/978-3-319-16080-1\\_5](https://doi.org/10.1007/978-3-319-16080-1_5)
- Whitchurch, C. (2018). Being a Higher Education Professional Today: Working in a Third Space. *Professional and Support Staff in Higher Education*, 11-21. [https://doi.org/10.1007/978-981-10-6858-4\\_31](https://doi.org/10.1007/978-981-10-6858-4_31)





THE UNIVERSITY OF  
MELBOURNE

Melbourne Centre for the Study of Higher Education  
Level 1, Elisabeth Murdoch Building, Spencer Road  
The University of Melbourne  
Victoria 3010 Australia  
melbourne-cshe@unimelb.edu.au

 [melbourne-cshe.unimelb.edu.au](http://melbourne-cshe.unimelb.edu.au)