

A history of university income in the United Kingdom and Australia, 1922-2017

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In 1952 the Australian Vice-Chancellor's Committee (AVCC) published a booklet that was designed "for the express purpose of drawing public attention to the functions of the Universities, to their immediate financial difficulties and to the need for a coordinated plan for University development" (AVCC 1952, i). Titled *A Crisis in the Finances and Development of the Australian Universities*, it included a comparative table that showed "the extent to which the scale of University expenditure in Australia [was] lagging behind" that in Canada, the United States and the United Kingdom (AVCC 1952, 15). But it was comparison with the UK that most occupied the booklet's authors. With "much graver financial difficulties" the United Kingdom had "voted increasing amounts to her Universities since the war" and expenditure per student there was markedly higher than in Australia, it stated (AVCC 1952, 18). In order "to attain a standard comparable in all respects with the Universities of the United Kingdom", the AVCC argued that Australian universities urgently needed "increased financial support" from both State and Commonwealth governments (Australian Vice-Chancellors' Committee 1952, v-vi; Croucher and Waghorne 2020, 94)

Assessing the arguments of the AVCC in 1952 is difficult, however, because at present no comparable datasets for the UK and Australia exist. Outlining variations in the production of data and acknowledging its limitations, this article uses a variety of sources to bring together comparable statistics on the sources of university income in Australia and the United Kingdom since the First World War. Utilising the historical statistics on university income in the UK collated by Vincent Carpentier, the article follows his methodology in order to generate a comparable series for Australia (Carpentier 2004). It has two aims: first, to provide a resource that enables comparison of the changing funding profile of universities in the two countries across the twentieth century; and second, to serve as a point of departure for those seeking to investigate the production and utilisation of such statistics, and the uses and consequences of changing funding profiles. In the process the article identifies patterns in, and well as differences between, the funding arrangements of universities in both countries, and highlights to the potential of considering such questions within not only a comparative but also connected frame.

A history of comparison

The importance of comparison with the United Kingdom is evident in successive reports on the Australian university system. In their history of Australian university co-operation, Gwilym Croucher and James Waghorne suggest it was a 1939 report from the United Kingdom's University Grants Committee (UGC) that finally pushed the Australian universities towards a new phase of joint action (Croucher and Waghorne 2020, 49). They also identify the importance of the Cambridge meeting of the 1953 Congress of the Association of Universities of the British Commonwealth (AUBC) as crucial in effecting a new system of university funding in Australia (Croucher and Waghorne 2020, 98). Comparison with the UK was a feature of the 1957 report of the Committee on Australian Universities, which was itself led by Sir Keith Murray, chair of the UK UGC, (Committee on Australian Universities 1957; Croucher and Waghorne 2020,

94, 102–5). Comparative analysis was part of the 1964 Martin Report and subsequent discussions (Committee on the Future of Tertiary Education in Australia (CTEC) 1964; O’Neil 1970) and the Williams Report of 1979 unfavourably compared Australian expenditure on research to that of the United Kingdom (B. Williams 1979, 149, 542). The United States and Canada and sometimes Germany were also at different times invoked in these analyses, with the former becoming an important referent point from the Williams Report onwards. But for most of the twentieth century it was with the United Kingdom that Australia’s universities were most closely entangled and against which they measured themselves (Homs and Morris-Jones 1980, 160–66).

Only more recently has comparison been undertaken in the other direction. University finance first appeared as a topic for discussion at the 1921 Congress of the Universities of the British Empire (as the AUBC was previously called). However, while the University of New Zealand’s Sir Robert Stout told the assembly that governments in the Dominions recognized that it was their “duty and function” to “provide for education” and that this was rapidly becoming the case in the United Kingdom too, UK representatives did not see the Dominions’ relationship with government as something to be emulated (Hill 1921, 290). “We should protect our autonomy,” argued George Adami, Vice-Chancellor of the University of Liverpool, and “guard against giving Whitehall too great a claim to influence our individual development” (Hill 1921, 314). The Robbins Report of 1963 contained accounts of the university systems of several countries, including Australia, but it was really from the 1990s onwards, in the context of the marketisation and internationalization of global higher education, that comparison with Australia became more frequent. The 1996 report by H. Connor et.al. for the Committee of Vice-Chancellors and Principals on student trends paid close attention to Australian higher education, and Australian practice (and competition) was one of the factors that in 1999 led the United Kingdom to initiate recruitment targets for international student enrolments (Connor et al. 1996; Robbins 1963, 35; Croucher and Wagborne 2020, 186).

Beginning in the 1990s, global rankings and research metrics became the favored tool for apportioning value and establishing standards in many countries, and policy makers, governments, funding bodies and universities alike began to incorporate comparative measures into their decision-making. Aided by the publication of data by the OECD and World Bank, a rich comparative scholarly literature on university financing and the changes to higher education systems (among other themes) has developed (Lewis and Ross 2011; Sharrock 2018). In their 1997 book, for example, Sheila Slaughter and Larry Leslie used comparative data on the United States, Australia, Canada and the United Kingdom and noted a turn, since the 1980s, to increasing reliance on income generated from market-related research services (Slaughter and Leslie 1997). In 2016 Julian Garritzmann compared the tuition-subsidy systems of universities in several OECD countries, identified what he called the “four worlds of student finance” and posited that there was a relationship between the type of post-war political government a country elected, and the kind of higher education system it developed (Garritzmann 2016). Similar histories of institutional amalgamation, and similar policies around research assessment, international student recruitment, and government-backed student loans, as well as the longer tradition of the movement of academic staff between the two countries, have in recent decades made the United Kingdom and Australia rich sites for comparison.

Yet comparative historical analysis of Australian and UK higher education during the period before the 1990s is wanting. While early studies placed Australian universities in an British imperial context, after the 1960s university historians tended to chart a national course, with scholars in the UK focusing their comparisons on Europe and the United States (Pietsch

2013, 3; Silver 2006). Only in more recent years have collected volumes and integrated studies drawing in multiple countries that include the UK and Australia begun to emerge, as higher education has come to be recognized as an important force in international relations as well as political economy (Ashby 1963; Chou, Kamola, and Pietsch 2016; Palfreyman et al. 2017; Taylor and Pellew 2020). This article contributes to this literature by generating historical datasets that enable comparison of university income in Australia and the United Kingdom since the First World War.

The changing contexts of university funding

The use of statistics as a mode of knowledge and system of governance in education as well as more broadly, has its own history (Desrosières 1998; Poovey 1998; Burke 2000, 118–38; Mitchell 2002; Kalpagam 2014). Vincent Carpentier pointed to the direct relationship between the growing involvement of the British state in education and the “more formal and systematic collection of quantitative data” (Carpentier 2008, 702). Higher education statistics in the UK began to be systematically collected, he pointed out, when the University Grants Committee (UGC) began to distribute public grants to all universities in 1919. At that time there were eleven universities in England (as well as several university colleges), five in Scotland and Queen’s University in Belfast. Until the First World War they had derived their income principally from tuition fees, endowments and local community support, supplemented from 1889 in the case of the “modern universities” by direct grants from government. It was the strain of the war that finally led to the creation of the UGC to advise on the distribution of government funding based on universities’ financial needs whilst protecting their autonomous character. Following the Second World War, its mandate was extended to include planning and the foundation of several new universities, thanks to the recommendations of the Barlow Report on “scientific man-power”, commissioned by the Labour government (Barlow 1946). In 1961 Harold MacMillan’s Conservative government appointed Lord Robbins to chair a new committee on higher education, and its report recommended the further expansion of universities, the conversion of colleges of advance technology and the creation of a new Department of Education and Science to which the UGC reported (Robbins 1963). Domestic student tuition fees were typically paid by local education authorities (LEAs), but from 1962, following the Anderson Report, they were partially means-tested (Hillman 2013). Overseas students continued to pay fees and a small differential charge was introduced in 1967 with more significant “full-cost” fees from 1981. Students from the European Economic Community (EEC) however, were exempt and charged the “home student” rate (R. Anderson 2016; P. Williams 1984; Lee 1998; Perraton 2014, 121). Constituting 12.3% of all UK university students in 1976-77, HESA data shows that by 2016-17 non-EU overseas students constituted 19% of the UK university student population (Perraton 2014, 84, 123).

The next major change for universities in the UK came in 1992, when John’s Major’s Conservative government passed the Further and Higher Education Act which provided for the conversion of 35 polytechnics into universities and the creation of Higher Education Funding Councils for England, Scotland and Wales. They replaced the University Grants Committee which itself had succeeded the UGC in 1989 whose system of block grants had already come under pressure with the separation in 1985 of its teaching and research elements. From 1992 the Funding Councils presided over a new Research Assessment Exercise (RAE) ranking of universities’ research (later called the Research Excellence Framework) as a basis for distributing funding. Immediately following its election in 1997, Tony Blair’s New Labour government commissioned a new National Committee of Inquiry into Higher Education chaired

by Ronald Dearing, which led to the introduction of a mixed tuition fee with, in addition to government grants, students making contributions supported by low interest government loans. From 1998 the student contribution rate was set at £1000 (with maintenance grants ended in 1999), and this rate has subsequently increased in two stages, with a deferred and income-contingent government-backed loan introduced in 2004. However, devolution enabled the Scottish Parliament to abolish fees entirely for Scottish students in 2008. In 2017 the Conservative government reorganised the structure of research funding with the creation of UK Research and Innovation (UKRI) as a single body to replace HEFCE, alongside a new Office for Students (OfS). These entities have also taken over the statistical function of HEFCE. Since 1993 their data have been published by the Higher Education Statistics Agency (HESA), also a consequence of the 1992 reforms. Public accountability, value for money and autonomy have been constant themes in all these statistical reports, but with the shift towards rankings and metrics, these data have also come to play an increasing role, “not only in the development and monitoring” of the UK education system, “but also as an instrument in the exercise of state power” (Carpentier 2008, 704).

This relationship between the contexts in which universities have operated and the nature of statistical production is also evident in Australia. There, universities were established by Acts of State (or Colonial) Parliament as autonomous institutions, which nevertheless received substantial support from government in addition to income derived from student fees, private donations and other sources. In the first half of the twentieth century government support came solely from the States, but the increasing demands of research in the 1930s, as well as for graduates both during and after the Second World War, led the Australian Commonwealth to make significant financial contributions which from 1943 were managed by the Universities Commission. From 1951 it took on the task of overseeing the new Commonwealth Scholarship scheme which, established by the Menzies Liberal government, paid tuition fees and a means-tested living allowance on the basis of selective entry. After lobbying by the universities, Menzies also launched a commission of inquiry to be led by Sir Keith Murray, former chair of the UK UGC. Murray’s report recommended the establishment of the Australian Universities Commission (AUC) in 1959 as a permanent statutory body to advise the government. Financial responsibility was shared (on approximately a 50:50 basis) between the States and the Commonwealth, with each providing matching capital and recurrent triennial funds based on the recommendations of the Commission, which also oversaw the expansion of the sector through the foundation of several new universities. With the election of the Whitlam Labor government in 1972 university governance changed again. From 1 January 1974, the Commonwealth assumed full financial responsibility for tertiary education. It determined that tuition fees should no longer be charged for courses leading to formal qualifications and also introduced means-testing living allowances for students. A new Liberal government determined that the AUC should be replaced (in 1977) by the Commonwealth Tertiary Education Commission (CTEC) which continued the AUC’s previous approach of recommending the government grants that institutions should receive on the basis of student load and distribution, as well as their research requirements and capital needs. An overseas student charge was introduced in 1980 (though it was not paid to universities) and country quotas introduced, but in 1986 the new Labor Minister for Trade, John Dawkins, enabled universities to market their courses overseas on a full-cost basis (Department of Employment, Education and Training Higher Education Division (DEET) 1993, 59). From about 10% in 1987 (only a tiny fraction of whom were fee-paying), by 2017 international students represented approximately 28% of the total student body in Australian universities (Department of Education, Skills and Employment (DESE) 2020).

As in the United Kingdom, colleges of technical, further and advanced education and institutes of technology operated within a separate and largely state (as opposed to Commonwealth) funded system. Their growth had been recommended by the Martin Report of 1965, but by the 1980s the differences between the two systems were becoming blurred. The Hawke Labor government, and in particular its Minister for Employment, Education and Training from 1987, John Dawkins, sought to reform this system. The committee that he asked Neville Wran to chair, recommended the introduction of a new Higher Education Contribution Scheme (HECS), in which students would make a financial contribution to the cost of their education either via an upfront discounted private payment or via an upfront payment by the Commonwealth to be repaid by individuals on an income-contingent basis through the tax system. The Commonwealth would supply the rest of the funding. Dawkins' 1988 White Paper 1988 set out the shape of a new architecture for higher education. CTEC was abolished and the administration of government funding was transferred directly to Dawkins' department, with a separate new Australian Research Council (ARC) to recommend research grants. Institutions were only to be eligible for Commonwealth funding if they reached a certain size, with a single operating grant awarded according to an 'educational profile' that institutions were required to develop. Additional grants as well as research income were to be allocated on a competitive basis. These incentives were designed to encourage the amalgamation of institutions and creation of a Unified National System of higher education. This resulted in an expansion of the number of Australian universities, from 22 in 1988, to 38 in 1994 (including two private universities). In 1989 postgraduate fees were also deregulated with full fees charged from 1994, and in 1996 the new Howard Coalition Government both increased the student contribution and created a new three-tier fee structure, which calculated it on the basis of perceived future earnings (eg. Law and Medicine fees were higher). In 2003 the HECS system, was renamed the Higher Education Loan Program (HELP). HECS places were now called Commonwealth Supported Places (CSP) and various sub-categories were created within HELP as the loan scheme was extended to include students studying on semesters abroad and for Vocational Education and Training (VET) courses, for example.¹ In 2012 a Labor government uncapped university places, allowing universities to recruit as many students as they wished (funded through CSPs & HELP). But in 2017 a new Coalition government suspended this "Demand Driven System" and capped the number of students, whilst also lifted the HELP student contribution rate in 2017 and reducing the Commonwealth's contribution.

The nature of the data produced on education in Australia reflects this history. Statistics were a feature of the ways the colonial state sought to know, occupy and control the land and its people, and statistical "Blue Books" were produced by each of the colonies that in 1901 federated to become states of the new Commonwealth of Australia. Education was not one of the powers transferred to the new federal government, and neither – initially – was the gathering of statistical information. Universities and schools reported data to the State governments, which published them in annual "Statistical Registers". But the new nation-state quickly perceived the utility of national statistics and a Commonwealth Statistician was appointed 1905. Until 1952, however, the Commonwealth office continued to rely on and work with the state offices in the collection of data. For the first seven decades of the twentieth century, the *Official Yearbook of the Commonwealth of Australia* brought this information together, detailing in its education section, the number of university teachers and students, university revenue (including

¹ HECS-HELP (2005) for Commonwealth-supported students to pay their student contribution amounts; FEE-HELP (2005) for full-fee paying domestic students; OS-HELP (2005) students studying overseas for one or two semesters; VET FEE-HELP (2007) for students studying VET courses (replaced by VET Student Loans in 2017); and SA-HELP (2011) for student services and amenities fees. See Ey, 2017.

listing individual bequests) and university expenditure. These reports relied on figures “made available by the university authorities” (Yearbook Australia 1939, 184), though from 1943 the form of this reporting changed, with a new section added for the Universities Commission and additional details of the students funded in “Reserved Faculties” (Yearbook Australia, 1944-45, 202).

With the changes of 1974 the format of statistical reporting in the *Yearbooks* changed again, this time more significantly. Student and staff numbers and some limited finance statistics focusing on government funding and expenditure were published as *Selected University Statistics* and *Selected Higher Education Statistics* by the AUC and then the CTEC. Although they acknowledged that universities continued to receive small amounts of private income, the *Yearbooks* (and the AUC and CTEC reports) no longer recorded it, instead placing full emphasis on the government expenditure and student numbers. Universities were still obliged to present full financial reports to state parliaments, but the Commonwealth’s statistical reporting in this period reflected other priorities. Following the creation of the Unified National System in 1990, the higher education statistical project was transferred to the Department of Employment, Education and Training and since then it, and its successor departments, have published reports on all sources of university funding, including private income (DESE 2020).

Methods and sources for historical statistics on university income

These changes in statistical production reflect the different political priorities that have attended the different phases of state involvement in higher education. They have significant implications for the availability, consistency and comparability of data over time. In both the UK and Australia longitudinal datasets need to be constructed from several, not always matching, sources.

For the UK this work has been undertaken by Vincent Carpentier, whose *Historical Statistics on the Funding and Development of the UK University System, 1920-2002*, is deposited with the UK Data Service (Carpentier 2004). Focusing on pre-1992 universities and post-1992 institutions after their conversion, and utilising multiple sources, his study was part of an UK Economic and Social Research Council (ESRC) funded project that sought to provide a long-term explanation of the relationship between university funding and the wider economy. Carpentier’s series is unlikely to be perfect, relying as it does on the annual reports of the UGC. Different methodologies (for example those used by Robbins and Dearing in their reports of 1963 and 1997), might generate slightly different outcomes, but Carpentier’s dataset has the advantage of being an annual series with a clear approach to categorization that enables analysis and comparison of long-term trends. Building on the well-established literature on the history of higher education in the United Kingdom, it has helped facilitate a new set of comparisons particularly with France and the United States (Sanderson 1972; R. D. Anderson 1992; Halsey 1992; 1988; Johnes and Taylor 1990; Greenaway and Haynes 2003; 2003; Carpentier 2006; 2008; 2012; 2018). But a longitudinal comparison between the United Kingdom and Australia has been hampered by, among other factors, the absence of a good dataset for Australia.

There is no official time series data on university income in Australia that is comparable with Carpentier’s UK study. In 2000, Kim Jackson, a member of the Social Policy Group within the Australian department of Prime Minister and Cabinet, prepared a brief on Commonwealth higher education funding policy (later updated in 2003). It included a table that presented snapshots of university income by source for 1939, then at ten-year intervals from 1951 to 1981, and then for 1987, 1994, 1996, 1998 and 2001 (K. Jackson 2000 Table 1). In their 2003 study, Malcolm Abbott and Chris Doucouliagos presented a table of higher education funding from

all sources from 1939 to 2001 with similar intervals (Abbott and Doucouliagos 2003, 26). So too did the Group of Eight in their submission to the 2014 Senate Standing Committee on Education and Employment, though with added bars for 1907 and 2011 and 2012 ('Higher Education and Research Amendment Bill 2014 Senate Committee Report' 2014, Ch 2, Fig.1). Andrew Norton and Ittima Cherastidtham's 2018 report on Australian higher education for the Grattan Institute, gave an updated version of the same chart, providing snapshots of the revenue share of universities for 1939, and then at 10 year intervals from 1951 to 1981 and then every 5 years from 1990 until 2016 (Norton and Cherastidtham 2018, 59). The longitudinal analysis Norton presents in his 2017 chapter on the history of public and private funding is significantly more detailed for the decades between 1948-1971 and then 1989-2015, but it skips over the period before 1939 as well as that between 1971 and 1989 (Norton 2017, 51-52; 'OECD Thematic Review of Tertiary Education Country Background Report: Australia' 2007).

The task of constructing a time series for Australia is a fraught one. As higher education analyst Andrew Norton points out, "different historical data sources do not always match" and this has the potential to create serious analytic difficulties (Norton 2020). Can the general block grants of the pre-1989 era, which universities could largely allocate according to their own priorities, be compared with earmarked funds, which from the 1990s have been distributed competitively or according to performance-based formulas? (Norton 2020). Should government-backed student loans be counted as government funding or as private contributions, especially when a good proportion of these loans will – in Australia as in the United Kingdom – go unpaid? The UK government attempts to express this estimated cost to of borrowing to support the student finance system based on future loan write-offs and interest subsidies and calls it the Resource Accounting and Budgeting (RAB) charge (McGettigan 2015). The RAB charge, along with written-off loans in Australia, could even be considered a form of government contribution (Norton 2014). Beyond government support, how should donations, bequests and investments be represented when they are sometimes reported as separate categories and sometimes collapsed into each other? Year-to-year series are unlikely to be precise when reporting varies between calendar year, financial year and academic year. What happens when government publications cease reporting universities' private income, as they did between 1973 and 1989? And how to analyse institutions such as Colleges of Advanced Technology that were only accorded university status within the period under study? These issues present significant challenges to the quantitative researcher and force choices of categorisation that could be made in several legitimate ways.

In preparing his UK series, Carpentier also highlighted these problems, noting the potential omissions, different methodologies, and significant changes in the way data on UK higher education were collected and processed across the twentieth century. Of serious concern to him was the extent to which indicators were (or were not) used to measure the same thing over time, especially given the merger and conversation of higher education institutions (Carpentier 2008, 705-6). These already significant difficulties are only magnified in the context of comparison between countries, with differing histories, governance systems and priorities. For Carpentier, however, analysing quantitative educational data is still valuable because it has the capacity to "contribute to the identification of patterns and structures that could reinforce or sometimes challenge traditional interpretations" (Carpentier 2008, 707). Understanding statistics as social constructions that are far from neutral might encourage historians to see datasets such as those presented here as a valuable, albeit imperfect and limited, resource for understanding how education has been planned, controlled and monitored in different contexts and periods (Waldow 2001, 137).

This study utilizes Carpentier's data and follows his methodology to present two comparable historical series for the United Kingdom and Australia, providing snapshots at five-year intervals (or as close as possible) of university income from all sources for the period 1922 to 2017. Despite the limitations that flow from the inherent problems of statistical consistency, reliability and categorization outlined above, this approach has the advantage of producing comparable long-range data series for both countries. Carpentier's approach adopted here does not reveal the very divergent levels of support flowing to different universities either from state governments or from private benefactions. Neither does it take into account the size of the system, the actual costs of delivering higher education, the amount spent per student, nor the socio-economic profile of those receiving it. It does not reflect the changing loci of decision making about how income might be spent. What it does do is provide a very broad overview of the structure of university income from all sources that, although imperfect, can be compared across countries over nearly ten decades.

The first (UK) series presented below combines Carpentier's data, which drew on a variety of sources, with the statistics published annually by HESA (Carpentier 2008, 704; Higher Education Statistics Agency (HESA) 2001-2017).² Carpentier's category "All Public" incorporated the line items for Funding Councils, Research Councils UK (and preceding bodies), and UK central government bodies in the HESA tables. His "Private Research" figure included the remaining "Research Grants & Contracts" line items listed in the HESA tables, including UK based charities, UK industry & commerce and EU and other sources. This practice has been continued for 1997-2017 using the HESA data, and is also used for the Australian data. "Domestic and EU student fees" comprises student fees from all sources, even when these fees were paid by LEAs or other sources. While in Carpentier's series the category of "Student fees" also absorbed overseas student fees, here they have been separated, using a combination of HESA data for 1997-2017, a separate study by Carpentier for 1972-92, and extrapolating for 1922-67 based on Hilary Perraton's data on overseas students as a percentage of the whole student population, though note that data is absent for 1947 (Carpentier 2010; Perraton 2014). Due to difficulties obtaining data, Carpentier's series included pre-1992 universities post-1992 institutions only after their conversion, with the consequence that the different historical funding profiles carried over from the binary system likely influences the post-1992 aggregate statistics (Carpentier 2006, 6). Annual calendar years are used to denote data for the preceding academic year (eg. 2002 presents data for the 2001-2002).

The second (Australian series) is constructed using the *Commonwealth Yearbooks* for the period up until 1971, and thereafter the Commonwealth Tertiary Education Commission (CTEC) *Supplementary Report for 1986 and 1987*, the *National Report on Australia's Higher Education Sector 1992*, the 1992 Selected Higher Education Finance Statistics, and the *Financial Reports of Higher Education Providers* published by the Commonwealth Department of Education, Skills and Employment (DESE 2020). Carpentier's broad categories are adapted so that "Government Funding" comprises Commonwealth Grants, Australian Research Council funding and State government funding. "Other Sources" includes consultancy, royalties, trademarks and licenses and non-government grants and "other fees and charges" (which includes fees for services and sundry fees such as examination fees and library fines) (Department of Education 2014, 65). Where possible, bequests and donations have been

² Sources listed by Carpentier include publications from the Central Statistical Office (1932-1939 Statistical Abstract for the United Kingdom; 1939-1967 Annual Abstract of Statistics; 1967-2003 Education Statistics for the United Kingdom. The main other type of resources comes from higher education funding bodies. These include from 1889 the Committee on Grants to University Colleges, 1918 University Grants Committee, 1988 University Funding Council, 1992 Higher Education Funding Council. (Carpentier, 2003).

extracted from the Department of Education, Skills and Employment data and combined with investment income as per the practice in the *Commonwealth Yearbooks*. In keeping with the article's focus on the sources of university income, and following Carpentier's approach, student tuition fees appear as a discrete category, even when these fees were paid through government backed schemes such as the Commonwealth Reconstruction Training Scheme (CRTS) or HELP, and even when a portion of these loans had to be written off. Therefore, for the period after 1992, HECS and the Postgraduate Education Loads Scheme (PELS) as well as other HELP schemes, are included in "Domestic student fees", as are other upfront student fees, fees and charges for continuing education, fee approved post-graduate courses, other fee-paying courses and student service and amenity fees as recorded in DESE data on the logic that these are part of a largely domestic student-generated income stream. Note, however, that until 1972, the fees collected on behalf of student unions, adult education fees, ad hoc course fees and public examination fees were not included in *Yearbook* data (*Yearbook* 1973, 652). International student fees are shown as a separate source of income, using DESE data from 1992, and prior to that extrapolated on a percentage of student population basis from the CTEC reports and the 1993 *National Report on Australia's Higher Education Sector* (often called the Blue Book). Also following Carpentier's approach, converted institutions such as the University of Technology Sydney and amalgamated Dawkins institutions are only included after they achieved university status.

As noted above, the lack of reported data on universities' sources of private income for the 1970s and 1980s (ie. "Other Sources" and "Investments and donations") makes these decades something of a blackspot if the *Yearbooks* and CTEC Reports are relied upon. The 1986 Hudson Report acknowledged that when it came to "Other Income" there was "limited information on trends of the decade" (Hudson 1986, 38). The CTEC Supplementary Report for 1986 and 1987 does, however, give retrospective percentages for 1971, 1979 and 1983, which can be used to rectify this in part. Using the data for these years does disrupt the five-yearly interval pattern (which should record 1972, 1977 and 1982), and this disruption is indicated in the graphs presented below with square brackets. More precise statistics for these missing decades may be able to be reconstructed using the annual reports of individual universities, and this would be a worthwhile future research task. To accommodate differences and changes in currency (Australia converted from £sd to decimal currency in 1963) and inflation, the shift from state or local to federal or national responsibility, institutional amalgamation, and the significant expansion in both the number of universities and the size of the student population in both countries, the data are expressed as a percentage of income from all sources to all universities.

Trends in university income in the United Kingdom and Australia

As noted above, university systems changed significantly in the decades examined here and the data presented in figures 1 and 2 may be helpful in lending substance to, as well as challenging assumptions about, national trends in the profile of universities' sources of income, as well as the impact of specific policy initiatives. When assessed together, however, these time series for the UK and Australia highlight a similar pattern of higher education funding across the century. Describing a "turtle" shape, both figures 1 and 2 point to three distinct phases in university financing (see also Fig. 3). The first phase, running from the start of the 1920s to the Second World War, relied on a mixed funding profile with public sources, student fees and other income from endowments and investments and other sources all playing a role. During the second phase, which ran from the early 1950s to (broadly) the 1980s, public funds came to play

a much more significant role in university financing, in the case of Australia replacing student fees altogether. In the third phase, from the 1990s onwards, a mixed of “cost-sharing” model returned, although this time with a much greater (and increasing) reliance on student fees. To draw out these similarities and investigate some of the differences between the two countries, the charts that follow present comparisons of government and public funding, of student fees, and of other sources of income as a proportion of university revenue in the United Kingdom and Australia, 1922-2017.

In his historical comparison of higher education income structure, expansion and institutional differentiation in the UK, France and United States, Vincent Carpentier also noted these three phases and argued that they point to the “strong impact” on revenue profiles of long wave Kondratiev cycles of high and low economic growth (Carpentier 2006; 2018). He placed emphasis on the role of crises, in particular the depression of the 1930s, the oil shocks of the 1970s and the global financial crisis of 2008 in shaping these patterns. According to Carpentier the first of these crises had only a “moderate effect” in terms of “a retreat of public funding” in the UK and USA and a decentralization in France and in all three countries, the post war period of “Fordist expansion” saw the share of public funding increase significantly. But the oil shocks of the mid-1970s shook this economic model and led to a “dramatic reversal of those trends” and a move toward “cost-sharing” with a greater reliance on student fees and private sources of income in the UK and USA, although less so in France (Carpentier 2018, 22). These links to the broader economic cycle are evident in the Australian data too, although with some notable differences: the downturn in public funding during the 1930s appears as much more significant for Australian universities than for those in the UK, the period of mid-century expansion took place slightly later, and the reversal that began in the late 1970s seems to have begun later and been less severe, perhaps moderated by the election of broadly left-of-centre governments in 1972 and 1983.

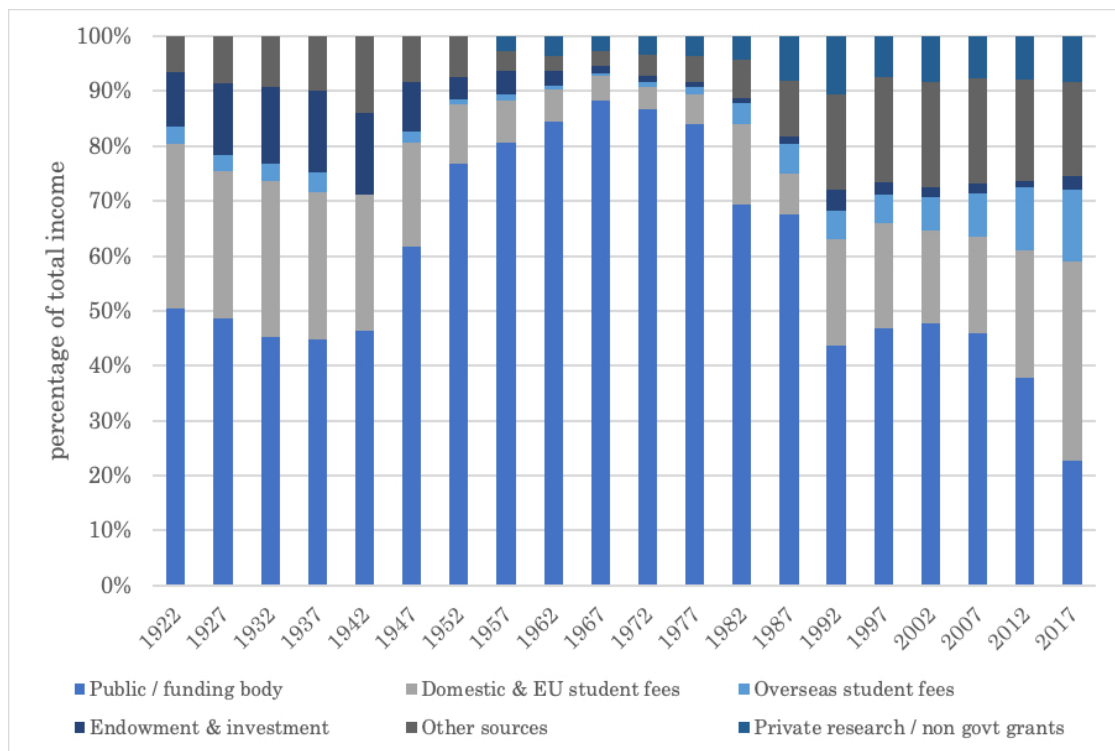


Figure 1: UK universities’ income from all sources, 1922-2017

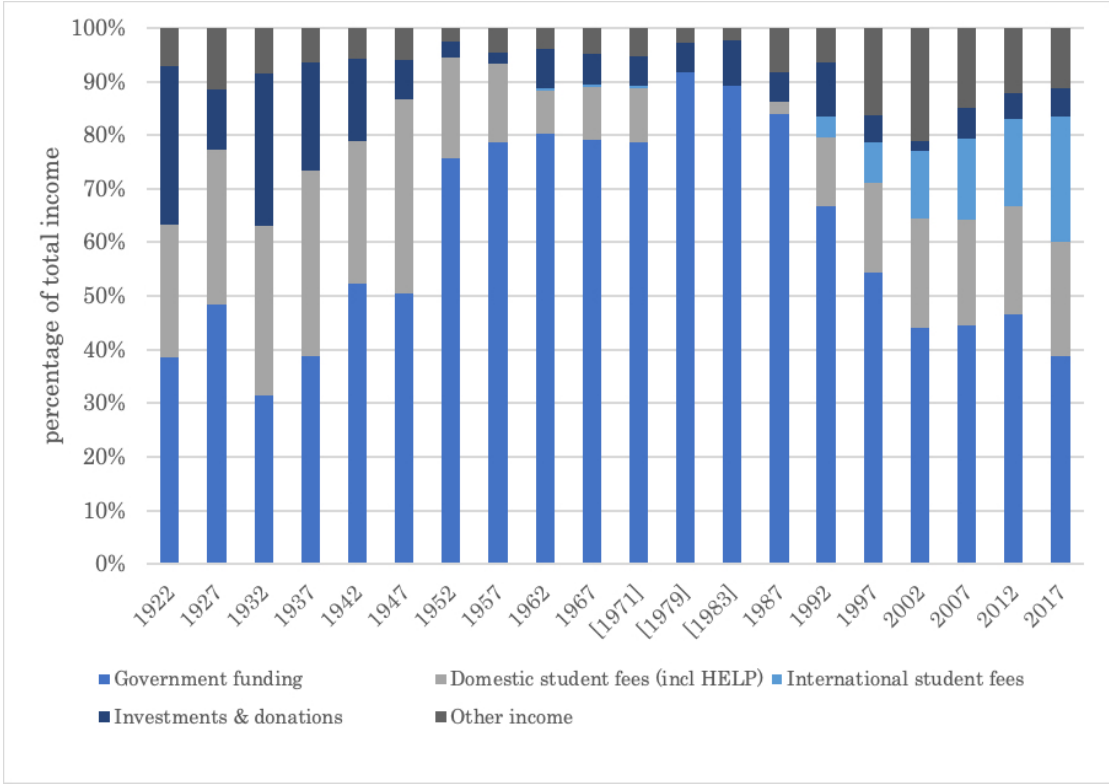


Figure 2: Australian universities’ income from all sources 1922-2017

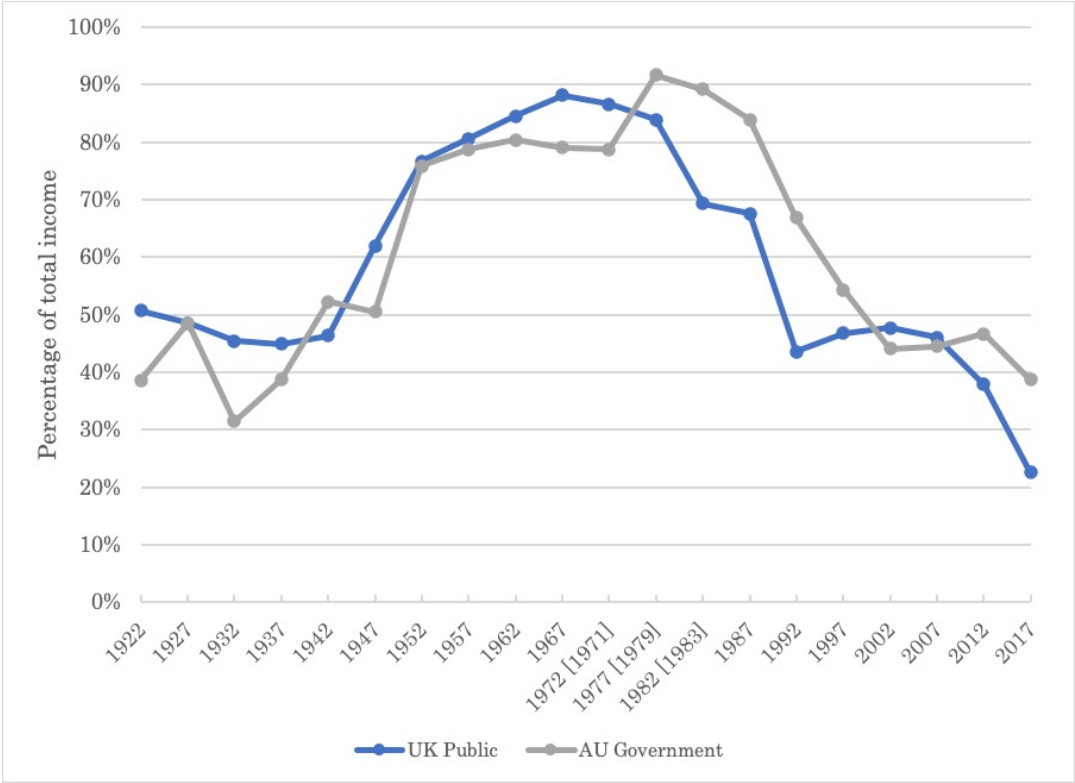


Figure 3: Government / public funding as a percentage of universities’ income, in the UK and Australia, 1922-2017

These patterns might also be thought about in terms of the changing structures of academic territorialisation and de-territorialisation that linked institutional and national policy with broader intellectual as well as economic trends. On this reading, the mixed model of interwar funding reflected a system in which states were realising the nation-building function of universities but still operating largely within the settings of the pre-war system, in which institutions understood their legitimacy as deriving both from their connection to the rapidly changing international currents of knowledge and their development of this knowledge at home. In the contexts of the depression, another war and the end of empire, states looked much more explicitly to universities as powerful agents for the formation of democratic and national identity as well as economic prosperity. The greater government support for universities in this period reflected these priorities and it came with a new pattern of territoriality, including through the foundation of new universities, sponsored academic research, expansion of student numbers and the development of new professional bodies that linked universities to their national contexts. At the same time universities' engagement abroad began to be internationalised through scholarly associations, exchange programmes and conferences that academics attended as national as well as institutional and disciplinary representatives. A new phase of de-territorialisation came in the 1980s with what one Australian government review described as the "deregulation" of these systems in the context both of broader economic change, but also rapid international technical and intellectual developments (G. Jackson 1984). The reduced government funding, increasing numbers of domestic students and rising tuition income thanks to a new system of individual contribution, and push for universities to enter the global market as competitors for international students reflected an regime in which students as well as faculty were encouraged to understand themselves as mobile knowledge workers in a global economy (Middell and Naumann 2010; Pietsch 2013).

Domestic and overseas student fees

The increasing importance of student fees to university revenue since the 1990s are clearly evident in Figs. 1 and 2. In 1987 student tuition fees from all sources represented a little over 18% of university income in the UK and a just over 2% in Australia. Thirty years later they constituted 50% of UK and 45% of Australian universities' revenue, and the importance of overseas student fees to this growth is immediately apparent (Fig. 4).

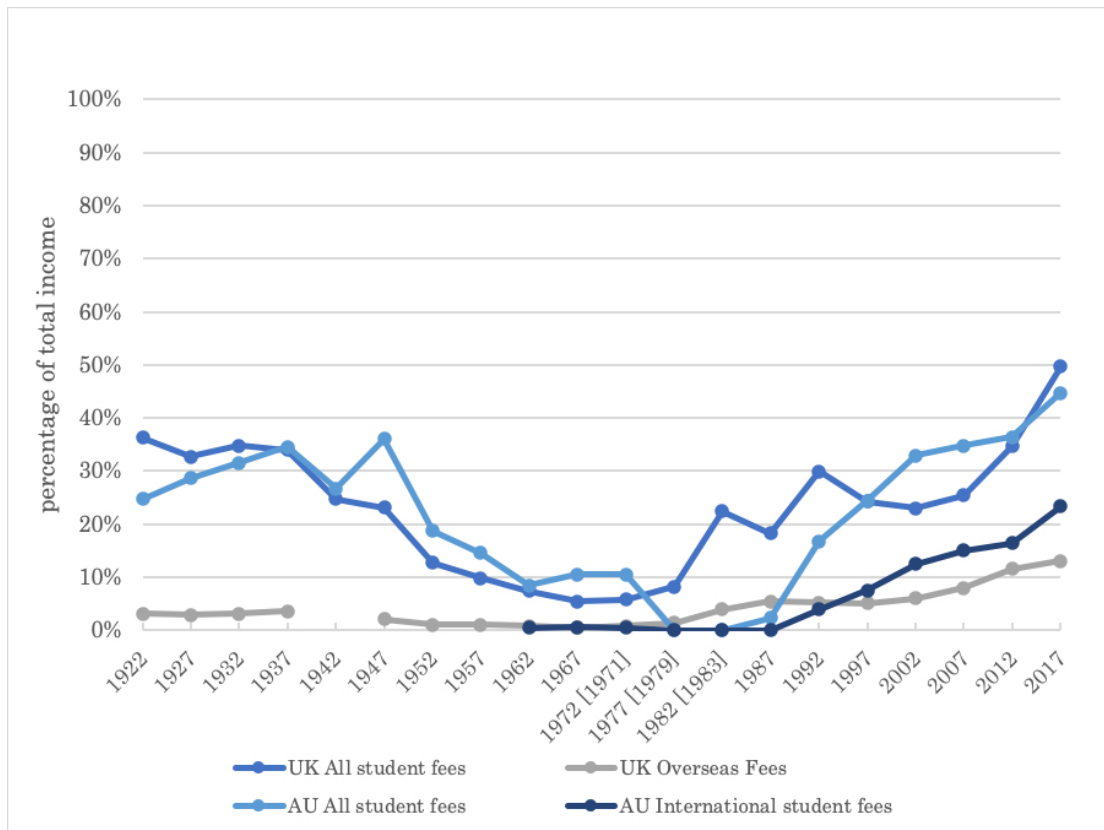


Figure 4: Student fees as a percentage of universities' income, in the UK and Australia, 1922-2017

But these series also make clear that overseas student fee revenue in the UK and Australia has a history that predates the 1990s. As Hilary Perraton among others have shown, in the first part of the twentieth century a significant number of “overseas” students made their way to United Kingdom universities and they paid the same fees as domestic students. It is perhaps paradoxical for the purposes of this article that in this period, as in 2020, some of these overseas students in the UK were from Australia (as well as other countries of empire). Perraton puts the figure for the interwar period at between 9-12% of the total student body and this is broadly consistent with A.H. Halsey’s assessment (Perraton 2014, 56; Halsey 1998, 272). These students paid fees at the same rate as domestic students and, until 1940, funding from this source constituted approximately 3-4% of all university revenue and 10% of student fee income. When in the post-war period student fee income became less important to universities’ revenue (in 1967 it constituted only 5.5% of total income), the share of which came from overseas students (who continued to pay fees) increased. In 1977 overseas student fees constituted 17% of all student fee income and this figure only continued to grow in the decades that followed, with non-EU overseas student fees in 2017 making up 27% of total UK tuition fee income and 13% of total university revenue.

In Australia, too, overseas students have a history that stretches into the middle of the twentieth century. The provision for *ad eundem statum* students (those still in the course of their studies who were given credit for work already completed in other universities) published in university calendars in the interwar period suggests that small numbers of students arrived at Australian institutions from the United Kingdom and, less frequently, Europe, from the nineteenth century on. In the period after the Second World War, however, as Lyndon Megarrity and others have shown, despite the racially exclusionary “White Australia policy”,

students from abroad (mostly India and South East Asia) began to come to Australia in significant numbers, with the intention of fostering cultural exchange and trade as well as a form of aid (Department of Employment, Education and Training (DEET) Higher Education Division 1993, 59). In fact, by 1966 “overseas students” compromised 8.9% of all full-time university enrolments, with only a small percentage on government supported places (Megarrity 2007, 103; Lowe and Kent 2019). The abolition of tuition fees in 1974 applied to international and domestic students alike and in 1983 students from abroad constituted almost 4% of the Australian university student population. In 1986, however, the Australian Labor government allowed universities to enroll international students on a full-fee basis and this policy brought about an immediate change. In 1987, only 1019 of the 17248 overseas students in Australia paid fees (equating to less than 0.01% of university income) but by 1992, 30,296 (of a total of 39,490) paid fees which equating to 4% of total university income (DEET Higher Education Division 1993, 60). The importance of their fees to university revenue has increased ever since (Australian Bureau of Statistics 1995).

The history of overseas student fees in the UK and Australia are again entangled. According to the *National Report on Australia's Higher Education Sector, 1992*, the 1981 introduction of full-cost fees for overseas students in the UK had the effect of increasing demand for less expensive alternatives in countries like Australia. The pressure of this demand, together with concerns that overseas students were taking the places of domestic students, led to the Goldring Review into Australia's Private Overseas Student Policy. It called for a clear national policy on overseas students, but it was the 1984 Jackson Report on Overseas Aid that identified education as a significant new export industry for Australia and described existing subsidies for overseas students as a kind of industry protection that, if deregulated, would enable “Australian institutions to compete successfully on the international market.” It was this that led to the opening up of university places to full-fee paying overseas students and the beginnings of Australia's international education industry (DEET Higher Education Division 1993, 59–61).

Revenue from “private” sources

In his 1987 Green Paper, the reforming Minister for Employment, Education and Training, John Dawkins, announced that his Department would be considering “means of enabling institutions to increase revenue from private sources ... bearing in mind the Australian Labor Party's policy [at that point] of opposition to tuition fees” (Dawkins 1987, 7, 12). One of the potential sources of funding Dawkins had in mind was income received from investments and endowments, non-government research funding and “other sources” such as consultancy and royalties. The 1985 Hudson Report referred to this as “Other income”. Before the Second World War, funds from these sources comprised a major part of university revenue particularly in Australia where in 1922 it accounted for 36% of revenue, as against 16.5% in the UK. From 1992 it once again become crucial to university finances, in 2017 constituting 27% of revenue in the UK in and 16% in Australia (Fig. 5).

Another potential source that Dawkins had in mind when he spoke of “revenue from private sources” was international student fees, as by 1987 he had already announced his full-cost plans. While domestic students might also be counted as a non-government and therefore “private” income source, particularly in the case of up-front postgraduate fees, government-backed loan repayment programmes, together with regulations in terms of recruitment in both countries, mean that not only is this income not entirely “private”, but neither do universities have a free hand in developing it. Therefore, instead of combining international with domestic

student fees, international student fees are presented along with “other income” to show the relative importance of Dawkins’ “revenue from private sources” (Figs. 6 and 7). These figures make clear just how important “private sources” have become in the post-1990s marketized era of “cost sharing”. In Australia as in the UK, what Charpentier called “private funding (including tuition fees) increased steadily to compensate for the decline in public resources” (Carpentier 2006, 11).

These charts also reveal another striking pattern: that funding derived from domestic student fees in both Australia and the UK in 2017 (36.6 % for the UK, and 21.4% for Australia) appears very similar to the amount received from the same source in 1922 (at 33.2% for the UK, and 24.7% for Australia). Since 1979 in Australia and from 1987, “private” sources of income were more important as a share of revenue than domestic fees. As government funding has declined, these data series demonstrate the extent to which it has been “revenue from private sources” in the form of international student fees and “other income” that has constituted what Carpentier called “public/private substitution” (Carpentier 2018, 24). Although for many years this underpinned enormous growth, its dangers have become acutely clear in the context of the disruptions to the international student market as a consequence of the covid-19 pandemic in 2020.

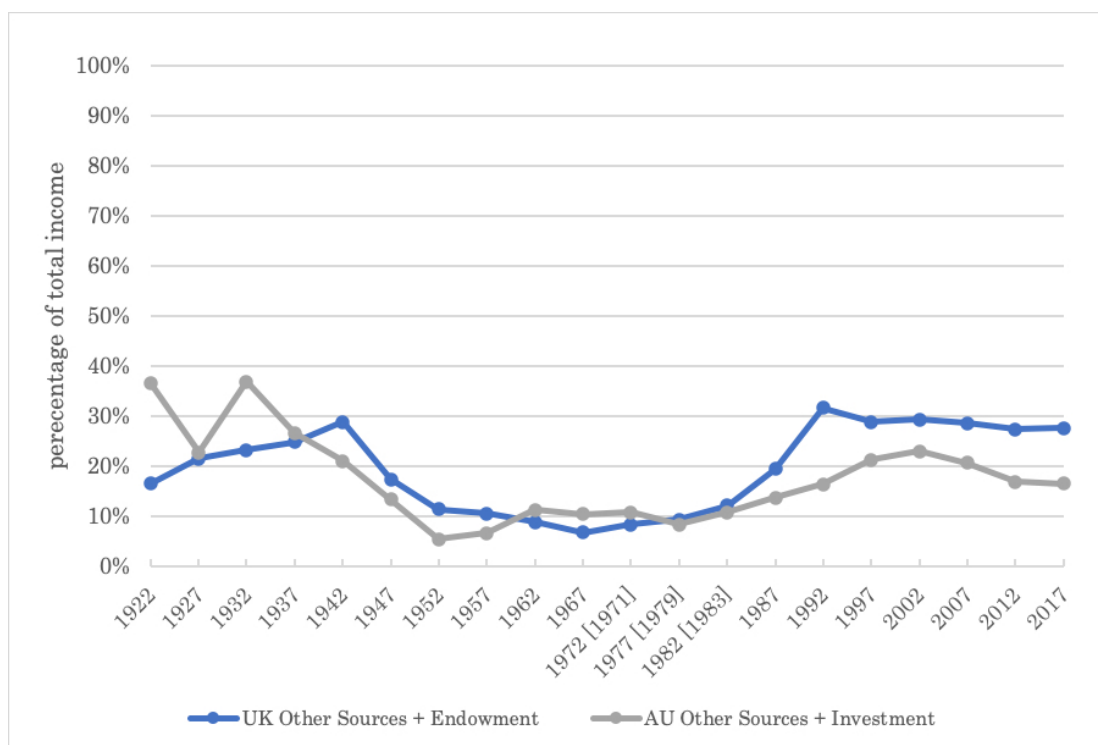


Figure 5: Non-government and non-student fee revenue as a percentage of universities’ income, in the UK and Australia, 1922-2017

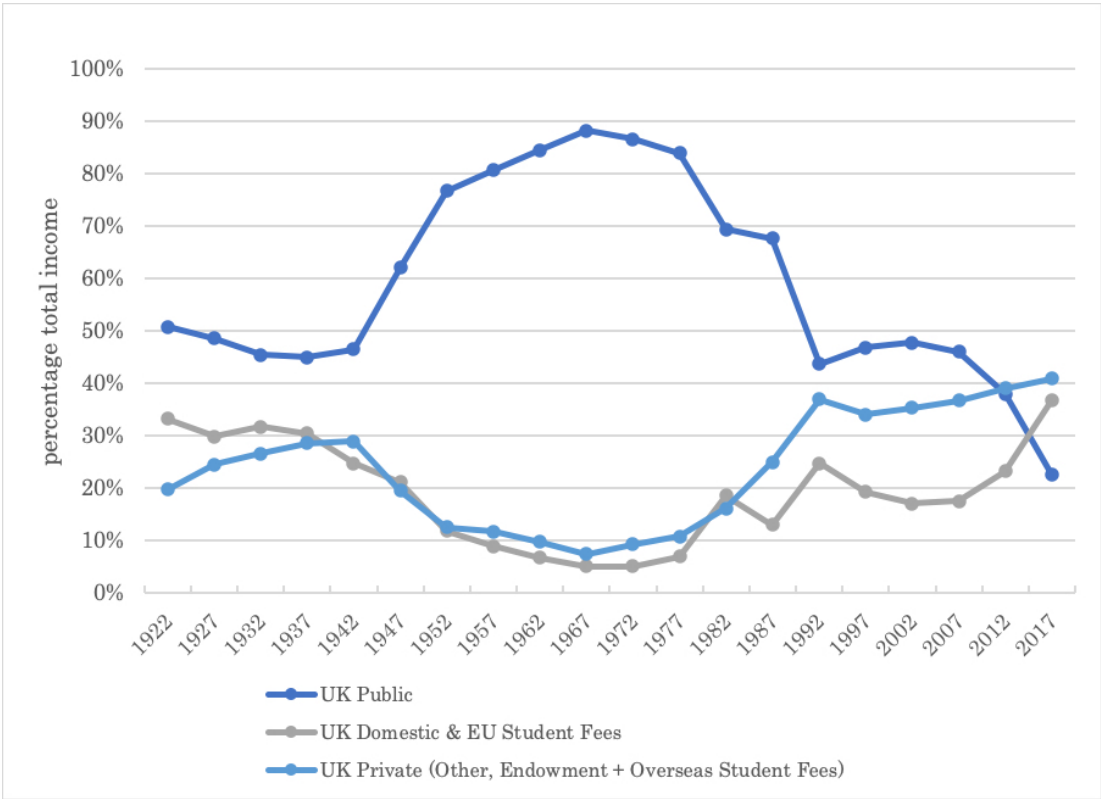


Figure 6: Public, domestic student and "private" sources of as a percentage of UK universities' income, 1922-1917

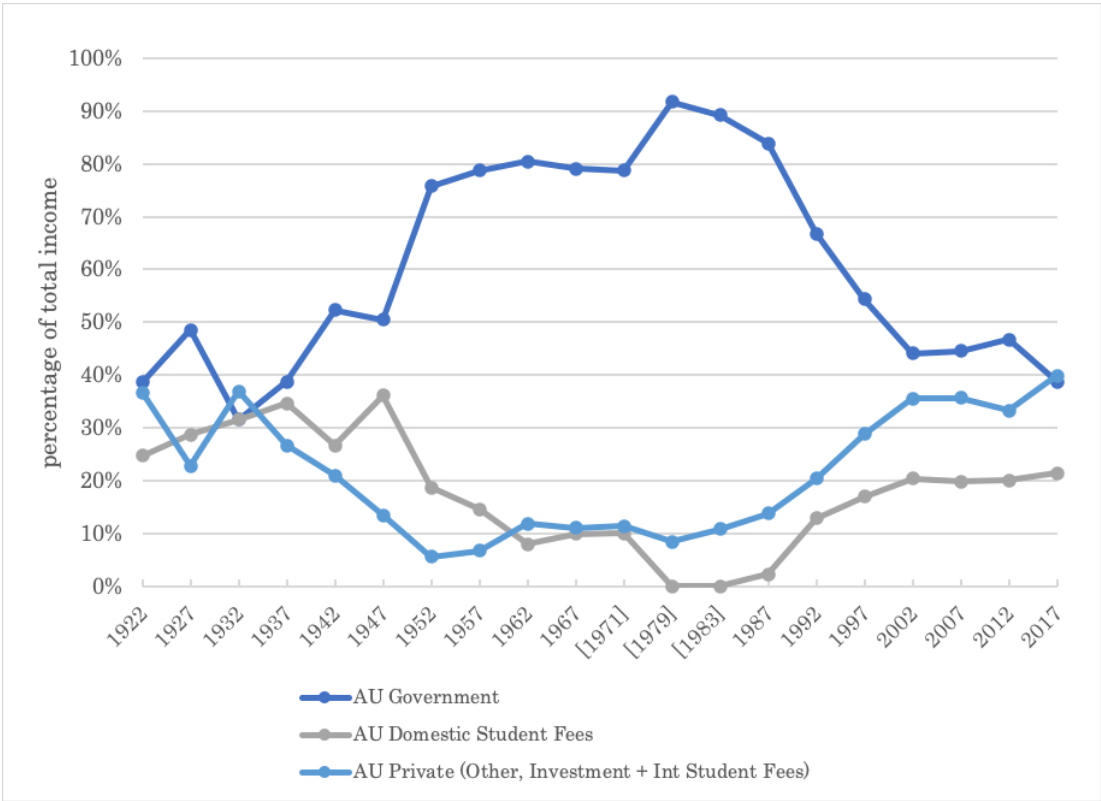


Figure 7: Government, domestic student and "private" sources as a percentage of Australian universities' income, 1922-2017

Conclusion

When in 1952 the Vice-Chancellors of Australia's universities compared their universities' income to that received by institutions in the United Kingdom, they focused on the amount of public funding and expenditure per student. In profiling the sources of universities' income, the time series presented here reveal little about these questions. They say little about the relative poverty of each system, its size or its autonomy. What they do is show that the profiles of university funding in both countries evidence a very similar pattern that maps closely onto broader international socio-economic cycles and patterns of political and intellectual change and legitimacy. The return of university resourcing in 2017 to a profile similar to that of the interwar period is particularly striking (although the role of international student revenue, together with the UK's move since 2017 towards high domestic student fees and yet lower public funding, does potentially presage a new departure.) This "cost-sharing" profile, together with growing contemporary concerns about generational equity and inequality, raises questions about the extent to which there are (or are not) limits on the public funding cuts mass democratic societies are prepared to tolerate, as well as limits on the tuition fee contributions individuals are prepared to make.

Comparing these datasets also points to the potential for a series of other investigations. To what extent have these two university systems influenced each other, especially in view of the strategic comparisons made by leaders and policy makers across the century? Comparison of the rates of public funding suggest three points at which changes to government policy in the UK was subsequently followed in Australia: the 1920s, the early 1970s and the late 1980s. Did Australia's recruitment of British advisors such as Keith Murray shape the kinds of funding systems it put in place? To what extent were the patterns shown in these series influenced by the direct exchange of ideas? Beyond this, what is the relationship between individual leaders and broader processes? Were political leaders such as John Dawkins and the authors of the many reviews and enquiries into higher education, able to direct or mitigate broader political and economic trends and impart a national character to them? How might these series (and the changing commitment to public funding across time that they show) reflect contrasting visions of the role education could play in the wider society and economy? The relationship between sources of university income and universities' decision-making about expenditure constitutes another line of possible enquiry. One of the consequences of the introduction of full-cost fees for overseas students in the UK in 1979, was to increase the control that universities had over that portion of their income, with similar effects evident in Australia. How did they direct this discretionary spending? And how might this whole picture look different if the Dawkins and 1992 institutions, the mid-century foundations and the older institutions are considered separately? Carpentier has begun this analysis for the UK and has also compared the profile of income with the proportion of students accessing higher education, and those projects too might be undertaken for Australia (Carpentier 2006; 2018).

The disruptions to international higher education brought by the covid-19 pandemic in 2020, suggest that broader economic shocks may once again be altering the profile of universities' revenue in both the United Kingdom and Australia. In this context, the patterns revealed by the long view on university income presented here might interest the twenty-first century successors of the AVCC and its UK equivalent – the Committee of Vice Chancellors and Principals. Since 2012 the proportion of income that UK universities have received from public sources has not only fallen below that of their Australian competitors, but it has reached its lowest rate since the First World War. In Australia it is lower than it has been since the Great

Depression. Might this be a new moment for university leaders and their allies to make strategic comparisons, not only with the practices of other countries but perhaps also with the decisions taken and investments made by higher education policy makers across time?

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