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Financial sustainability in a marketised and partially autonomous environment: the case of small new public universities in England

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ABSTRACT

In the context of threats to their financial sustainability, this paper uses Resource Dependency Theory to explore the challenges being faced by a sample of 10 small new public universities in England. It discusses the responses being taken and prospects for the future in this segment of the sector. It concludes that some of the most important elements of income and expenditure are also areas where institutions have amongst the lowest levels of autonomy, including tuition fees, staff salaries and pension costs. It suggests that institutions are proactively seeking ways to both adapt their strategy and influence the environment in which they operate, including the introduction of new organisational forms, models for employing staff, the diversification into new programmes and markets, and greater use of domestic and international partnerships.

KEYWORDS

University financial sustainability; Resource Dependency Theory; Institutional autonomy; Income diversification

Introduction and context

The liberalisation of the higher education (HE) market in England has led universities to focus increasingly on their financial sustainability. However, legacy expenditure liabilities reminiscent of a pre-marketised sector remain. Given the importance of the 'environment' in the story of sector marketisation, this paper uses a resource dependency framework to examine the extent to which a portion of the sector can be financially sustainable, exploring institutional responses and prospects for the future (Pfeffer & Salancik, 1978). It focuses on smaller new public universities, providing a narrow but illuminating insight into financial dependency, sustainability and institutional autonomy.

Definitions

Financial sustainability, marketisation and autonomy are frequently used terms, with numerous definitions and discussions of their relative strengths and weaknesses in the HE context (e.g. Boliver, 2015; Brown & Carasso, 2013). This paper borrows a definition of financial sustainability from the Financial Sustainability Strategy Group (FSSG),

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a university-led high-level forum considering strategic, political, cultural and technical issues, which suggests it requires

> institutions to generate the necessary level of cash to finance their operations and strategic needs over the medium-to-long term, including its investment in human and physical resources. Achieving a sustainable financial position is, therefore, complex. It requires medium-to-long term decision-making, backed up by strong and clear financial strategy (FSSG, 2019, p. 16).

The marketisation of HE is defined as the increasing influence of market competition on academic life (Williams, 1995). Whilst noting that no developed system meets all the criteria, Brown (2011) suggests that a 'pure' HE market would include six features: legally autonomous universities; little or no regulation of market entry; no limits on fees; teaching costs covered entirely; fee costs met entirely by students and their families; and study choices informed by valid and accessible information.

In 2007, the European University Association (EUA) set out a four-dimensional definition of university autonomy (Estermann & Nikkola, 2009). This defines autonomy as the ability of universities to determine organisational structure and governance; oversee financial issues (to acquire and allocate funding, charge tuition fees, accumulate surplus, and borrow money); control staffing matters (to recruit staff and define terms of employment); and make academic decisions (defining programmes of study, quality assurance and student admissions).

The marketisation of English HE

HE marketisation in England has been widely discussed (Brown & Carasso, 2013; Molesworth et al., 2009), although most criteria set out by Brown (2011) remain only part fulfilled. Driven by sets of policy recommendations in Robbins (1963), Dearing (1997), Browne (2010) and Augar (2019), HE in England has been characterised by expansion, and increased participation and choice. As portrayed by Foskett (2011, p. 25), the system has morphed from 'a small collegium of medium sized, research- and education- focused organisations to a knowledge-based service industry'. At the start of the 2020/21 academic year, 1.76 million domestic students were studying at English universities, an 11% increase on 2016/17 (Higher Education Statistics Agency [HESA], 2022f). A further manifestation of marketisation has been the international-fees driven growth of overseas student recruitment. English universities grew their overseas student cohort to 501,000 in 2020 (a 35% increase in five years), whilst a further 431,000 studied overseas as part of transnational education ventures (HESA, 2022e; Universities UK [UUK], 2022).

An enabler of the increase in participation in English HE has been the changes made to sector funding. Annual tuition fees of £1,000 per year were introduced in 1998, rising to £3,000 per annum from 2006, £9,000 from October 2012 and £9,250 in 2015, where it remains.

Theoretical framework

The extent of change in the HE environment means its analysis requires a strong framework recognising significant roles played, and influence generated, by external policy makers on universities (Slaughter & Leslie, 1997). Whilst political theories help us understand national education policy changes, and organisational theories can frame internal management strategies, Resource Dependency Theory (RDT) provides a framework for

understanding the interplay between external factors, internal decisions and organisational dynamics. The main RDT themes used in this paper to shape the analysis are: first, the effect of environment on universities; second, the extent of autonomy held and ways these organisations manage environmental constraints; and third, the impact of constraints on institutional dynamics and the existence of alternatives (Pfeffer & Salancik, 1978). Looking ahead, RDT sets out two adaptive strategies to build resource capacity and support financial sustainability. First, universities can adapt and change to fit their environmental conditions, and second, they can seek to alter the environment to fit their own institutional capabilities. Again, this framework provides a sound model for assessing contemporary financial challenges.

RDT continues to be an influential framework across many business disciplines in the development of organisational strategies (Hillman et al., 2009). Its use in HE management is more limited. Tolbert (1985) used RDT in a sample of US universities to establish a direct relationship between funding sources and resources allocated to pursue such funding. In developing the theory of *Academic Capitalism*, Slaughter and Leslie (1997) used RDT to look at how national policies across four countries, including the UK, translate into HE finances, and how and why institutions change their attitudes to adapt to different income conditions. More country-specific studies using RDT in HE contexts include Huisman (1991) examining the system in the Netherlands, Machado (2005) on Brazil, Kholmuminov et al. (2018) on Uzbekistan, McAllister-Spooner and Kent (2009) focusing on community colleges in the U.S.A, and subsequently Fowles (2013) and Powell and Rey (2015) broadening this perspective across US HE.

Approach and financial typology

Method

First, a financial typology for a 'small public university' is established and major elements of income and expenditure are identified. Second, factors and forces impacting financial sustainability are explored against each income and expenditure area, drawing on financial data for the institutional sample. Third, organisational responses are appraised, using case studies within the sample. Fourth, future impacts on organisational dynamics are assessed, including a discussion on the outlook for small public universities in England and the extent to which issues identified may be transferable across the sector. The main sources for this paper are quantitative data from the Higher Education Statistics Agency (HESA), including the release of sector data in July 2022, and qualitative case study material from the universities sampled.

Defining a small new English university

Commentators have discussed the stratification and classification of English HE, and the roles played by each type of institution, be that into quality tiers, through league tables, via mission groups or another means (Boliver, 2015). Rather than adopt an existing cluster, this paper uses three criteria to define a 'small new public university' in England:

- It achieved full university status, via the Privy Council, between 2000 and 2015;
- It was home to between 4,000 and 10,000 students, as at the end of the 2020/21 academic year; and
- As holder of a Teaching Excellence Framework (TEF) award, it is eligible to charge home undergraduate tuition fees of £9,250 per annum.

Ten universities meet these criteria. This tight definition enables the development of a reliable financial typology, acknowledging that larger, smaller, newer, older or private universities could have a dramatically different income and expenditure mix. Whilst the identity of these institutions is anonymised, four are based in the north of England, three in the southwest, three in the southeast. Their annual income in 2020–21 ranged from £46 m to £84 m. The homogeneity of this sample is not limited to their size and age. These universities all attract a high proportion of students from areas of educational disadvantage, eight are located in small cities or towns rather than large metropolitan areas and nine have their origins in teacher training. An examination of their subject mix reveals that all 10 institutions have an arts and social science bias to their academic offering, although most have started to diversify.

A financial typology

Table 1 shows that in terms of financial health, as defined by Pagano and Moore (1985) and Woelful (1987), these small institutions have a consistently weaker performance than the sector. Over the past five years, financial surpluses have been lower than the wider sector average, and two of the universities reported a financial loss every year since 2016/17. Liquidity, which in this case is a measure of the number of days from the financial year end a university could operate based on its cash reserves and short-term investments, aligned closely with the sector until 2019/20, and varies significantly between the individual institutions. However, it was nearly 20 days below the sector average in 2020/21 at a time when all universities sought to protect their sustainability, through prudent financial planning, during the pandemic (Office for Students [OfS], 2022a). The days ratio of total net assets to total expenditure averaged 401 in the sample in 2020/21 (with a range of 193 to 810) against a sector mean of 419. This suggests that there is no discernible difference in the proportional level of assets held by the sampled universities versus the sector in general.

Table 2 summarises the income and expenditure profile of sampled smaller English universities. It demonstrates that, compared to the sector, these institutions

Table 1. Current financial health of sampled universities.

		2016/17	2017/18	2018/19	2019/20	2020/21
Reported surplus (% of income)	Minimum	−8.8%	−12.0%	−8.1%	−12.4%	−12.1%
	Maximum	11.4%	9.9%	4.8%	7.4%	10.9%
	Mean	**2.9%**	**1.2%**	**-0.6%**	**0.1%**	**1.2%**
	Sector	*3.7%*	*3.1%*	*3.9%*	*2.0%*	*4.7%*
Liquidity (days)	Minimum	44	32	36	72	98
	Maximum	228	208	200	231	293
	Mean	**116**	**130**	**115**	**139**	**149**
	Sector	*143*	*144*	*125*	*137*	*168*

Source: Author, based on HESA (2022a), OfS (2022a) and institutional Financial Reports.

Table 2. Sample universities income and expenditure (2020/21).

INCOME	Home tuition fees	International fees	Funding body grants	Research and other grants	Accommodation and catering	Other income
Minimum	68.7%	0.2%	4.2%	0.2%	0.5%	1.1%
Maximum	88.4%	10.2%	10.0%	2.5%	10.9%	9.5%
Mean	**76.5%**	**4.6%**	**6.8%**	**1.0%**	**6.2%**	**4.9%**
Sector	*38.8%*	*16.3%*	*11.0%*	*15.4%*		*18.5%*

EXPENDITURE	**Staff salaries**	**Social security costs**	**Staff pensions**	**Other operatingcosts**	**Depreciation**	**Interest and financing costs**	**Other costs**
Minimum	35.8%	6.8%	9.3%	20.8%	5.6%	0.8%	0.0%
Maximum	53.7%	10.9%	15.6%	44.2%	8.6%	4.0%	2.0%
Mean	**43.6%**	**9.6%**	**12.8%**	**29.3%**	**7.2%**	**2.3%**	**0.6%**
Sector	*41.4%*	*5.9%*	*8.0%*	*36.2%*	*6.7%*	*1.8%*	

Source: Author, based on HESA (2022c, 2022d) and institutional Financial Reports.

are twice as dependant on home tuition fees (they represent 77% of income on average) as the sector norm. This has risen from 70% of the sample's income in 2016/17. Areas where more autonomy exists, including international fees, funding body grants, research grants and other income, are all significantly less important for these smaller institutions. Further inspection suggests that this is the case for all 10 of the universities in the sample, and that, with undergraduates representing 82.7% of their overall domestic student cohort, it is first-degree students that are the principal income unit (HESA, 2022d). Staff salaries, social security (National Insurance) and pension costs together account for 66% of expenditure at smaller new universities (up from 60% in 2016/17), significantly exceeding, and increasing faster than, the sector average of 55% (which is unchanged from 2016/17). Again, as will be discussed later, limitations on organisational autonomy exist in relation to staff and pension costs.

Environmental effects: factors and forces impacting financial sustainability

Undergraduate tuition fees

Home undergraduate tuition fees are the largest source of income for the sampled universities, but arguably they are also the income unit where least autonomy is held. It was announced in February 2022 that fees would remain capped at £9,250 until the 2024/25 academic year (Department for Education [DfE], 2022a). Using 2012/13 as a base and the Consumer Price Index (CPI) as the measure of inflation, tuition fees will have reduced by 23% in real terms over 2012–25, to the equivalent of £6,959 (Bank of England, 2022; ONS, 2022). Whilst fixed fees provide certainty for universities, diminishing fee levels in real terms for at least three more years has the potential to jeopardise financial sustainability if core markets cannot be diversified.

While outlining the tuition fee freeze, the government also announced consultations on the introduction of Student Number Controls, Minimum Eligibility Requirements, and reduced fee cap levels for *Access to Higher Education* courses such as Foundation Years

(DfE, 2022a). This may indicate intent by the government to reduce the numbers going to university, further threatening the core market of smaller institutions.

Other external factors impacting home undergraduate tuition fee income include the potential for expansion in numbers of HE providers in England, further increasing competition, and the behaviours of larger, resource hungry universities. Ahlburg (2020) suggests that larger, stronger institutions may move into smaller university markets post the Covid-19 pandemic and Brexit, serving regional markets through applied courses, replacing lost foreign students with domestic entrants. Whilst this has not borne out in 2022, with international student recruitment remaining buoyant, an ongoing risk remains.

Staff salaries

Staff salaries dominate spending in the sampled universities (for the past five years accounting for, on average, 43% of expenditure), while institutions enjoy little autonomy or flexibility in this regard. Sector marketisation has not been accompanied by the liberalisation on how most staff are remunerated. Most public universities continue to use a nationally agreed single 51-point pay spine agreed, initially, as a result of a pay modernisation programme led by the Joint Negotiating Committee for HE Staff (JNCHES) in 2003, and are subject to an annual collective bargaining process between the Universities and Colleges Employers Association (UCEA), the University and College Union (UCU) and other unions (UCEA, 2003, 2021). Most staff, excluding those already at the top of pay bands or at the highest levels within university hierarchies, are appointed on this pay scale and are subject to two kinds of pay adjustment per year: first, pay progression within the scale, where staff members move to a higher pay increment within a grade for doing the same job; and second, a pay award, an increase in pay resulting from the collective bargaining process. Whilst the latter, varying annually, lasts as long as the staff member is employed, the first is limited to the width of the pay band. According to UCEA (2022), 51% of academic staff and 46% of non-academic staff were eligible for increments in 2021, worth on average 3% of salary.

For staff, the JNCHES framework provides transparency, comparability and fairness, and has supported work towards equal pay (UCEA, 2003). For smaller universities, however, whilst a single national pay scale helps avoid equal pay cases; simplifies pay administration; improves retention; harmonises working hours; and if managed correctly, supports good employee relations, it also limits the extent to which individual institutions can differentiate themselves. For example, limited autonomy exists to retain their best resources, attract higher performers (especially in a competitive market) and respond to income challenges. In financial terms, it means smaller universities in England pay a similar level of salaries as larger sector peers, despite not necessarily being able to sustainably afford this. In some institutions, a response may be to employ fewer staff. Headcount across the 10 sampled institutions decreased by 480 between 2016 and 2021, but the cost of staff salaries during this period grew by £18.4 m.

Staff pensions

The two main forms of occupational pension scheme in England are defined benefit (DB), with the pension typically based on salary level and years served, and defined contribution (DC), with a pension based on the size of investment made by employees and employers. In the economy in general, there has been a move from DB to DC schemes for mainly financial reasons (de Thierry et al., 2013). Since their time as quasi-public bodies, English HE institutions have generally operated DB pension schemes. Three major schemes are in operation within English HE: the Universities Superannuation Scheme (USS) with over 400,000 members principally located in older and larger pre-1992 universities but also some newer institutions; the Teachers' Pension Scheme (TPS) which operates across HE, Further Education and schools with over 700,000 members; and the Local Government Pension Scheme (LGPS) which transcends a range of public sector organisations, with over 4.6 million members divided into regional funds. All three of these operate on a career average basis and in 2021 had employer contribution rates of 21.6% (USS), between 14% and 18% (LGPS) and 23.7% (TPS) (DfE, 2022b; Unison, 2022; USS, 2022). By comparison, the minimum employer contribution rate for a DC pension in the UK in 2021 was 3% (Pensions Regulator, 2021).

The 10 sampled universities are, together, members of all three schemes, but in general, academic staff enter the TPS and non-academic staff enrol in the LGPS. Table 3 shows how the costs of these schemes rose between 2016 and 2021. As discussed by the Economist (2017), DB pension costs are likely to continue to rise with an ageing population and declining returns on investments.

A major issue here is the extent to which universities can influence pension costs as both the TPS and LGPS are operated by bodies distant from member organisations. In both funds, contribution rates are set by these external bodies, with minor reviews annually and major reviews triennially that historically have resulted in increased costs for employers. This has led to the sampled universities spending on average £3.1 m more on pensions in 2020/21 versus 2016/17 (HESA, 2022d).

Other operating costs

There are several other external factors impacting financial sustainability in HE, although not necessarily unique to the institutions in the sample. Of the five financial pressures outlined by Dickmeyer and Hughes (1982), two are particularly pertinent at present: inflation and increasing regulatory requirements.

The Consumer Price Index has increased dramatically in the UK. It reached 10.7% in November 2022 on the back of Brexit, the Covid-19 pandemic and conflict in Ukraine. This places short-term financial pressure on university operating costs, particularly spending

Table 3. Pension costs as a proportion of income, for sampled universities.

	2016/17	2017/18	2018/19	2019/20	2020/21
Minimum	6.7%	7.0%	6.9%	8.6%	9.4%
Maximum	10.8%	11.2%	12.2%	14.9%	15.1%
Mean	**8.2%**	**8.8%**	**10.2%**	**11.6%**	**12.6%**

Source: Author, based on HESA (2022c, 2022d) and institutional Financial Reports.

on energy, services and consumables and potentially leads to increased borrowing costs. This also leads to inflated pay expectations in the job market, perhaps reducing universities' ability to compete for increasingly scarce resources. The macro-economic situation has also led to a 1.25% increase in employer National Insurance contributions, subsequently proposed for reversal, calculated to cost the sector £131 m in 2022/23 (UCEA, 2022), accompanied by a 6.6% National Living Wage increase in 2022. Seven of the 10 sampled smaller universities also pay the (higher) Voluntary Living Wage, which rose by 10.1% in late 2022. Inflation and cost of living increases have a particularly significant impact within English HE, with fixed domestic undergraduate tuition fees, and for the sampled universities such fees represent a large proportion of income.

A longer-term financial pressure relates to the cost of meeting the conditions of registration, both in relation to administration and expenditure on activities over and above teaching and research. The OfS sets out seven such conditions that all universities must meet, regardless of their size, including specific requirements around: access and participation; quality; student interests; financial sustainability; good governance; information for students; and accountability (OfS, 2022b). Whilst quantifying these costs is difficult, a review of the Access and Participation Plans for the 10 universities in scope reveals that they spent on average £1.8 m (2.7% of income) on these activities alone in 2020/21. In addition, universities are constantly measured and compared, by regulators and by students, with Research, Teaching and Knowledge Exchange frameworks being used as measures of 'quality'. There are signs that this regulatory burden could increase, with the OfS publishing a consultation on its minimum acceptable outcomes for students that could see universities investigated and fined should they dip below targets for student retention, completion and graduate outcomes (Adams, 2022). Requirements for reporting, governance, central planning and student support will require teams of dedicated people at each university, costs which cannot be balanced with income. Whilst this is a cross-sector issue, these costs are likely to be proportionally higher for smaller universities.

Organisational responses

The RDT model proposes two sets of adaptive and strategic organisational responses to build resource capacity: adaptation to fit with environmental requirements; and the alteration of the environment to fit existing capabilities (Pfeffer & Salancik, 1978). In the context of HE and acknowledging that they may not be equally weighted, both approaches require an understanding of the role a university plays, and its relative strengths and weaknesses (Keller, 1983).

Adaptation to fit with the environment

The first response in RDT relates to the adaptation of universities to serve traditional markets in a more efficient and effective way, hence preserving or increasing financial sustainability. The activities undertaken by smaller English universities, in this respect, can be split into two categories: first, actions to employ resources on different terms; and second, measures to change the form of the organisation to remain competitive.

Three of the 10 sampled universities have launched DC pension schemes independent of the USS, TPS and LGPS, following the lead of larger institutions and the private sector over recent decades (Hillman, 2021). These DC schemes serve new professional support staff, with the LGPS closed to new entrants, and contribution rates, at around 3%, are significantly lower. At present, however, there are no signs of withdrawal from the TPS by any of the universities in the sample, although a process to do so, outside of HE, for independent schools, is now in place. Interestingly, pension costs at the three sampled universities that have launched DC schemes are not yet lower than the sample in general (at 12–13% of total costs in 2020/21; HESA (2022c, 2022d). This suggests that they may take several years to make any financial impact.

In one case, a DC pension scheme in the sample was facilitated by the creation of a separate wholly owned subsidiary company which now employs all new non-academic staff, on different terms and conditions of employment. Whilst this approach has been largely criticised by the Trade Unions, which see it as 'gaming' the employment system, it appears to be becoming more commonplace across the sector in England, albeit not yet amongst the rest of our focus universities (UCU, 2018).

Even where new subsidiaries have not yet been created, smaller English universities continue to employ staff on non-standard contracts, to retain flexibility but also to counter some of the structural issues in the system. Data from HESA (2022b) suggests that the sampled institutions employed 26% of their academic staff on fixed-term contracts in 2020/21 (versus 31% in 2016/17), compared to a national average of 33% (33% in 2016/17), and 15% on zero-hours contracts, against 14% across the UK. Whilst the proportion of staff employed on a fixed-term basis in the sample is, on average, lower than the national benchmark, this masks significant variation. One sampled university employed 40% of its academic staff in this way in 2020/21, and at another the level was 38%. Only 5 of the 10 institutions employed academic staff on zero-hours contracts, but at one, 47% of staff were engaged in this way and at three others the level was greater than 28%. UCU (2021) now considers the casualisation of the sector 'endemic' with concerns over fairness, workload and student experience, but these are tactics employed by many institutions, including several in the sample.

There have also been changes to workforce size in the sampled universities. In 2016/17, the 10 universities employed a total of 9,845 members of staff, and by 2019/20 this had reduced to 9,365 (down 5%), despite the number of students attending these institutions rising by 4% during that period. This has led to the ratio between students and academic staff at these institutions rising from 12.3 to 14.1, even taking into consideration varying interpretation of HESA data requirements, significantly higher than the sector, which has remained stable between 8 and 9 HESA (2022g). The data suggest significant reductions in staffing levels have taken place at four of the 10 sampled institutions. Whilst initial staff cuts may be related to efficiency gains, their continuation may be hard to maintain, and could negatively impact the student experience.

The way that external resources are employed is also an area of consideration. All 10 universities in focus are members of university purchasing consortia, which claims to have made £76 m cashable and £104 m non-cashable savings for UK universities, in general, in 2020/21 (UKUPC, 2022). Perhaps the most innovative shared services example, however, is one sampled university's collaboration with a local Russell Group university. This is

a jointly owned and operated shared service model launched in 2012 that manages a shared campus on behalf of both institutions, covering campus services, IT, estates management, retail, libraries and study support, and is often held up as the first, and still the best, example of this kind of collaboration (Herbert & Rothwell, 2015). At present, there are no further examples of significant outsourcing, offshoring or asset sharing amongst the sample.

Attempting to alter the environment

The second response discussed by Pfeffer and Salancik (1978) in the context of HE largely relates to the selection of new markets, leading to a reduced dependency on traditional forms of income. For smaller English universities, this can be summarised in three overlapping sets of responses to grow the offer and reach new sets of students and other customers: first, growth and diversification including the introduction of new programmes; second, internationalisation; and third, partnership building.

Smaller universities in England have, in general, experienced a period of growth (Table 4). Eight of the 10 institutions have seen higher student numbers over this time, on average by 12.2%, albeit slightly slower than the overall sector growth of 15.7% as the sector seeks to take advantage of demographic changes to counter the impact of fixed tuition fees. Three sampled universities have grown by over 35%. Growth to date, across the sample, has largely been driven by diversification activities. A comparison of the academic programmes on offer across the sample suggests a gradual move away from their roots in the arts, teacher education and social sciences, including towards disciplines where more public financial support is available, such as science and health-related courses, or where there is a greater demand for places. Three of the sample have established nursing programmes (taking the total to five), and four have started delivering law (taking the total to nine). One university has recently moved into engineering via a dedicated campus, and another has become the first in the sample to open a London branch campus; a third created four new academic schools in 2021, and all except two of the 10 institutions have developed provision within the Degree Apprenticeship market.

So far, this growth trajectory has not yet driven a proportional increase in income, nor as previously shown in Table 1, financial surplus. Income across the sample has increased by an average of 7% in the period 2016–21, suggesting that income per student has fallen. Despite this, growth aspiration continues, with Corporate or University Strategies in five of the 10 institutions including quantified student growth targets for the next decade. Some of these are modest, with one targeting 9,300 students by 2030, and another 10,000 by

Table 4. Student population growth amongst sampled universities.

	Student Headcount (FTE)					
University	2016/17	2017/18	2018/19	2019/20	2020/21	2016–21 change
Minimum	3,625	3,365	3,415	4,985	4,693	
Maximum	8,635	8,490	8,255	8,450	9,821	
Mean	6,393	6,329	6,350	6,659	7,092	12.2%
Sector	*1,951,075*	*1,983,480*	*2,015,110*	*2,076,465*	*2,257,580*	*15.7%*

Source: HESA (2022f).

2026. Others though, are more ambitious: one university is seeking to grow by 65% in 10 years, and another is aiming to reach 15,000 by 2030.

Part of the growth agenda has been an increased international presence, where there is institutional freedom to set tuition fee levels in both undergraduate and postgraduate markets. Although none of the samples was amongst the 25 English HEIs to have established 37 overseas campuses by the end of 2020 (Cross-Border Education Research Team [C-BERT], 2020), all were actively recruiting international students, and five have active transnational education partnerships. Between 2016/17 and 2020/21, the total number of international students studying in person at the 10 universities rose from 3,715 to 5,025. They represented 5.8% of the student body in 2016/17 and 6.8% in 2020/21 (HESA, 2022f). Looking at England overall, 19.2% of students were from overseas in 2016/17, rising to 22.2% by 2020/21, with the OfS claiming that they underpin the financial health of the whole sector (OfS, 2022a). These students will bring higher fees, offsetting some of the challenges around fixed fees and domestic competition, but smaller institutions are home to disproportionally fewer international students, and are growing their cohorts at a slower rate. Only two smaller universities bucked this trend with higher growth than the national average, one of which is based in London, and the other which has attracted a large proportion of its new international students to its London Campus. In addition, transnational activity (where institutional data are limited) shows interesting differences between the institutions in focus. One currently works with 11 partners in eight countries in Africa and Asia, whilst two others engage four partners, but boast an impressive 26 and 27 programmes internationally, respectively. Two more have modest international partnerships, with no evidence of any at the remaining institutions. Further inspection of these agreements suggests that they are prominently based around business and management courses, with arrangements a mixture of franchising, validation, articulation and progression, dual and double degrees, and flying faculty.

There are signs that smaller universities are beginning to innovate in terms of domestic partnerships, opening new markets segments. In 2022, one of the in-scope institutions announced a partnership with a large Russell Group university to open a new graduate entry medical school in 2025, especially designed to meet the needs of the local region. Elsewhere, one university accredits all research degrees delivered by a smaller HE provider and, since 2018, one of the sample has delivered a Foundation Coaching and Development degree with a Premier League football club. All 10 sampled universities work with both further education and independent domestic HE providers to some extent. As a leader in creative subjects, one university has over the past decade created 12 domestic partners offering 38 courses, whilst three others are all particularly active in this space with each having more than 20 live partnerships in place across the country.

Discussion: the impact on organisational dynamics, a future outlook

The responses that small universities are taking to remain financially sustainable are likely to change the nature of these organisations. Fixed fees, pressures on the costs of employing resources, and the need to comply with ongoing regulatory requirements, are already leading to changes in their shape and orientation. Their relatively modest financial performance suggests that small, new universities may be disproportionately impacted

by these challenges, although an argument could also be made that their size makes responding potentially easier to manage.

The impact of organisational adaptation may mean universities in the sample increasingly adopting the model pioneered by one, with different employment structures across academic and non-academic staff. Similarly, strategies to improve control and de-risk future spending may mean more reliance on staff on fixed-term or zero-hours contracts, outsourced services or, as has already been seen across the sector, the specialisation of employment terms, such as the introduction of research-only or teaching-only contracts (Baker, 2019). The extent to which universities can continue to freeze or reduce resource levels, leading to the increased student-staff ratios discussed earlier, may depend on the impact that this has on regulatory compliance, quality and student experience, but certainly this appears inevitable unless the universities in the sample find a way to reduce their reliance on income sources where they have little control. Together, all these measures may lead to greater friction between the universities and staff, and lead to continued industrial relations challenges.

In terms of environment alteration, the efforts of sampled institutions to exploit scale economies through growth has to date led to an increased number of academic programmes on offer and a gentle move away from their roots in arts and social sciences. This has had the short-term impact of a modest increase in student numbers, but there may be concerns at individual institutions that the range of new courses that can be introduced and delivered efficiently, within a fixed undergraduate fee environment, is being diminished. As discussed earlier, the evidence so far suggests that student number growth has not been accompanied by a proportional increase in income levels, raising concerns around the ability of institutions to grow efficiently. The time needed to bring new programmes to market – with design, approval and marketing periods – is also a challenge in this context, as is the teach-out period for those deemed unviable. Diversifying course offerings towards segments and markets where more institutional autonomy exists, and with it higher margins, mean that these universities may look very different in the future. Historically, the sample universities have largely served local markets at undergraduate level, becoming key local anchors visibly at the forefront of widening access to HE. As financial tensions increase, there is a risk that this expensive and resource-intensive activity becomes no longer affordable. Furthermore, future financial sustainability challenges may mean institutions seek to recruit from further afield domestically, where at present demographics are favourable with more people of student age in the system through to 2025 (UCAS, 2021), and with a far greater focus on international students, and on postgraduate programmes. This has implications for the courses they provide, with national and international demand potentially different to the programmes traditionally delivered to local students. In addition to ongoing investment to support degree apprenticeships, the introduction in 2025 of the Lifelong Learning Entitlement, which will provide citizens with access to a loan for the equivalent of four years of post-18 education to use over their lifetime, may also mean that universities diversify towards short course and modular provision. The extent to which the sampled universities will move towards greater blended or online learning provision in the post-Covid-19 world is at present unclear, but provides an opportunity for further diversification and market expansion depending on student preferences and potential funding incentives (Beatty,

2019; Rapanta et al., 2020). Diverse types of resources will need to be employed, including managers able to innovate and design new processes, staff with different skillsets; campuses and digital infrastructure orientated towards different learning styles; and timetables and working patterns with more flexibility. These potential changes will alter organisational dynamics, from one perspective creating organisations that are more responsive to student needs, but from the other creating larger and more complex universities that could be, in a way, less cohesive and nimble. Most of the diversification activities discussed will also require institutions to take a risk on investing in some form of new resource and/or associated processes and administration, on the prediction that this investment will be rewarded in the future. This represents an existential threat to universities where resources are already stretched.

Sector level dynamics are also likely to impact individual institutions. Whilst many of the sample are seeking to grow and diversify, create new partnerships and exploit new markets, so are other players including larger and more established universities moving into some of the lower-tariff markets typically occupied by the sampled institutions. Whilst more collaboration and partnership building may support overall financial sustainability, it could be argued that this could lead to a different form of dependency and in a sense reduce institutional autonomy. Sector-wide financial performance was deemed 'reasonable' by the OfS for 2020/21, but in the same report, the regulator expects the rise in costs to exceed the rise in income in the short-term (OfS, 2022a). These external environmental changes may accelerate some of the responses already discussed, such as shared service models and the medical facility collaboration discussed earlier. They could also, however, lead to more fundamental changes in the sector such as asset refinancing or stripping, institutional failure, or vertical or horizontal integration. Whilst Hunt and Boliver (2020) comment that the closure of public HE institutions in the UK is almost unknown in comparison to more recently founded for-profit organisations, the National Audit Office (2022) stated the proportion of HE providers with an in-year deficit increased from 5% in 2015/16, to 32% in 2019/20. Perhaps more likely than failure is consolidation, with more universities merging vertically with FE, as has been seen at several locations over the past two decades, or horizontally with each other, akin to Victoria University of Manchester and UMIST forming the University of Manchester in 2004. Another potential interesting future scenario would be the development of new public-private hybrid models resulting from mergers or acquisitions between not-for-profit and for-profit institutions, which have the potential of bringing a new form of HE to the UK market. Further variants could involve, for example, technology companies, social enterprises, large philanthropic foundations and others (Ferlie & Trenholm, 2019).

Conclusions

Pfeffer & Salancik's resource dependency perspective proves a useful framework to analyse the financial sustainability issues facing smaller public universities. It demonstrates that three of the most important income and expenditure factors: home undergraduate tuition fees, staff salaries and pension costs, are also areas where institutions have amongst the lowest levels of autonomy. Indeed, two of the four 2007 EUA dimensions of university autonomy (financial issues and staffing matters) have not been met (Estermann & Nikkola, 2009). Furthermore, other operational

costs are being inflated externally due to the macro-economic climate and the regulatory regime imposed by the OfS. The RDT framework enables categorisation of universities' adaptation responses to these challenges including the introduction of new pension arrangements, new models for employing staff, and new organisational forms such as subsidiaries, increased collaboration and outsourcing. Measures focused on altering the environment primarily relate to growth, aiming to exploit economies of scale, and diversification into new programmes and markets both domestically and overseas, which in many cases will see the academic offering within the sample continue to move into disciplines that sit outside of their arts, teacher training and social science foundation. The use of partnerships to achieve these is another common theme, but one where one form of financial dependency in a reliance on tuition fees is potentially traded for another in commercial relationships with third parties.

Whilst the outlook for the future is unclear, with ongoing turbulence in national policy making, it appears likely that steps being taken by small universities to remain financially sustainable will continue, but they will be operating in an environment becoming ever more competitive, and where there is general pessimism across the whole sector as to the short- and medium-term financial outlook (OfS, 2022a). Whether it is possible for these smaller institutions to grow and diversify whilst still improving their allocative and productive efficiency remains to be seen, especially when so many key elements of income and expenditure are determined externally. At sector level, with many universities of different shapes and sizes pursuing the same goals around scale and autonomy, it may be that there will be more structural changes than have been seen in recent years.

This paper has examined, in detail, just a small proportion of English HE, in a post-Brexit, post-Covid-19 environment, largely based on secondary data. The income and expenditure profile of older and larger institutions will differ from those sampled, meaning their exposure to external environmental factors also varies, creating new financial sustainability challenges. The conclusions of this paper are, therefore, limited to the profile of the institutions sampled, but the methodology employed could be applied to other typologies. Indeed, it would be interesting to examine what is common to all universities and what is due to being smaller and newer. A further question to consider is whether financial pressures on the sector in England are now such that there is a minimum viable size for a university in this market. Given the importance of the environment in English HE, further research is welcome to appreciate the extent to which institutions use frameworks such as RDT to understand their resource challenges and plan for the future.

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