he was formerly a sergeant. Finally, there is Joe Haines (Steven Crossley), an American private, who is the one odd man out. In the play, he is the last to arrive and the first to leave, appropriately enough when it is clear that his English comrades hold their late arrival against the Americans.

Their different situations mean that each saw the war from a particular angle, at least until the battle of the Somme, at which point their experience is shared and their individual accounts combine to produce a dramatic whole. Apart from the handful of survivors of the 1914-1918 conflict, none of us can imagine what it was actually like. We may have read the histories, the autobiographies and biographies, the novels, the poems, and we may have seen the documentary footage as well as the films devoted to the war. None of that can do more than give us some knowledge of what went on. What *Forgotten voices* does, by using the actual verbal accounts of the participants, is to produce what is almost a cross-referencing pattern, bringing us at least a little closer to the awfulness of those events. The play can never of course be more than an archive-based construct, and the choice of the different contrasting characters makes that obvious. But it works, reminding us that, despite the ceremony, the rhetoric and the heroics, war can only ever be a nasty business.

KEITH GORE

Oxbridge Investments

Shanta Acharya & Elroy Dimson, 2007, *Endowment Asset Management: Investment Strategies in Oxford & Cambridge* (OUP).

In this, as the first-ever detailed study of endowment asset management in UK higher education, Acharya and Dimson analyse the strategic objectives, investment philosophy, asset management tactics, and endowment management/governance of the sixty or so college and university endowment funds held within Oxford & Cambridge. The only comparable study is that of Yale's endowment management strategy (David Swensen, *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment*, 2000). The Acharya and Dimson book, based on exhaustive research (which included the challenge of getting secretive bursars at Oxbridge colleges to speak to them, let alone provide data) is something of 'a book for all readers', in that any reader with preconceptions in favour of the diversity of endowment management strategies that comes from all of these colleges doing their own thing (such as the bias of this particular reviewer) will be able to selectively quote from the book to support that stance. At the same time anybody finding such diversity unpalatable and wanting the whole thing to be managed centrally will be able to find selective quotations in favour of their assumptions about what is the best way forward.

The authors go through chapters covering the definition of endowment, the nature of the endowment/investment committees within the various institutions, the objectives set for investment, the spending policy (or spend-rate) determined by each organisation, the asset allocation, the somewhat peculiar propensity of Oxbridge colleges to invest in commercial property, the technical issues of portfolio risk, the use of consultants to advise and monitor, the selection of fund managers, the vexed question of socially responsible investment/ethical investment, the cost of managing the endowment, the use of alumni fund-raising as part of endowment growth... Along the way they supply many interesting tables, and, even beyond the geeky world of bursars, this is still an interesting and worthwhile read (and perhaps especially for those many Fellows of Oxbridge colleges who are dependent on the success of the endowment investment strategy for the paying of their monthly wages and who after all have a very clear fiduciary duty to manage the endowment properly – and are personally liable if grossly negligent in such management by, say, appointing a dodgy bursar, or delegating too much authority to said bursar or even to the endowment committee rather than making decisions at full Governing Body).

Chapter 1 sets the comparative scene, with perhaps the most telling table showing endowment per full-time equivalent student expressed in dollars: Princeton University $1.66m, Yale $1.35m, Harvard $1.33m, Cambridge $296K, Oxford $269K. It could be said that the gap between Oxford & Cambridge and its US competitors has largely arisen over the past thirty or forty years and is linked to the developing strength of the American economy which resulted in the alumni of such institutions being able to make major donations. It can also be said that the gap has partly arisen because those US institutions have been far more adventurous/sophisticated in their management of endowment, to which the response might be that an institution is able to be more adventurous in terms of investing in developing asset classes such as venture capital and private equity if it can control the pricing of its major product (undergraduate degree courses), increasing the price to help cover the gas bill while investing in asset classes that do not automatically and predictably throw off income to cover the gas bill.

In other words, the Oxbridge colleges have not necessarily been culpable in not following such investment strategies during the 1980s and 1990s, but simply were not able to sacrifice the certainty of investing in traditional income-producing assets in order to pursue the greater total return of investing in other newly-emerging asset classes. Finally, it might also be argued that the relative position of Oxford & Cambridge in terms of endowment per student is a function of their having (recklessly) expanded undergraduate numbers and diluted their endowment base: it is to be noted that Princeton, clearly a world-class institution, manages to be so on a student population of not much more than half that at each of Oxford & Cambridge; while even Harvard, with its endowment of five times that held by either Oxford or Cambridge, seeks to educate not many more undergraduates than each of those institutions tries to process.

An additional comment might be that, again while the US competitors have hiked fees progressively (in the same way that private health care costs in the US increase steadily at multiples of the rate of inflation and also private school fees in the UK), Oxford & Cambridge have been forced to work their endowment harder (in terms of some colleges pursuing an unsustainably high spend-rate) as the Government-funded unit of resource for undergraduate education has reduced by some 40% over the past fifteen years or so. Hence, the authors comment on 'this long-term under-funding of [university] education in the UK', and, with reference to the painfully slow introduction of higher tuition fees, 'top-quality [university] education in the UK is available at bargain prices'.

That said, the book notes the success with which Oxford & Cambridge have diversified their income-streams (everything from conference trade and tourist income to contract research and intellectual property exploitation): 'As Government funding failed to keep pace with the rising cost of operating these world-class institutions, they have successfully diversified their sources of income via fund-raising, improved endowment asset management and other operations.' The authors also note that, as with pension funds, the management of endowment has not been helped by Chancellor Brown's attack on their income by the abolition of tax credits on dividends back in the early days of New Labour being in power.

Citing the OxCHEPS study comparing Oxford's finances with Harvard, Princeton and Berkeley (Item 13 at the Papers Page, ***www.oxcheps.new.ox.ac.uk***), the authors comment: 'It would be reasonable to suggest... that if nothing is done urgently to reverse the funding gap faced by institutions in Oxford & Cambridge – not to mention other highly rated centres of learning in the UK – they will struggle to retain their status among the top educational institutions in the world.' They also add that it is this financial issue which is *the* problem for Oxford & Cambridge and not their governance structures. 'The collegiate University system may look messy, but it guarantees diversity and experiment... The real challenge... is not fiddling with structures, but raising enough money to enable these institutions to exert greater freedom in managing their affairs'.

Moving on through the book, they note that most colleges 'have considerable access to the good will and investment expertise of their alumni', with such alumni being 'very willing to express their gratitude by sharing their time and expertise'. Indeed, most colleges make good use of that valuable voluntary support by having such alumni on their endowment/investment committees. Equally, Oxbridge colleges tend to be deeply sceptical of the added value of the use of 'investment consultants', something which is fashionable in other areas (notably used by pension fund trustees). In the chapter on 'Investment objective', a useful definition is provided: 'The main objective of educational endowment could be stated as providing adequate spending [the spend-rate] for current and future beneficiaries while not eroding the principle corpus of the endowment' (in other words, balancing income for today's use with growing capital and its consequent yield/income for future use at a comparable rate to today's spending, or alternatively the annual spend being 'sustainable' without eroding the future spending power and hence achieving 'intergenerational equity').

Thus, the 'spending rule' for most Oxbridge colleges is 3% to 4% of capital value per annum: anything much below 3% could attract the attention of the Charity Commission in terms of whether the charity is fulfilling its objectives today as opposed to storing up too much largess for tomorrow; anything much above 4% arguably could be breach of trust on the part of the Fellows in over-spending for their benefit today at the expense of future generations of beneficiaries due to process through the college. It is, of course, telling from one of their tables that, where colleges exceed 4%, it is mainly colleges that have lower endowment capital (less than £50m) and hence for whom the temptation is to keep on spending even at the risk of not achieving 'intergenerational equity'. Quite rightly, the authors stress that: 'Determining a sustainable spending-rate is among the key decisions that the Governing Body of a College is responsible for'.

With reference to asset allocation, the authors note with interest that: 'As a group of institutions with similar investment objectives, colleges in Oxford & Cambridge exhibit a high level of individualism in their investment decisions. As far as endowment asset management is concerned, there is little evidence of herding or following the latest investment fad... If anything these institutions are conservative and can best be described as adopting a 'contrarian' investment approach' (something that Swensen also emphasises for Yale's strategy). In short, 'Oxbridge institutions remain refreshingly original in their investment approach'. They cite as part of this 'refreshing' scene, the creation of Oxford Investment Partners (OXIP), as launched by St Catherine's, Christ Church, Balliol, St John's and [declaring an interest on the part of this reviewer] New College, initially with £100m worth of investment that has now almost doubled as additional investors have come on the scene and as some of the initiating colleges have increased their investment in OXIP.

Commenting particularly on the high level of commercial property investment amongst Oxbridge colleges, compared with, say, pension funds and other long-term investors, the authors speculate that: 'The large property content of Oxbridge institutions may well account for the relatively low usage of investment consultants [as noted earlier] whose expertise does not extend to the very specific property holdings of the Colleges'. For the real nerds in terms of looking at investment strategy, the authors cover in detail such issues as indexed versus active portfolio management, the use of a smoothing mechanism for calculating the spend-rate, the issue of rebalancing the portfolio, the (very limited) use of derivatives by colleges in their investment management, the use of absolute return investment strategy in order to protect against volatility (again there is limited use of such strategies, given that, arguably, colleges should be much less concerned with volatility of capital values than with ensuring that the investments produce a predictable and gently rising income-stream), the concept of counter-party risk and investment risk (and of risk relative to benchmark), the detail of the investment management agreement with fund managers...

Out of all this, on the positive side, Acharya and Dimson, as already noted, talk of the refreshingly contrarian approach to investment management, comparing Oxford & Cambridge favourably with the doyenne of university endowment management in the form of Yale: 'Endowment asset management among these institutions may appear too individualistic, but such practice is not significantly different from their larger counterparts in United States'. The authors *seem* to be supportive of this diversity, whilst worrying that the pressure is for what might turn out to be a dulling and mediocre over-centralisation: 'Their considerable individualism can best be described as the Galapagos Islands of the investment world, and it may be in great risk of disappearing with a need to inject economies of scale, not to mention greater centralisation in decision-making'. That said, they also note certain technical weaknesses in terms of how colleges treat the detailed process of investment decision-making: 'Weaknesses relate mainly to tracking error, downside risk, setting out clear performance targets and in explaining what specific actions were to be taken in case of performance not meeting the target...'.

Wobbling slightly on the fence, the two authors also comment: 'Whether the high level of diversity manifest in investment approaches in Oxbridge endowment portfolios is necessary or desirable, taking into account the overall size of endowment assets under management, is an interesting question'. It is clearly one which will come increasingly into focus as each of the two universities create their own Investment Office, and appoint what they hope will be a Swenson to manage the university endowments of some £500m each. Will colleges progressively tip their own endowments into this investment pool, or will they continue to use a multiplicity of managers, or will more of them chuck their endowment in with OXIP? Again, the hearts of the two authors seem to be in favour of 'refreshing' diversity of investment strategies, while the rational brains of the two authors force them to comment: 'Despite evidence of pooling in the management of some assets, there exists considerable opportunity for further consolidation', effectively 'economies of scale could be achieved in pooling assets'.

The authors also worry that across this diversity of managers there then is a problem of comparing performance, as opposed to a reduced number of managers each handling more money: 'The lack of transparency in measuring investment performance and associated costs remains the Achilles heel of endowment asset management in Oxford & Cambridge. These institutions need to make their cost-adjusted investment performance more transparent'. Indeed they find it 'surprising that Colleges in Oxford & Cambridge never developed an internally customised benchmark for performance measurement'; and again later in the text stress: 'Performance measurement remains a key weakness among Oxbridge institutions in endowment management... there is no investment league table of the performance of individual endowment funds'. (In fact, figures can be gleaned from careful study of the accounts for each College in their relatively new format but, admittedly, there is no easily visible table specifically designed to provide the direct comparison of endowment performance before or after management fees, before or after alumni donations, etc).

Indeed, so concerned are the two authors about this issue of performance measurement, that they conclude it 'is a hot potato' and that: 'Colleges should therefore seriously consider pooling their resources in hiring an external consultant to provide such a service, as such evaluation will enable them to assess objectively the returns they are able to achieve compared to their peer group both in the UK and abroad. Current endowment asset management practice among Oxford & Cambridge institutions is far from efficient. There are too many participants in the investment process without any real value addition'. While there *may* be too many strategies and too many managers, and not enough comparison of performance, the authors do acknowledge that: 'The cost of managing endowment assets among institutions in Oxford & Cambridge is comparable to the costs reported by universities in the United States' (In other words, what may be too many managers managing funds of too small a size does not necessarily mean that they are being paid fees above the odds).

Before giving the authors' overall conclusions, a word on socially responsible investment/ethical investment: 'There are not many colleges in Oxford and Cambridge with a formal SRI policy in place... it can be said that institutions in Oxford & Cambridge like their counterparts in the United States do not typically consider socially responsible criteria when making their strategic asset allocation decisions.' For this reviewer at least this is an eminently sensible policy: colleges are not cancer charities where they clearly would have a conflict if they invested in tobacco whilst concluding that tobacco was a major cause of cancer; nor are they pacifist organisations like the Quakers, who again might be forgiven for not investing in guns. There is almost nothing that colleges should not be investing in on the basis of a conflict with their charitable objectives, and, given the very varying views amongst stakeholders such as current students and alumni, employees and Fellows, it is arguable that an SRI/EI would be almost impossible to determine and hence some group or other could oppose almost any and every investment decision.

By far the most sensible and practical way forward is for the Fellows to recognise their overwhelming fiduciary duty to maximise the total return of the endowment and that not hampering the fund manager by having an fuzzy SRI/EI is probably the best way forward. That is not to say, that the Governing Body should necessarily invest in the various 'vice funds' on offer in the US which have outperformed most other funds, and which are unashamedly based on investment in beer and fags, gambling and guns! As idealistic students (who should be idealistic at twenty) argue for ethical investment in front of grumpy Fellows (who should be grumpy at fifty), it is best if the latter remind themselves that they carry personal liability for breach of fiduciary duty in managing the College assets and point out to the former that the College bar still sells alcohol, that many students smoke, that the students are wearing trainers and designer clothing made in Far East sweat shops...

So, how do Acharya and Dimson sum up their careful, detailed and impressive survey of Oxbridge endowment management? 'If higher costs-adjusted returns *could* be achieved, then Colleges and [the two] Universities should seriously consider amalgamating their resources. Analysis of investment performance is perhaps the greatest weakness in the overall investment process. A centralised fund would help in assessing costs versus performance' (emphasis added by reviewer). On the whole, as discussed earlier, and in the end, the brain rules the heart for the two authors and they conclude: 'Greater effort at pooling assets and strengthening investment expertise could help in efficient management of costs and performance'. And, if centralisation is not to be the way forward, then at least there ought to be greater collaborative effort on performance measurement: 'One way to secure comprehensive performance analysis is to employ an independent performance measurement firm... Currently, performance analysis is fraught with limitations... It is essential that these institutions address these issues urgently... There are about as many formats for reporting investment performance as there are Colleges... performance should be rigorously analysed. There is no evidence to suggest such a process is in place. There could be better pooling of resources in terms of sharing information on returns, managers, costs, asset mix, and investment approach...'.

But, the authors then wobble a little, and in the 'conclusion' section of the 'Concluding Observations' chapter, they comment: 'If asset allocation decisions, based on careful assessment of individual objectives, are interpreted as being more efficient, then these institutions in behaving independently could be regarded as being on the right path. From defining investment policy to risk management, though they agree broadly on investment issues and are aware of one another's general approaches, there is little herding among them. What they forego is the scope for economies of scale, not to mention greater centralisation in decision-making.' Similarly, and again without quite the assertive firmness of the earlier comments as quoted above: 'Diversity makes for more efficient portfolios and markets. Whether such a high level of diversity in investment approaches is necessary or desirable, taking into account the overall size of endowment assets in Oxford & Cambridge, is an interesting question'. Their ultimate sentence, simply reads: 'For better or worse, it is likely that the current level of individualism revealed by these institutions will gradually disappear'.

The authors may be right. It could be that, a decade from now, one Investment Office in either Cambridge or Oxford, or OXIP, has outperformed the others, and colleges have progressively tipped their small endowments into that managed pool; or perhaps both investment offices, and OXIP, have performed equally well, and colleges spread their endowments amongst the three; or Yale may open up shop to outsiders and we all get to invest with Mr Swensen... Certainly, for colleges with less than, say, £150m of endowment, it is difficult to see how they can ever make sensible asset allocation decisions in relation to holding appropriately diversified investments in such asset classes as venture capital and private equity. They can really only achieve this through pooled vehicles such as might in due course be offered by the two new Investment Offices (and OXIP), along with some US fund of funds now beginning to sniff around the Oxbridge colleges that do much the same job for US universities. Equally certainly, it is difficult to see how any college with an endowment of less than £50m can find it cost-effective to bother with active-discretionary portfolio management, as opposed to using some sort of common investment pool or cheap index.

The really interesting question is what will those colleges with endowment of £100m-£200m be doing in ten years time: I rather suspect they will continue to be directly managing their own endowments but with chunks of them judiciously invested in at least one of the Oxford or Cambridge Investment Offices (unless both turn out to be disastrous), and with increasing use of various pooled vehicles in order to access other forms of asset allocation (and especially the so-called alternative investments of venture capital/private equity, commodities, and commercial property via property unit trusts and real estate investment trusts). As with fund managers choosing equity investments, there is the issue of not putting all the eggs in one basket and achieving a reasonable diversification, here not of stocks, but of fund managers for those endowments that are big enough to justify having two or more managers in action.

In the meanwhile, this Bursar at least would be more than willing to share investment performance with other colleges both in Oxford & Cambridge that have similar sized endowments, but the complexity of performance comparison is not really recognised by these authors in that there is the difficulty of comparing the performance of property (and especially when in the form of agricultural land that has development potential). There are no consultants who have expertise in drawing up comparisons for organisations that have the wide spread of assets typically found in Oxbridge colleges, and especially their use, for historical reasons or whatever, of property, and within that of agricultural land. In that respect, any really useful comparison mechanism, as recommended by Archarya & Dimson, will have to be very bespoke to the Oxbridge college world, and hence rather expensive to create – although it would be much easier to have a comparison mechanism for the simple bits, in the form of portfolio/fund manager performance within equities/bonds.

All in all, Archarya & Dimson are to be hugely praised for producing a really useful and solid book, full of thought-provoking and stimulating material that lays down a challenge to the professionalism of Oxbridge Bursars in working out how to move forward in ensuring that college endowments are managed rigorously, transparently, and with appropriate accountability to Fellows and students as their beneficiaries and to alumni as potential donors.

DAVID PALFREYMAN