Appraising Income Securitization in the Public Sector: the sale of student rents at Keele University

by

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Abstract

Already a mainstream source of finance in the private sector, the exchange of future income for present cash is increasingly being advocated by the international financial services industry as a means of funding capital projects in the public sector. For the promoters of such schemes, the attraction lies in comparatively secure income streams which are backed by the policy commitments of government. For the public service manager, the attraction is some easement of the pressure to deliver the maximum of performance from limited resources. The downside is the overall cost: where income streams are highly predictable, it is generally agreed that securitization is more expensive overall than borrowing. The problem posed by securitization, therefore, is that of a short-run confluence of interests between managers and promoters, a common interest which poses a threat to the public’s long-run interest in value-for-money.

In the UK the task of ensuring that managers adequately take account of this public interest falls upon such supervisory bodies as the Higher Education Funding Council for England (HEFCE) and the National Audit Office (NAO). This paper reports on an investigation by the NAO which throws some light on the extent to which these bodies are equipped for the task of ensuring value for money in securitization contracts.

The case concerned the 2000 securitization of the student rents at Keele University in which 30 years of the rents were exchanged for a capital sum of £55m. Two years later, the University suddenly announced a financial crisis which necessitated redundancies amongst academic staff. At this point the present author, together with a trade union colleague at Keele, carried out an analysis of the transaction. This concluded that it had been poor value for money, and that the loss of the securitized income had been responsible for need to reduce spending on academic salaries (Armstrong and Fletcher, 2004). The poor value of the transaction had been concealed at the decision making stage by a flawed appraisal and, once it was running, by an accounting treatment which overstated the University’s income during the early years of its operation. The paper also argued that the securitization had involved insufficient transfer of risk to justify its treatment as a sale of assets, the basis on which the loss of the securitized income had been exempted from HEFCE’s normal restrictions on the burden of loan service payments.

Since the University rejected all attempts to discuss the case, this analysis was referred to the NAO in 2003. The investigation took two years, the end product of which was a letter to the author which stated that no evidence had been found to support any of the concerns raised.

The present paper restates and expands the evidence which the NAO found insufficient to justify the foregoing concerns. On that basis, it comments on the adequacy of its investigation, and on the wider implications for the capacity of both the NAO and HEFCE to oversee the value-for-money aspect of public sector securitizations. In the course of doing so, it makes a number of suggestions relating to the evaluation of securitization transactions and their accounting treatment.
Since that investigation the University has restructured its finances once more, extending the securitization of its student rents both in duration and scope. The paper concludes an assessment of this second transaction, so far as this is possible on the basis of the available information.

Keywords

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**Introduction: Securitization in Public Sector Finance**

Securitization, in its widest sense, refers to the conversion of any asset into a marketable security. As such the process is fundamental to the capitalist economy. Nowadays, however, the term has acquired a more specific meaning, one in which the assets consist of entitlements to future income and in which their conversion into securities is accomplished by sale rather than collateralisation. Instead of assuming a determinate obligation to repay, guaranteed by a defined asset, the recipient of the cash agrees to hand over some or all of the income from the asset over an agreed period. Insofar as that future income is uncertain, the buyer assumes an element of risk and it is the presence or absence of this risk which defines whether or not the transaction may be treated as a sale of assets for financial reporting purposes.

It is normal for the cash to be advanced in a securitization to be raised through an issue of bonds by a special purpose ‘vehicle’ (SPV), a company formed for the purpose of receiving the stream of income. Because the only asset of such a company is its entitlement to the income, an issue of this kind can only raise capital at an acceptable cost if the service payments on the bonds are guaranteed by a substantial insurer. The insurer, as is the way with insurers, will make its own conditions and these will be aimed at safeguarding, so far as is possible, the stream of income on which the bond service payments depend. The contractual terms through which this is achieved must tread a fine line. If the risk is reduced too far the transaction will fail to qualify as a sale. If it is reduced insufficiently the bonds may fail to achieve an investment-grade rating.

It is particularly important that the securitized income should be insulated from any claims against the owner of the assets from which it flows, up to and including insolvency. Under UK law, this is typically accomplished by vesting the controlling interest in the SPV in a charitable trust so that the stream of income to which it is entitled has no identifiable owner. The managerial powers attaching to this trust will then need to be exercised on its behalf, and there are companies which offer the management of such SPVs as a specialised service. All of this means that securitization involves complex networks of companies and contractual relationships.
For this reason, cash obtained by the securitization of income tends to be expensive as compared to loan or equity capital.

In the private sector, this expense may be a secondary consideration. There may well be circumstances in which the immediate availability of capital is more important than its cost. These range from one-off investment opportunities to last-ditch efforts to keep ailing companies afloat. Even in normal times, securitization may be attractive as a means of raising capital for investment since it does so without increasing debt on the one hand and without increasing share capital on the other. If the investment produces income in excess of that committed to the SPV, the result will be increased earnings per share without an increase in the debt-to-equity ratio. For all of these reasons, private sector securitization has arrived – according to an interested party at any rate – as a mainstream source of finance (Moller, 2000; de Vries and Ali, 2006, 2007).

The past few years, however, have seen an increased tendency to promote the securitization of income streams either in the public sector itself, or in private companies which receive their income from public funds. An example of the former is the rents on public housing, and of the latter, the fees of private nursing homes which are underwritten by the welfare commitments of government. In both cases, the attraction for finance capital is that the income streams tend to be more secure than is typical in the private sector. Major investment banks are now hosting ‘conferences’ designed to showcase the attractions of utilising the receivables from public assets to raise capital (e.g. Euromoney, 2006)

Managers in these sectors too may find securitization attractive albeit for reasons which differ somewhat from those which apply in the private sector. Though the opportunities for positive entrepreneurship in the public services may be limited and the possibilities of insolvency remote, managers are still under pressure to extract the maximum of performance from limited resources. Particularly where the scope for borrowing is limited by policy, the possibility of exchanging future income for present cash creates new opportunities for achieving short-term results whilst passing on the cost to a future generation. Given a sufficient degree of opportunism – or of serendipitous incomprehension - the long-run costs of securitization in this situation too would be an irrelevance

The arrival of public sector securitization, then, has created the potential for a dysfunctional confluence of interests. On the one hand there is the understandable appetite for fees, commissions and service company dividends on the part of the financial services industry. On the other, there is the equally understandable desire of public service managers to extract a maximum of performance from the assets under their control. Neither of these parties, unfortunately, has a personal interest in minimising the long-run cost to the public purse.

It is at this point that one would expect the regulatory bodies to intervene, and to a certain extent they do. For higher education in England (the public service with which this paper is concerned) the Higher Education Funding Council for England (HEFCE) places limits on the size of the future obligations to which managers can commit their institutions. Institutions of higher education must obtain written permission from HEFCE before they are permitted to incur debt service payments (i.e. interest plus capital) in excess of 4% of the institution’s total income. The implication of the case
to be discussed presently, however, is that no such limits apply to the cost of capital obtained through securitization, provided the transaction can be represented as a disposal of assets. As long as the institution can show that value for money was obtained, the 4% limit does not appear to apply in such cases. Whilst this remains so, the incentive remains for managers in higher education to collaborate with financiers in order to access working capital at a cost in future income far in excess of that which would be permitted in the case of borrowing. That few have appear to have done so is, one hopes, a tribute to their good sense and commitment to the public good. Nevertheless an institutional structure which depends on this degree of probity and financial competence remains a cause for concern.

In the case of higher education in England, the next line of defence is the National Audit Office (NAO). Whilst the remit of the NAO does not extend to the audit of institutions of higher education themselves, it does have oversight of the HEFCE, and in particular, of its discharge of the duty to ensure value-for-money. For most other public bodies, the NAO itself is the front line of defence. This means that the performance of the NAO as an evaluator of schemes of income securitization is of considerable public interest and this paper reports on a test case.

It is not, one must declare at the outset, a disinterested report. Having expended considerable effort in establishing a primae facia case that the securitization in question was poor value for money, it was the author himself who referred the case to the NAO. The investigation took two years, reportedly because of difficulties in obtaining the relevant documentation from parties who are not, formally speaking, subject to the oversight of the NAO. At the end of this two years, the outcome was a personal letter to the author rather than a report. The substance of the letter was that no evidence had been found to substantiate any of the concerns which had prompted the referral. Nought out of five is a poor score, even for a piece of academic research and readers of this paper will need to make their own assessments of any statements issuing from its recipient. On the other hand, even those who have fallen short have the right to comment on the procedures which have found them wanting, just as members of the public have the right to make their own evaluation of the institutions which declare themselves to be the guardians of their interests.

**The Owengate Securitization**

Announced as an ‘innovative and cost effective’ way of re-organizing the University’s finances, the first securitization of Keele’ student rents in the year 2000 was primarily driven by a decision to refurbish the student residences. Since the University’s service payments on its existing debt was already near the HEFCE limit, borrowing more was out of the question. In these circumstances, the securitization offered not only a means of financing the refurbishments, but also the possibility of repaying a number of loans, which had been taken out at a time of relatively high interest rates. Thirty years of the rents were assigned to an SPV called Owengate Keele plc in exchange for a capital sum of £55.4m. Of this, £20.5m was used to pay off existing loans, £25.6m was placed in a fund which was to finance the refurbishment of the student residences whilst the remaining £9.3m was to be invested in what one member of the University’s Council described as ‘Well worked-out business plans demonstrating a return of 8-10%’ (Minutes, May 1999).
The transaction was launched with something of a fanfare in the specialist financial press. According to a press release by BNP Paribas, the underwriters of the bond issue which financed the purchase of the rents, the deal ‘stands to revolutionise the way UK universities fund themselves’. ‘This technique allows universities to raise substantial capital without selling assets or borrowing, both of which are difficult for them’ continued a spokesperson of the bank’s London securitisation group, ‘We have had preliminary discussions about similar deals with other universities, and I have had two or three fresh calls from universities today’ (Euroweek, 2000). To date, however, no other University has followed Keele’s example.

The period of the securitization began in January 2000. Outside of the community of University Finance Officers, it attracted little attention until November 2002, when it was suddenly announced that the University needed an annual saving of £1.5m on academic salaries in order to stem a persistent drain of cash - equivalent to about 30 jobs. The income and expenditure account for 2001/2, it transpired, showed a deficit of £3.2m compared with a surplus of £700,000 in 2000/01. £2.1m of this was attributed to a write-down of the University’s investments following the worldwide collapse of share prices. Of itself, the write-down was not thought to be the main concern; it was described as ‘purely technical’ and confined to a fund which had been ‘ring fenced’ for the refurbishment of the student residences. The real problem was the persistent cash shortfall. According to the pro Vice Chancellor charged with communicating the bad news to the academic staff, ‘experience had shown’ that the University needed to show a surplus of £1.5m on income and expenditure in order to break even on cash.

The news provoked a number of reactions – anger that the crisis seemed to have caught the University’s management flat-footed, astonishment that the University was committed to the stock market at all, let alone so heavily, and a suspicion on the part of the author that the University’s financial managers – or at least those charged with explaining the situation – did not know what they were talking about.

Because of the implications for its members’ careers, the campus trade union, Keele University Association of University Teachers (KAUT), formed a working party to investigate the financial crisis. In the absence of hard information, there followed a period of bewilderment during which the notion that there existed some connection between the student residences, the stock market and the University’s finances took on strange and fantastical forms. This sleep of reason ended with the arrival of an unmarked brown envelope through Keele’s internal mail. This turned out to contain a copy of the papers presented to the Council Meeting of May 1999 at which the securitization had been approved. Headed by the legend ‘Strictly Private and Confidential’ the top sheet declared that the University had signed a confidentiality agreement ‘with the proposed provider’, a clear indication that the papers contained useful information. Presumably the ‘proposed provider’ had insisted upon confidentiality because the contents were felt to be valuable intellectual property. However, it could also be seen as a tactic intended to restrict scrutiny of the deal to persons who were either committed to it because it was they who had suggested and appraised it, or to those who lacked the expertise to evaluate it for themselves - not that the two categories are necessarily distinct. This secrecy concerning the financial arrangements of publicly-funded institutions has important implications for their accountability in general and for the capacity of bodies such as the NAO to oversee
them in particular. Meanwhile, the new information quickly enabled the nature of the transaction to be established. It also made it clear that the University’s loss of income from the securitization of the student rents had been more than enough to account for the savings on staff salaries so far demanded.

Sure enough there was more bad news in July 2003. Although savings of £1.1 m had by then been achieved, at a net cost of 20 jobs, another £1.2m was needed, translating into an additional loss of 24 academic posts, plus 5 or so academic-related. Rationally, from the point of view of stretching a reduced resource, the staff losses were to be concentrated in those areas of weaker student demand. Unfortunately, and probably not by coincidence, these were also the areas which were producing the University’s most prestigious research. This was a particular irony since one of the rationales for the financial restructuring stated in the Council Minutes was that it would make funds available for a strengthening of the University’s research profile.

From the time of the announcement of the crisis to the present day, Keele University’s general position has been that the cuts in staffing had nothing to do with the financial restructuring, even though it would appear to be elementary that income sold in order to raise capital would no longer be available to pay staff salaries. Instead the need for the cutbacks was blamed on ‘the persistent tendency of salaries to run ahead of income’, an assertion flatly contradicted by the University’s own accounts.

Occasionally, however, there have been glimpses of another story behind the public facade. In June 2003 the Pro Vice-Chancellor for resources went briefly off-message in a meeting with KAUT with the declaration that ‘since Owengate’, it was no longer possible to ‘support’ academic salaries from student rents. The implication here is that the transaction has had the effect of diverting resources away from teaching and research and into student accommodation. That such a realignment of priorities may have been implicit from the outset is suggested by the following retrospective explanation by the University’s Director of Finance1:

> The ability to accommodate a high proportion of students on the campus is a central feature of Keele’s ethos and a key feature which makes it attractive to students. The funding body does not expect that non-core activities, including student residences, will be subsidised from public funds. It is generally the case that student rentals are set to a level which are sufficient to meet the full economic costs of the residences, including estimated life-cycle and financing costs. Against this background the University would have been unwise to allow the continued deterioration of its student accommodation, through inadequate investment and maintenance in order to subsidise its other expenditure, including academic salaries.


This seems clear enough. We are to take it as established that Keele’s campus accommodation is central both to its ‘ethos’ and to its ability to attract students. In the light of this, University had been spending too little of its student rents on the

1 The authenticity of this text as an statement of the motives behind the Owengate securitization is limited by the fact that it is not from the Director of Finance who was in post at the time of the transaction. Having vociferously championed the deal, that individual left the University shortly after it came into operation, leaving his successor in the uncomfortable position of having to defend it.
residences and too much of them on academic salaries. Putting that right, it would seem to follow, would entail the sacrifice of academic jobs. And yet, only two sentences later, the letter continues:

The University refutes [sic] the claim that there is a direct link between the Owengate transaction and academic job losses which have been sustained in recent years

Crawford ibid

How are these two statements to be reconciled? Perhaps we are to believe that the redirection of the rents from academic salaries and into the student residences through the machinery of securitization was somehow a lesser connection with the loss of jobs than would have been the case with a straightforward budgetary virement. Or perhaps we are to read the second paragraph as stressing the particularity of the Owengate transaction, the implication being that some other way would have been found of redirecting the funds in its absence. Even allowing these interpretations, the statement speaks unambiguously of ending the “subsidy” of academic salaries, suggesting that the notion of trading academic jobs for an upgrade to the student accommodation had always been present at some level of the collective unconscious of Keele’s decision-makers. Prominent amongst these were Keele’s Estates-Manager-cum-Registrar and its Director of Finance.

Here, personified, would seem to be the confluence of interests between the operational manager and the financial engineer mentioned earlier. Its workings are explicable in terms of professional deformations – the tendency, that is, of specialists to see all problems through the lenses of their own expertise. On the one hand there was the estates manager, quite properly concerned that the poor state of the student residences was preventing the University from fully exploiting one of its major competitive advantages: that of student accommodation on one of the most attractive campuses in the UK. On the other hand, there was the Director of Finance, eager to demonstrate that his function could find some way of assisting the University in the funding of its projects, in spite of the ever-present constraints on public spending. It is precisely this juxtaposition of budgetary constraint and financial entrepreneurship which gives rise to devices such as income securitization and renders their long-term costs of less account, always supposing that these have been understood in the first place. In this particular case, there was also encouragement from the funding council for the University’s venture into creative finance. HEFCE at the time possessed a ‘PFI unit’ at which Keele’s Director of Finance presented a well-received paper on the Owengate securitization shortly after its implementation. The author was even promised a set of slides by an enthusiastic person on the other end of the phone, but they never arrived.

In assessing the argument that the securitization of the student rents was needed to procure funds for the refurbishment of the residences, it is important to note that the rents were increasing rapidly at the time. On the argument that Keele’s student accommodation was cheaper than that at comparable institutions, the University had negotiated a ‘catch-up’ agreement with the students’ union whereby the rents would increase at 8.5% per annum (nominal) over the six years to July 2003. This predictable increase, in fact, was used by the designers of the securitization as a means of increasing the sum which the University would receive in exchange for the
rents (see p. 14). The extra £1.7m per annum (roughly) of the 2003 rents as compared with those of 2000 could also have been used to pay for refurbishments directly from the rents, possibly not on the same scale and not as quickly, but with no need for the securitization and no need for academic job losses.

Generally, however, the University’s management refused to be drawn into this kind of detail. Apart from one brief and not-very-informative meeting of March 2003, all attempts to discuss the securitization, and all request for further information have been met with unsupported blanket assertions that the securitization ‘has been good for Keele’. In addition, the University’s response to these enquiries has been to extend the practice of treating every document relating to the securitization as commercially confidential and to edit all Council discussions of the issue out of the minutes as ‘reserved business’. These practices too have implications for the ability of the NAO, and for that matter HEFCE, to monitor the uses of public money (c.f. Edwards, Shaoul, Stafford and Arblaster, 2004, p. 50). Meanwhile KAUT persisted with its investigation in the face of these stonewalling tactics and a summary of the results was eventually published in a paper authored by the present writer and the campus President of the union (Armstrong and Fletcher, 2004).

Since details of the securitization contract were not forthcoming from the University itself, the paper drew on a number of alternative sources. The most important of these were the accounts of the University and those of the special-purpose companies formed for the purposes of the securitization, the prospectus for the bond issue which financed the purchase of the student rents, and the University Council papers of May 1999 which contained details of the value-for-money appraisal which formed the basis on which HEFCE allowed the transaction to go ahead. The main conclusions of Armstrong and Fletcher (2004) were as follows:

- In the sense that the sums of money involved involved were similar, the loss of the securitized income had indeed been responsible for the need cut back on staff salaries.
- The financial restructuring was poor value for money in the sense that none of the uses to which the capital was put would cover its cost.
- The appraisal which formed the basis of HEFCE’s approval had contained errors without which the securitization would not have appeared superior to other options, including that of doing nothing.
- The securitization deal as implemented was markedly less favourable to the University than the one originally appraised and for which approval had been obtained.
- As part of the deal, the University was contractually bound to maintain its refurbishment fund at 90% or more of the present value of an independently-determined future schedule of expenditures. After the first three years, the discount rate used to determine that present value was to be based on the past three years’ growth of the fund. This meant that the stock market collapse of 2001 had increased the target level of the fund at the very moment of the losses, thus exposing the folly of investing a fund subject to such conditions in risk-bearing securities. The University owed several millions of pounds to its
own refurbishment fund and was trying to negotiate some easement of its obligations.

- The accounting treatment of the securitization recommended and audited by KPMG overstated the University’s income in the early years of the contract by several millions of pounds. This was because the debt representing the University’s obligation to pay over the rents in exchange for the cash which it had received was being depreciated evenly over the term of the securitization. In reality the deal was so structured that the University was actually borrowing more money from the SPV during the early years.

At this stage, it was becoming apparent that the public interest issue was rather wider than the situation at Keele. As well as the designs on the public sector expressed by the international financial services industry in general, the particular individuals who had devised the Owengate scheme were promoting it as a desirable means of exploiting the “slumbering assets” held by other institutions of higher education (Pinnock 2004). Because it seemed important that these other institutions should be made aware of the potential pitfalls, the author sent the analysis of the securitization reported in Armstrong and Fletcher (2004) to the NAO in September 2003.

**Issues in the Accessibility of Information**

The NAO investigation took two years largely because of delays in obtaining the relevant documentation from parties which are not, formally speaking, subject to its oversight. These included the University itself, despite its heavy reliance on public funds. The University, nevertheless, was stated to have ‘co-operated fully’ although it had been unable to retrieve some of the requested information ‘owing to the passage of time, and [because] some of the people involved in the transaction had since left.’ This last is certainly true: since questions were raised over the securitization there has been an unusual turnover at senior levels of Keele University’s Finance Office. It is extraordinary, however, that the NAO, a body charged with the oversight of decisions involving public money, should accept the passage of only four years and a turnover of one or two senior staff as excuses for the absence of appropriate records.

In particular, and despite the fullness of its co-operation, it took the University nearly 18 months to hand over a copy of the securitization contract(s?), the obvious starting-point for any authoritative appraisal. A possible reason for this particular element of delay was the aforementioned requirement that the financial model around which the transaction was designed should be treated as confidential. The pressure to agree such conditions, however, is unlikely to be unique to the Keele case, and it has clear implication for the ability of the NAO to evaluate these transactions after the event. In fact, the delays from causes of this kind, and the dependence on voluntary disclosure may be the most important lessons to be learnt from the Keele securitization. They suggest that the NAO may not presently possess the powers needed to monitor transactions in which the private financial services are so heavily involved. Similar problems with Private Finance Initiative® (PFI) projects have prompted the Public

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2 Initiated by the Conservative government of John Major, the UK’s Private Finance Initiative is a means of involving private capital in public projects so as to contain their demands for capital within
Accounts Committee to suggest that the Treasury ought to require spending departments to include a clause guaranteeing access for the NAO (Stokdyk, 1999).

The outcome of the NAO investigation was not a formal report but a personal letter addressed to the author (Appendix 1). The tone was courtesy itself. The author was thanked for his concern and the letter spoke of ‘useful findings’ albeit in non-specific terms. The body of the text, however, was less congratulatory. It was declared at the outset that the investigation had found ‘no evidence to support your specific concerns’ (i.e. some of those bullet-pointed above). Whilst this is not the same thing as a positive finding that those concerns were unwarranted, it is nevertheless a statement which casts a considerable pall of discouragement. It was only on re-reading the letter for what was left unsaid and for what was missing from the evidential base of its conclusions that the suspicion began to form that there were lessons to be learnt from the NAO investigation itself.

In one sense, of course, a letter from the NAO must be regarded as authoritative – not perhaps as a statement of truth as it was understood in the old testaments of social science, but certainly as a statement of that newer version of it to be found intricated in the exercise of power. In the sense that no power is to be exercised in the case of the Owengate securitization, there is indeed no truth behind the concerns which led to the inquiry. The episode is closed. Yet that very closure prompts its own tremor of unease; a suspicion that the attractions of moving on may themselves have inflected the enquiry. Compared to many of the cases investigated by the NAO, the Owengate securitization may well have seemed small beer. Compared to the culpabilities and ineptitudes unearthed by some of its other investigations any derelictions on the part of those involved in the case must have appeared nugatory. On top of that, it may have seemed that there was little to be gained from reviewing decisions taken over four years ago – over six by time the investigation was concluded – decisions which were now set in the concrete of unbreakable contracts. For all these reasons, it is possible that the Keele investigation may not have seen the NAO at its most incisive. One is fortified in these reflections by the mixed reception of other work by the NAO in the general area of public-private partnerships. A report into a private Finance Initiative (PFI) deal was criticised by the Oxford Consultancy group for its ‘absence of primary textual analysis’ and for failures ‘in its evaluations of arguments provided by other parties’ (Grant 2005). The NAO has also been criticised by no less a body than the Public Accounts Committee of the House of Commons for its reliance on an interested party for the financial evaluation of a PFI scheme (Hawkes, 2005).

**Investing for Growth: Keele’s Refurbishment Fund meets the Dotcom bubble**

The letter contained some positive news. One of the concerns expressed to the NAO was that the University owed its own refurbishment fund several million pounds due to public expenditure limits. The cost of doing so is typical spread over several decades, during which the private sector providers are paid from public funds for managing and servicing the projects. The quality of these services is frequently a matter of controversy, as is the value-for-money of such transactions. Inasmuch as both have the effect of deferring the costs of current public consumption, there are parallels between PFI contracts and the securitization reported in this paper.
to the combined effect of losses in the fund and the manner in which its target value was calculated.

The intention behind the fund – indeed the driving rationale for the whole transaction according to the University’s Estates Manager – was that it would pay for the refurbishment of the student residences. To this end, it was to be invested so that its growth would enable it to meet a future schedule of expenses determined by consultants working for the insurer of the bond issue, Financial Security Assurance (UK) Ltd (FSA). Whilst the University was obliged to meet these costs, it could only draw upon the fund in order to do so, provided its value was above 90% of the discounted value of the future refurbishment expenses. If it fell below this level in any year, a lease rental payments normally paid to the University by Owengate would be paid directly into the fund instead, and if the deficit persisted in spite of this measure, the University would have to top up the fund using other monies. The sting in these provisions lay in the way the discount rate was determined.

Initially, and for the first three years of the contract, it was calculated from a number of public financial indicators, the starting value of which was about 4.9%. In fact the £25.6m initially placed in the fund was a future schedule of refurbishment expenditure totalling £48.3m discounted at that rate. This meant that the fund would be sufficient to meet the expenditures as they fell due, provided it grew at 4.9%. Anything over this would be a surplus, but any shortfall would have to be made up from other sources.

After the first three years of the fund’s operation, however, the agreement stipulated a change in the procedure for determining the discount rate. From that point onwards, it was to be the lower of the rate determined as above and the average of the previous three years’ growth. From the point of view of FSA, the insurer of the bond service payments, this made sense as a way of ensuring that the University would assume the risks of its own investment strategy - the risk that the fund would fail to achieve sufficient growth to meet the refurbishment expenditures.

That investment strategy, one recommended by the company to which the University had entrusted the management of the fund, involved placing about one third of it in equities. This, remember, was in the year 2000, shortly before the collapse of the Dotcom bubble. By the time of the announcement of the University’s financial crisis in 2003 the fund had lost £2.1m, as already recounted. As if in mitigation of the responsibility for this, the NAO letter points out that the adopted investment strategy was quite conventional amongst the financial community at the time. This is perfectly true, but it is an assessment which fails to allow for the fact that this was a fund which simply could not afford to lose money. This is because any losses would trigger a reduction of the discount rate and a consequent increase in the target value of the fund at the very moment of the losses. In a (nearly) worst-case scenario, zero growth over the first three years of the fund’s operation would have meant a zero discount rate so that (the remainder of) the initial £25.6m would have to be topped up to a wholly unfeasible (remainder of) £48.3m. It was this situation, or something approximating to

\[^3\] It may not be clear how the growth of a fund subject to continual withdrawals might be measured. At the beginning of each financial year, the amount committed to refurbishment works is transferred from fixed assets to current assets in the University’s accounts. The relevant growth for the purpose of calculating the discount is that of the amount remaining in fixed assets.
it, which prompted the University to open negotiations with Financial Security Assurance (UK) Ltd. early in 2003, with a view to resolving the problem.

The NAO letter made it clear – by implication at any rate – that these negotiations had made some headway. It quotes a shortfall of only £800,000 as of March 2004. Whilst this is still a substantial sum for an organization with an annual turnover of about £60m, and still well over the allowable 10% shortfall, it also suggests that the insurer has agreed a considerable relaxation of the terms of the contract in order to save the University from the catastrophic budgetary virements which would otherwise have been necessary. For the staff and students of Keele University, this is good news indeed, and so is the news that the fund is now following a low-risk strategy. It does not, however, excuse the initial irresponsibility of signing a contract which made it imperative to avoid risk, and then investing part of the fund in risk-bearing securities.

A low-risk strategy, meanwhile, creates problems of its own. The fund is now invested in a Guaranteed Investment Contract (GIC), at a rate of return which will certainly be lower than that on the bonds from which the finance was originally raised. The result is that the University is paying out more interest on the capital in the fund – through its student rents and through the medium of Owengate - than it is receiving. Apart from the irony involved, this lower return will have reduced the discount rate used to calculate the target value of the fund and so have required additional monies to be committed to it.

The Value-for-Money Issue

The news of the refurbishment fund occurs some way into the letter. As is proper for a body which defines its mission as ‘report[ing] to Parliament on the value for money with which [public] bodies have spent public money’, the letter actually begins by acknowledging that this was the over-riding concern behind the referral of the case. It then proceeds to outline the University’s rationale for the securitization. However, it does not do so in the form of a value for money argument as one might expect, but in the form of a list of the uses to which the University intended to put the cash – the redemption of existing debt, the refurbishment of the student residences, and capital investment. This shopping-list is presented as if it were some kind of answer to the concern for value. Self-evidently it is not. The question at issue, and the one dealt with by Armstrong and Fletcher (2004) is whether or not these uses of the capital sum covered the cost at which it was obtained, the conclusion being that none of them came anywhere near doing so. The only way of evaluating that conclusion would have been to carry out an independent calculation of the cost in foregone rental income of the capital obtained by the securitization and then compare it with the value of the benefits obtained. The NAO letter mentions no such calculation and quotes no figures for the cost of the capital which the University obtained.

The University’s Cost of Capital

The calculation of the minimum cost of the capital obtained by the securitization is tedious but not difficult. The basic constraint is that the net cash flow from the University to Owengate must cover the service payments on the Owengate bonds plus Owengate’s own expenses. The service payments are defined by a six-monthly schedule set out in the Bond Prospectus whilst Owengate’s expenses have been taken
to be £100,000 per annum, a conservative assumption in the light of the actual amounts for the first five years of the deal (Fig 2, p. 19). The cash flows from the University to Owengate consist of the student rents plus an annual license fee of about £0.7m (indexed at RPI all-items) for the right to the income from out-of-term lets. From this must be deducted a lease rental of about £2.8m (also indexed) paid back to the University by Owengate.

A major complication arises from the fact that the student rents for the first few years of the deal were insufficient even to cover the interest on the bonds. This came about because the design of the securitization took advantage of a ‘catch up’ agreement between the students’ union and the University whereby the rents would increase at 8.5% per annum in monetary terms until the end of academic year 2003-4. This meant that the value of the bond issue could be increased to the maximum which could be serviced by the fully ‘caught up’ rents provided there were some means of supplementing the rents whilst they were still insufficient. This was achieved by holding back £5.6m of the sum raised from the bond issue in a ‘Fixed Drawdown Account’ held by Owengate Keele plc. During the earlier years of the securitization, the net cash flows from the University were being supplemented from this account so as to meet the bond service payments. It is the state of the Fixed Drawdown Account account which determines the minimum aggregate annual increase in the student rents following the expiry of the ‘catch-up’ agreement. Its balance must not fall below zero.

With the foregoing initial values and constraints, the minimum annual increase in the student rents after the expiry of the catch-up agreement turns out to be 2.8% with the Fixed Drawdown Account falling to zero in 2020. The most generous assumption to the securitization thereafter is that the rents will increase with inflation and this has been taken at the current UK government target of 2.5%.

With the minimum net cash flows from the University to Owengate now defined, the minimum equivalent rate of interest on the £55.4m obtained by the University turns out to be 8%. A fall-out from this calculation is the manner in which the University’s effective debt changes over time:

4 8.5% was the agreed figure. The actual annual increase in the rents was about 9.4%, possibly justified by an upgrading of some of the rooms.

5 In fact a range of values for inflation was investigated. Not surprisingly, given that the Owengate bonds are at a fixed rate of interest, the University’s minimum real cost of capital declines monotonically as inflation increases. At rates of inflation above 3%, however, the achievement of this minimum depends on below-inflation increases in the student rents. If this possibility is discarded as unrealistic, the minimum lifetime cost of capital occurs precisely at 3% inflation and computes to £2 per £1 received as against £2.17 per £1 at 2.5% inflation in the main text.
The trendline in Fig. 1 was the occasion of considerable head-scratching on the part of the author until it was realised that the University was indeed borrowing more money during the early years of the securitization. The source is Owengate’s Fixed Drawdown Account from which the rents are being supplemented in order to meet the bond service payments. As will appear presently, this has consequences for the representation of the securitization in the University’s accounts.

Meanwhile, the University’s 8% equivalent rate of interest compares with 7.5% for minimum investment grade (BBB) bonds in the UK in the year 2000. This means that the University was effectively obtaining its capital at a junk bond rate. Whilst this has a discouraging ring to it, value for money would still have been achieved had the funds had been placed in investments which yielded a returns in excess of 8% over the thirty years. The real problem with the Owengate securitization is not so much the equivalent rate of interest but the very long period over which the effective debt is outstanding, a factor which is compounded by the concentration of the capital repayments late in the period. For the first six years, in fact, the service payments on the Owengate bonds were interest-only, with the repayments of capital gathering pace only slowly thereafter. The net result was that the half-life of the bonds themselves was no less than 22.8 years (Euroweek, 2000), a figure which feeds through to the 26.1 year half-life of the University’s equivalent loan.

This being the case, the question of value for money depends not so much on the effective rate of interest at which the finance was obtained but on a comparison of the whole-life return on the University’s disbursals of the capital with its lifetime cost.
That cost, discounted to year 2000 prices and assuming inflation at the government’s
target of 2.5%, was £2.17 paid per £1 received.

The NAO letter did not comment on this figure, but it is one which simply cannot be
much in error since by far the greater part of it follows from the most obvious surface
features of the deal: that the rents foregone in exchange for the £55.4m received by
the University must cover the payments on a £69.4m issue of 30-year bonds at 6.67%.

That much established, there is room for some debate on who will bear the cost. If the
view is taken that the student rents would have increased at the rate required by the
securitization in any case, it is the University. If, on the other hand, it is felt that the
rents would have been lower in the absence of the securitization, that would imply
that part of the cost will be born by the students, though the University managers, one
hopes, would not much like the thought. Taking the larger view, this issue of
distribution may not matter much, since the costs of the securitization could be
considered to be born by the Keele community as a whole.

Towards the end of the NAO letter, the matter of value for money is picked up again,
but this time in a discussion of where the responsibility lies:

The financial memorandum between the HEFCE and institutions sets out that it
is the responsibility of institutions to ensure best value for money. It was clear
from our meeting with officials at HEFCE and the documents we reviewed that
the University informed HEFCE of the deal at an early stage and that the
University complied with the terms of the financial memorandum. We consider
that HEFCE was involved in the deal at an appropriate level and met its
obligations in its role as supervisor of public funding.

Considered as a play of concepts, this is a passage which executes a deftly-executed
segue in which an obligation of substance (to ensure value) fade-dissolves into an
observation of procedure (to inform and consult). At the same time, the tone hardens
up into that of the British Officer Class. Large-sounding assurances are pressed upon
the reader concerning the competence and probity of all concerned. Once that is
established, the evidential basis of these assurances can quite properly be suppressed,
since to require anything of the kind would be an impertinence.

An impertinence, then: presumably we are to take it that the University’s compliance
with the terms of the financial memorandum means that it did ensure best value for
money. Presumably too, HEFCE’s proper discharged of its obligations, means that it
ensured that the University did so. Let us see.

**The Repayment of Existing Debt**

The most straightforwardly quantifiable ‘benefit’ from the financial restructuring was
the savings made by paying-off some of the University’s loans, as these stood in
1999. In the NAO letter, these debts are quantified at £21m ‘at interest rates fixed
around 13%’.

In fact there were a number of loans, and though the interest rate on one or more of
them may indeed have been 13%, the average rate was much lower. The prime source
for the figures used by Armstrong and Fletcher (2004) was the appraisal document
presented to the University Council in May 1999 (Appendix 2). In that document the
cost of redeeming the loans is stated as £21.5m (as against the £20.5m reported in Euroweek, 2000). Also shown, however, is the schedule of interest and capital repayments due on these loans. The annual repayments of capital total £18.3m, not £21.5m (or £21m [NAO letter], or £20.5m [Euroweek]), a figure which also agrees with that for the repayment of long-term debt in the University’s accounts for 1999-2000. This implies that £3.2m (or £2.7m, or £2.2m) of the £21.5m cost of paying off the loans was consumed in fees and penalties. That some such payments were indeed involved is confirmed by a reference to the ‘break costs’ of paying off the loans later in the NAO letter.

From the figures presented in the appraisal, it is easy to compute the running total of outstanding debt and thence, from the annual interest charge, to derive the average rate of interest on the loans at any stage. Far from being 13%, this turns out to be fairly consistent at about 9.1%. The tables also show that the collective unexpired half-life of the loans was a little over 9 years. It was these loans which were to be paid off using capital obtained at an effective rate of 8% from a bond issue with a half-life of no less than 22.8 years (FSA Website). Not surprisingly the redemption of the loans turns out to have been poor value for money. Armstrong and Fletcher (2004) calculated that the inflation-adjusted saving from the redemption of the loans would be £29.4m whereas the inflation-adjusted cost of doing so would be £43.8m (assuming the amount to be redeemed was £20.5m, the lower of the two quoted figures). In fact this aspect of Keele’s financial restructuring closely resembles those loan consolidation deals advertised to the general public, deals in which existing debts are consolidated into a single loan at a lower rate of interest but with a greatly extended repayment period.

Apart from the initial appraisal, there was other publicly available information from which the NAO could have checked the rate of interest on the redeemed loans. For the financial year to 1/08/99 the University’s accounts show the total interest paid by the University on its long-term loans as £2.2m on £23.9m, an average rate of 9.2%. This leaves the NAO’s interviews with the University’s officers as the likely source of the figure of ‘around 13%’. It is a figure may not have been quite so casually offered as the phrasing suggests: at an interest rate of 13% and at the actual unexpired half-life of 9 years, the redemption of the debt would – nearly – have been worthwhile. The difference is far from trivial. It is that between value-for-money and not value-for-money - to the tune of £14.4m (the £43.8m cost minus the £29.4m saving).

**Returns on the Refurbishment Fund**

£25.6m of the £55.4m cash premium received by the University was invested in the fund which was to pay for the refurbishment of the student residences. Though the NAO mentions this fund, no attempt was made to determine whether or not the returns on it will cover the costs at which the capital was obtained. In potential, the returns on this fund could take two forms. Firstly there might be an investment return from the fund in excess of what is needed to pay for the refurbishments, in which case it could make its own contribution to the University’s income. Secondly, value is obtained from the fund in the form of a betterment of the student residences.
Investment Returns

There is no doubt that the University’s financial managers fully expected the refurbishment fund to make an independent contribution to the University’s income. In the financial year 2000-2001, in fact, they believed they had obtained one. In both the Vice-Chancellor’s and Treasurer’s reports, much was made of a 6% return on the fund in the accounts for that year, the implication being that the whole of this amount had been an addition to the University’s income. It was not of course. The discount rate applied to future refurbishment expenditures in order to set the required value of the fund was still 4.9% at that time, and this meant that the fund had to grow at that rate in order simply to meet its commitments. Its contribution to the University’s income, therefore, was a modest 1.1% - roughly the salaries of four professors or one Vice-Chancellor. The fate which overtook the refurbishment fund during the stock market crash of 2002 has already been outlined, and from then onwards the fund has become a considerable liability.

By 2005, so the NAO letter informs us, that liability had reduced to £800,000, an amount which would still take about three years to pay off at an excess return over the discount rate of 1.1%. By then, however, the fund was following a low-risk investment strategy with correspondingly lower returns. This being the case it is safe to assume that the refurbishment fund will make no contribution to the rest of the University’s finances.

The Betterment of the Student Residences

That leaves the refurbishments themselves as the only significant return on the fund. As already explained, the £25.6m invested by the University was the present value in the year 2000 of a schedule of future refurbishment expenditures discounted by an expected nominal return on the fund of 4.9%. As has been amply demonstrated by the subsequent shortfalls in the fund, this return has not been achieved, but even if it had, value for money would not have been obtained. This is because the cost of the University’s £25.6m will be spread over 30 years at an effective rate of interest of 8% nominal. Discounted for inflation to year 2000 prices the cost of the £25.6m calculates at £55.6m (£25.6m x £2.17 per £1). From the Owengate securitization, then, the University obtains refurbishment works to a year 2000 value of £25.6m at a year 2000 cost of £55.6m

‘Well worked-out Business Plans’

The £9.3m remaining after the repayment of existing loans and setting up the refurbishment fund was taken to be available for discretionary capital spending. The Council Minute of May 1999 which spoke of ‘Well worked-out business plans demonstrating a return of 8-10%’ at least demonstrated an awareness of what would be required in order to achieve value for money. In the event the University was rushed into a rapid spend of the capital by a requirement on the part of HEFCE that any monies obtained through a sale of assets must be committed within 3 years or surrendered to HEFCE itself (HEFCE, 1997, paras 48, 50).

It seems to have occurred to no-one that there was an obvious inconsistency in HEFCE’s application of this rule to the Owengate securitization; if it applied to the residual £9.3m why did it not also apply to the £25.6 in the refurbishment fund? Why
was the University allowed to invest the fund and rely on its growth to fund expenditures which lay as much as 30 years in the future?

Given the chronic under-funding of UK Higher education, there was certainly no shortage of urgent claims on the residual £9.3m. The University’s records show that it has been consumed in necessary improvements to its infrastructure such as disabled access for certain buildings and air conditioning for specialized laboratories.

Since there is no identifiable return on expenditures of this kind, the only way of estimating one is to suppose that, since they were essential, such works would have had to be financed by borrowing in the absence of the securitization. Whilst the rate of interest on this borrowing might have exceeded the effective 8% cost of the securitization capital – though not by much - it is inconceivable that loans for such purposes would have been taken out over 30 years, and with the capital repayments end-loaded to boot. In other words, it is extremely unlikely that they would have cost an inflation-adjusted total of £2.17 per £1 borrowed. From this it follows that the return on the residual £9.3m will fail to cover its total cost, though in the absence of a concretized borrowing alternative, the shortfall is difficult to quantify.

Overall, the conclusion of this section is that none of the uses to which the University put the money from the securitization comes anywhere near covering its cost.

**The Running Costs of Securitization**

**Fees and Expenses**

If the Owengate securitization is typical, securitization may involve considerable running expenses as well as heavy set-up costs. Around 15 companies (Appendices 4 and 5) are required operate the structure, many of which have ongoing contracts for management and advisory services. In the face of such complexity, the advice of a recent *Guardian Money* article seems apposite: ‘Before embarking on any financial scheme, always ask yourself how many mouths it is going to feed.’ (Collinson, 2006). In total, the accounts of Owengate Keele plc show the following amounts for administrative expenses⁶:

**Fig. 2 Administrative Expenses of Owengate Keele plc by Year**

<table>
<thead>
<tr>
<th>Year to July 31st</th>
<th>Administrative Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>£103,194</td>
</tr>
<tr>
<td>2002</td>
<td>£132,739</td>
</tr>
</tbody>
</table>

⁶ What the accounts for 2000-2001 (for example) actually show is ‘Administrative Expenses’ of £1,950,270, an enormous figure which includes the linear depreciation over thirty years of an asset, initially equal to the £55.4m, which represents the University’s obligation to had over the rents to Owengate. The figures quoted for Owengate’s expenses in the main text are the result of subtracting this annual depreciation of £1,847,076.
<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>£86,328</td>
</tr>
<tr>
<td>2004</td>
<td>£285,901</td>
</tr>
<tr>
<td>2005</td>
<td>£390,916</td>
</tr>
</tbody>
</table>

Sums of this magnitude are a significant portion of the costs of the securitization: Even at £100,000 per annum, these expenses will have consumed rather more than £3m by 2030, at year 2000 prices, all of which will have to be paid for by Keele’s student rents.

Quite where most of this money goes is something of a mystery, and one which largely defeated Armstrong (2007). The only sums itemised in the accounts of Owengate Keele plc and its holding company are the fees charged by the auditors and SPV Management Ltd., the company which provides of management services on behalf of the nominal owner of the student rents, the Millsdale Charitable Trust\(^7\). In 2005, the auditors were paid £4,470 and SPV Management Ltd £19,789, leaving £366,657 not accounted for, out of the total administrative expense of £390,916.

Part of the answer, though how much is unclear, lies in a network of private limited companies associated with Owengate. These are owned, staffed and controlled by the individuals who devised and facilitated the securitization, Mr Blonde, Mr Pink and their respective wives. The flavour of such information as can be gleaned from the accounts of these companies may conveyed by the following:

Owengate Structured Finance Ltd. is a company which plays a pivotal role in the determination of Keele’s student rents. Each year it receives a proposal from the University on next year’s rents. It must then make its own recommendation to Owengate Keele plc’s controlling creditor, Financial Security Assurance (U.K.) Ltd. This recommendation must be sufficient to meet Owengate’s outgoings and maintain its reserve accounts during the coming year, as demonstrated by a financial model. This procedure, and possibly other ‘management services’, are the subject of a contract between Owengate Structured Finance Ltd and Owengate Keele (Holdings) Ltd., which, according to a note to the accounts, was ‘drawn up on an arm’s length basis and at full market value’. The annual fee received by Owengate Structured Finance Ltd for its services is not disclosed but since the determination of the rents is at the core of the securitization it is reasonable to suppose that the payments will continue until 2030.

Owengate Structured Finance Ltd was originally owned, controlled, and staffed by Mr and Mrs Blonde, but sometime during the financial year 2000-1, Mrs Blonde decamped to Australia and her share was assigned to Mr Pink. The company is now jointly owned and controlled by Mr Blonde and Mr Pink, though Mr Blonde too now lives in Australia. During the financial year 2001-2, Mr. Pink received £4,038 (2001: £4,585) and Mr. Blonde £4,039 (2001: £4,436) for their services as directors of Owengate Structured Finance Ltd. In addition £41,227 (2001: £50,250) was paid in

\(^7\) Appropriately enough, this trust appears to have been named for the house at which Mr and Mrs Blonde were living at the time of the Owengate securitization.
respect of ‘management costs’ to Structured Finance Product Marketing Ltd, another company owned by Mr and Mrs Blonde.

In 2000, Structured Finance Product Marketing Ltd. had featured in the University’s press release on the Owengate Securitization as one of two partners which had been awarded the contract to raise the finance. It ceased to trade in June 2002, following Mr Blonde’s move to Australia. It paid a final dividend of £130,207 (2001 £102,250) to its owners in addition to £39,685 credited to their current accounts.

Such are the tantalising glimpses of cash as it flows, now as management fees, now as expenses, from one Owengate company to another before it disappears from view entirely.

The NAO letter took considerable umbrage at what it took to be an implication behind the presentation of this information: ‘that advisers to the University were enriching themselves at the University’s expense.’ The objection seems to have been to the use of the term ‘financial consultants’ to refer to Mr Blonde and Mr Pink. These individuals, the letter admonished, were not advisors; their role was to provide finance and to manage the business of Owengate and ‘for this service they are paid a fee based on the market rate for an independent party to provide these services.’

That sounds confident enough, but the lack of specificity inclines one to doubt that it is based on anything more than the descriptors ‘arm’s length’ and ‘market value’ applied to the relevant transactions in the accounts of Owengate Keele (Holdings) Ltd. As has been observed of the networks involved in Private Finance Initiative contracts, the rudimentary reports required of private limited companies make it impossible to match payments with the services for which they are supposed to be made (Edwards, Shaoul, Stafford, and Arblaster, 2004, p. 216). Without more transparency on these matters it is clearly impossible for bodies such as HEFCE and the NAO to discharge their duty of ensuring value-for money.

Since the NAO investigation, events have moved on, and it so happens that they have moved so as to shed more light on the dividends, fees and expenses which have flowed from the Owengate securitization. A second restructuring of the University’s finances, also engineered by Mr Blonde and Mr Pink, has involved the termination of some of arrangements in which they had an interest and the amounts which have been paid in compensation reveal something of the flows of cash which were taking place (page 41).

**Dividends and Distributions**

There is also the question of any distributions which may be made by Owengate itself. The bond prospectus contains a declaration that ‘it is not intended that Owengate will accumulate cash in excess of that needed to maintain its reserve accounts’. It is not clear whether this means that increases in the student rents will be kept to the minimum or whether any excess cash which accrues in consequence of greater increases will be paid out to other parties. Insofar as the latter is the case, the prospectus also states that 75% of any excess will be gifted to the Millslade charitable trust, the holder all of the voting shares in Owengate Keele (Holdings) Ltd. Since the holding company holds all but one of the shares in Owengate Keele plc, it will therefore receive the remaining 25% of any excess cash. The holding company, in
turn, has four shareholders: the University, the Millslade charitable trust, Mr Blonde and Mr Pink. Respectively, these shareholders are entitled to 9.5%, 50.5% and two shares of 20% each of any distribution\(^8\). How much will be involved depends entirely on the extent to which the student rents exceed the amount needed to pay the Owengate bondholders and the expenses of the securitization structure.

This last point, the fact that any ‘profits’ of Owengate Keele plc will consist entirely of an excess of student rents over the amount needed to pay for the company’s outgoings, seems to have eluded some of the University officials involved. In apparent innocence of its real purpose (to insulate the flow of rents from claims against Owengate and the University), one of them expended much labour in devising the constitution of the Millslade trust. It is to conduct medical research, specifically into health problems in the Stoke-on-Trent area, and its constitution has been drafted so as to favour researchers from the University itself. The good intentions are as sad as the naivety.

**Biases in the Initial Appraisal**

The fact that the Owengate securitization is turning out to be poor value for money places an obvious question mark against the decision to go ahead with it. That decision was taken at a meeting of the University Council in May 1999, at which an important influence was an appraisal prepared by the University’s Finance Department. This purported to show that the Owengate option represented best value-of-money as compared to a rival securitization proposal, straightforward borrowing and an ‘as is’ option. As is conventional in the evaluation of PFI proposals (Shaoul, 2005), the method used was discounted cash flow (DCF). The original of this appraisal is reproduced in Appendix 2.

In the following paragraphs it will be argued that the appraisal was biased in favour of the Owengate securitization both in its choice of comparator scenarios and in respect of errors of principle in its computations. How far those biases were coincidental is impossible to say. The rival securitization (‘S&H’) will not be included in this argument, since the proposal was never seriously entertained by the Council. It was disqualified at the outset by a KPMG consultant’s opinion, also presented at the meeting, to the effect that it failed to transfer sufficient risk to the purchaser of the rents and would therefore fall foul of HEFCE’s restrictions on borrowing.

**Biases in the Comparator Scenarios**

The appraisals were carried out on the assumption was that the student rents would raise £65m (less set-up costs) if they were committed over 25 years. On that basis, the Owengate securitization was compared with a loan of £65m over 25 years at 7% nominal, the capital to be repaid in equal instalments, and an ‘as is’ option. Concerning the loan comparator, it seems to have been assumed without explicit justification that the appropriate loan to compare with the securitization was also for £65m and also over 25 years. This need not be so. For a given stream of income, the

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\(^8\) This is no longer the situation. Following a re-organization and renaming of Owengate which took place in 2006 the shares formerly held by Mr Blonde and Mr Pink have been held by the trustee of the Millslade Charitable Trust.
amount obtained by its securitization and the period over which the income is committed are mutually determining. Quite obviously, this is not the case for a loan. This being the case, it should have been considered whether the University actually needed the full £65m for the full 25 years. If it did not, a smaller, shorter and therefore cheaper loan might have sufficed. It is clear, for example that the University had no firm plans for the full £65m. Instead the justification for the securitization mentioned only the establishment of the refurbishment fund and the repayment of existing loans, and for these purposes a smaller loan of £47.1m would have been sufficient (£25.6m refurbishment plus £21.5m loan repayment), and this might also have been paid off more quickly than the full £65m. Nor was it considered that there might have been more cost-effective ways of funding the refurbishments than borrowing money and investing it for growth. Nor, as we have already seen, was the repayment of the existing loans with money borrowed over a much longer period value for money over the long run. Although these loans were at a higher rate of interest than 7%, they had far less than 25 years to run. If the amount to be spent in these repayments had been excluded, the comparator loan need only have been £25.6m. Every one of these alternative loan scenarios would have presented a more serious challenge to the Owengate securitization than the one actually chosen.

Similar remarks apply to the ‘as is’ scenario. In fact the one presented in Appendix 2 is not quite the ‘do nothing’ benchmark conventionally included in a PFI appraisal. Notice that all of the appraisals in Appendix 2 assume the same intermittent schedule of refurbishment expenditures, concluding with a lump-sum investment of £18m in the final year (line 1.1). Whilst this could be defended as evaluating the transactions on a level playing-field, it also means that ‘as is’ is actually a scenario in which the refurbishments commence immediately and are financed by additional borrowing which maximises at about £4.5m in year 5 (‘Loan Interest’ in line 1.4 of the ‘as is’ scenario). Whilst this might be defended on the grounds that a prompt start to the refurbishments was absolutely essential, it could also be argued that the ‘as is’ option as presented was one handicapped by the additional borrowing. In fact an alternative ‘as is’ option which postpones the assumed schedule of refurbishment expenditures for only two years yields a rather important result. Not only would it have eliminated the additional £4.5m of debt; it would have enabled the student residences to be refurbished on the assumed schedule with no need for financial restructuring of any kind and none of the attendant costs. Paying for refurbishments on this scale direct from the student rents, however, would still have required some reduction in the staff budget, the amount depending on the start date of the expenditure.

**Struggles with Discounted Cash Flow**

One of the learning outcomes routinely achieved by first year students of management accounting is an understanding of why future inwards flows of cash are discounted in a calculation of their present values. It is a level of competence which seems to have been beyond the University’s Finance Department, those officers of HEFCE responsible for the oversight of the appraisal and the investigator from the NAO, who could find no errors in it. This section of the paper explores this and a second error of principle, both of which biased the appraisal in favour of the Owengate option.

Consider first the Owengate appraisal of Appendix 2. The column for year zero shows how the £65m obtained in exchange for the student rents was to be disbursed. Line 1.2
show set-up costs of £0.6m (a gross under-estimate as it later transpired). Line 1.3 is the £21.5m cost of repaying existing loans whilst the rest of the cash, initially £42.9m, as shown on the bottom line, was either invested in the refurbishment fund (£25.6m) or considered to be available for the University’s ‘well worked-out business plans’ (£17.3m). The proxy for the returns on either investment was a 5% nominal return shown as ‘Interest’ in line 2.2. From this inward flow of cash is deducted the spending on the refurbishment of the student residences (line 1.1), leaving a net inwards cash flow (bottom line) to be added to the investment funds for the following period (not shown). Once the inward flows of cash on the bottom line had been computed for the whole of the 25 years, they were discounted at 7% (a figure labelled as TDR for ‘Treasury Discount Rate’), and totalled to yield a net present value (NPV) of £51.1m. Similar procedures carried out on the other scenarios yielded markedly inferior NPVs of £21.7m for ‘as is’, £34.8m for the £65m loan and £37.5m for the ‘S&H’ securitization.

The error of principle, to return to our first year students, lies in the attribution of interest at 5% to positive cash balances in a DCF calculation. It is elementary that discounting is precisely a way of allowing for a risk-free return, and a 5% return (nominal) was indeed a reasonable risk-free rate at the time of the appraisal. The UK bank rate stood at 5.25% and a slightly lower rate was actually used to discount the schedule of refurbishment expenditures in order to establish the initial value of the refurbishment fund. This implies that the 7% discount rate actually used consisted of a 5% risk-free rate plus an allowance of 2% for risk – of which more in a moment. For the present, the attribution of a 5% return to positive cash balances together with the simultaneous application of a 7% discount means that the benefits of holding cash are being double-counted. It is an elementary error, and one which massively biases an appraisal in favour of any scheme – including securitization – which exchanges future income for present cash. That it creates nonsense can be demonstrated by the following simple calculation which was actually sent to the University’s finance department at a time when it still seemed that rational discussion of the matter might be possible. No reply was forthcoming:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value of cash borrowed</td>
<td>£100</td>
</tr>
<tr>
<td>Plus present value of interest received</td>
<td>+£4.76</td>
</tr>
<tr>
<td>Minus present value of £105 repaid</td>
<td>-£100</td>
</tr>
<tr>
<td>Present value of profit</td>
<td>£4.76</td>
</tr>
</tbody>
</table>

The Bank of Utopia both lends and borrows at the prevailing risk-free rate of 5%. I propose to restructure my finances by borrowing £100 from Utopia and immediately reinvesting it in the same bank for one year. I will use the interest I receive to pay off the interest I owe, leaving the rest for profit.

I calculate this profit as follows:

The profit, of course, is as much an illusion as the bank of Utopia.
This particular error can easily be corrected by omitting interest received from the calculation (the interest paid out on borrowings remains). Still using a 7% discount rate, ‘as is’ now yields an NPV of £15.9m, borrowing £15.4m and the Owengate securitization £22.7 (a drastic reduction from the original figure of £51.1m). An ‘as is’ scenario with the refurbishments postponed for two years in order to obviate the need for additional borrowing yields an NPV further increased to £18.2m.

**Discounting for Risk in the Appraisal of Securitizations**

A second problem lies with the discount rate itself. The University’s appraisal described its figure of 7% (applied to nominal values) as ‘The Treasury Discount Rate’. In fact the discount rate mandated by the UK Treasury for the purpose of evaluating investments of public money has been 6% for many years and it is supposed to be applied to inflation-adjusted values. The mistake is a strange one for a Department of Finance in a publicly-funded institution, though it could be coincidence that it favours the Owengate option once more. Nevertheless, the NAO letter describes 7% as ‘defensible’, and so it might have been had it applied to a conventional investment appraisal. In its present application, however, it is certainly not defensible.

To see why this is the case, consider the loan and ‘as is’ scenarios in Appendix 2. In both cases the student rents appear as an inflow of cash in line 2.1 and the expenditure on Facilities Management (F&M) for the student accommodation appears as a cash outflow in line 1.2. Both of these cash flows are absent from the securitization scenarios; the rent because it has been assigned to Owengate and the F&M expenditure because it is covered by the lease rental paid back to the University by Owengate. Both of Owengate’s comparator scenarios, therefore, include net inwards flows of cash extending over the full 25 years and it is these which are discounted at the 7% nominal in the University’s appraisal.

If 7% had been a defensible risk-free rate, that might have been acceptable. If the cash flows had been truly risk-free, their present value would indeed have been the amount of the risk-free investment required to produce the actual schedule of payments. But 7% in year 2000 was not a defensible as a risk-free rate, if only because the University’s own loan scenario assumed that it could borrow £65m at that rate. Together with the University’s assumption of a 5% nominal return on its investments of the cash, this indicates that 7% can only be defended as including a risk premium of about 2%.

It is at this point that a second error of principle occurs. Increasing the discount on the future inward flows of cash in the loan and ‘as is’ scenarios would be reasonable as a way of allowing for the risks attached to these scenarios, specifically the risk that the student rents might turn out to be lower than expected or the F&M expenditure higher. But these are not the scenarios under appraisal; they are the comparator scenarios against which the Owengate option is being appraised. To depress the net present values of these comparators is to increase the advantage of the Owengate scenario, and that cannot make sense as an allowance for the risks attached to Owengate.

It might be objected at this point that there are net inward flows of cash in the Owengate scenario too (bottom line). According to the University’s representation of
that scenario, that is true, but those net inward flows of cash are incorrect as has already been explained, because they include the interest on holdings of cash. When they are taken out of the calculation, all of the future cash flows in the Owengate scenario are outwards and this means that the 2% risk premium increases the NPV of the Owengate (slightly) at the same time as it decreases that of its comparator scenarios. This is obviously nonsensical as a means of allowing for the risks attached to Owengate and that is why 7% is not a defensible discount rate in this particular application.

How, then, should the risks involved in a securitization be allowed for? The best approach this question may be to consider the differences between a securitization of future income and a conventional investment. In a conventional investment, there is an initial outlay of capital in the expectation that this will yield a future income. The risk is that this future income may turn out to be smaller than expected and this is allowed for by increasing the rate at which it is discounted. A securitization of income is the reverse of this process. In this case, it is the future income which is invested and the return takes the form of present cash. The risk attached to this scenario is that the income handed over might turn out to be greater than expected, not less. In the present case, this might happen if Owengate were to decide that its consumption of administrative expenses needed to increase from its present level and that the student rents needed to increase accordingly (not entirely a conjectural situation, see p. 19). In order to allow for contingencies of this kind, the discount rate applied to a future income which is exchanged for capital needs to be lower than the risk-free rate, not higher.

If this conclusion seems counter-intuitive, that perhaps illustrates an important point about management accounting technique: that its mechanical application can lead to serious errors and that it is important to return to first principles from time to time, particularly when unfamiliar applications are concerned. The consequences for the University’s appraisal are serious, as one might expect. Depending on the rate of interest assumed on borrowings, the NPVs for ‘as is’ and the Owengate securitization (corrected for the double-count of interest received) equalize at a discount rate of 5.7%. This is still above the risk-free rate, so that any allowance for risk by reducing the discount below that rate would show the Owengate securitization as markedly inferior to the ‘as is’ option.

Despite the ‘thorough and substantive’ nature of its investigation, the NAO’s examination of the University’s appraisal uncovered none of these problems and nor did the perusal which was carried out – one hopes – by HEFCE. In mitigation of these failures of oversight, it must be conceded that the University’s appraisal is not a document which gives up its secrets easily. In fact its calculative procedures and assumed interest rates could only be reconstructed by transcribing the numbers onto spreadsheets so that the operations on them could be varied until they yielded exactly the quoted figures for NPV. This tedious but unavoidable process is detailed in Appendix 3.

It may well be that the opacity of the Finance Department’s appraisal was responsible for the credulity with which the calculations were received by the University’s Council. How else to explain their failure to query a calculation which showed that borrowing £65m at 7% and investing it at 5% over 25 years (the loan scenario) was
better value than doing nothing? From HEFCE and the NAO, on the other hand, one expects better, and the fact that they too could find nothing amiss has worrying implications for the capacity of both institutions to ensure value-for-money.

**A Deteriorating Contract**

To return to the sequence of events at Keele: having carried out its appraisal, the Council of the University formed an ‘approvals group’ empowered to implement the agreement. The authority of this group was circumscribed by a requirement that the final agreement should be ‘not less favourable to the University than the original proposal, unless a worsening could be justified as due to a general change in economic conditions’. As we have seen the appraisal was of a 25 year securitization of the rents which would fetch £65m, less set-up costs of £0.6m. In the event the transaction yielded only £55.4m for the University and the rents had to be committed over 30 years to achieve even that.

Despite quoting the restrictions which applied to the approvals group and despite acknowledging that the actual agreement was indeed worse than the one appraised, the NAO letter maintains that the final agreement did not exceed the authority delegated to the approvals group. This cannot be right. Unless the terms of the actual transaction came as a traumatic shock, it must have become clear some time during the six months preceding the agreement, that the rents were not going to fetch anything like the capital sum which had been assumed. This was not because of a worsening of economic conditions, but because certain entirely predictable costs had been omitted from the appraisal, as had the fact that the University itself would not see the whole of the proceeds of the sale of the rents.

Part of the reduction of the cash sum was due to finance charges. As already mentioned, these amounted to £5.7m, most of which was probably consumed by the insurance necessary to achieve a reasonable rating for the bonds. The scale of these charges points up the utter unrealism of the appraisal’s assumption that the set-up charges for the Owengate securitization would amount to only £0.6m. In fact this amount barely covered the £0.5m which the University was required to invest in the SPV which was to issue the bonds and receive the rents, Owengate Keele plc.

The other reason for the reduction of the capital sum lay in the need for Owengate Keele plc to hold back about £7.8m of the cash, part of it as a short-term revolving reserve from which the bondholders would be paid, and part as a medium-term reserve from which the student rents could be topped up whilst they were still insufficient to pay the bondholders (see p. 14). Even if this need to hold back some of the proceeds of the bond issue had not been apparent when the scheme was first designed, it must have become clear once the size of the bond issue and its rate of interest had been decided, since it simply follows from the fact that the rents at their 2000 level were insufficient to cover the service payments on the bonds. Why, then was the transaction not abandoned at that stage, or at the very least, re-appraised?

How could the approvals group have convinced themselves that the revised transaction was ‘not less favourable to the University than the original proposal’? That they were aware of the reduction in the cash sum before the actual transaction is shown by their decision to compensate for it, so far as was possible, by extending the period of the securitization.
On this point the NAO letter states that in such circumstances ‘we would expect the alternative options to be re-appraised’. It continues:

The University considers that there was no need to re-appraise the options as the period was extended to maximise proceeds and there was not a material change in the structure of the deal. The changes in the quantum represented different applications of some of the premium – to the break costs on pre-existing funding to reduce the future interest burden to the University, and to the cost of the FSA insurance. The reason for not re-appraising the options were not set out in the papers we have seen from the time. In our view the University should, as a minimum, have documented for its Council the reasons for not carrying out an appraisal.

The University’s excuses are feeble indeed. Extending the period of the securitization in order to maximise the proceeds was unnecessary if the primary object was to fund the refurbishments and repay the existing loans. For these purposes the 25 year securitization would still have sufficed and there were no clear plans at the time of the deal for the investment of the additional capital. That the structure of the deal had not materially changed is irrelevant to the basis on which it was approved, which was value-for-money. That some of the cash obtained had to be expended on the ‘break costs’ of redeeming fixed rate loans is also irrelevant to the amount obtained, and in any case these costs had been factored into the original appraisal. Finally, the need to fund expensive insurances in order to achieve a reasonable investment rating for the bonds was entirely predictable since such insurances are an essential feature of income securitizations. As such they ought to have figured in the original appraisal. The absence of this cost from the original appraisal (in all likelihood a major portion of the £5.7m consumed in finance charges) only highlights the unrealism of the assumptions on which it was based. It also prompts speculation on who was responsible for the omission.

In fact the University’s failure to re-appraise is more consequential for the NAO’s overall assessment of the transaction than it is made to appear. Such a marked deterioration of its terms makes nonsense of the conclusion quoted earlier: that the University complied with the terms of the HEFCE financial memorandum which places a duty on institutions to ensure value for money. Even without the five-year extension of the period over which the rents have been committed, the actual cash premium of £55.4m fed into the corrected method of appraisal, shows the NPV of the Owengate securitization as £2.5m worse than that of the status quo.

The Burden of the Future

Omitted from the NAO letter is any discussion of the burden assumed by the University in the form of its commitment to pay over its future student rents. This matter was extensively discussed both in Armstrong and Fletcher (2004) and in the supporting documentation sent to the NAO. At the time these documents were produced, the foregone rents amounted to about 5.8% of Keele’s entire annual budget as compared to a HEFCE limit of 4% on loan service payments in the absence of specific permission (HEFCE, 1997, para 57).

Irrespective of whether the securitization of future income differs in principle from borrowing, the issue here is whether or not it should be subject to the same limits.
Should the loss of an income which has been securitized be treated differently from an income which has been committed to the servicing of debt? HEFCE’s treatment of the Keele transaction suggests that it should.

As it stood at the time of the Keele securitization, the Financial Memorandum between the HEFCE and Institutions made it clear that the 4% limit on service payments applied to monies obtained through finance leases as well as borrowing, a condition which still applies (HEFCE, 1997, para 55). The contention of the University’s Director of Finance was that this restriction need not apply to the Owengate securitization because the transaction was essentially a sale of assets rather than a lease of finance. The argument depended crucially on establishing that it was the purchaser of the student rents (Owengate) and not the seller (the University) who would bear the risks that they might prove insufficient to meet the payments on the Owengate bonds. In making this case, an opinion that the transaction could be accounted for as a sale was obtained from the consulting arm of University’s auditors, KPMG. This seems to have been enough to convince HEFCE, even though the author of that opinion stressed that it depended on verbal assurances from the individuals who had devised the scheme that no security for the income stream would be forthcoming from the University (see p. 30 for more detail). Despite this clearly-stated reservation, HEFCE ignored it. The conditions laid down for the approval of the Keele securitization made no mention of the 4% limit. Instead, the University was required only to demonstrate that the securitization represented best value-for-money as compared to a range of alternatives. In meeting this requirement, the University’s finance office prepared discounted cash flow (DCF) calculations purporting to show that the securitization of the student rents was a better way of financing the refurbishment of the student residences and repaying existing loans than was borrowing an equivalent amount at 7% over the same period, and that both were better than doing nothing.

The mistakes of principle made in this appraisal will be discussed presently. For now the point is that value-for-money is a different basis for permitting a transaction than a limit on the burden of future costs. It carries the implication that institutions will be able to access cash by securitization at a cost in future income which would not be permitted as payments on a loan. This interpretation of HEFCE’s position is reinforced by the University’s accounts for 2003/2004 which carried the news that it had negotiated facilities for an additional loan of £18m plus an overdraft of £3m. Clearly the service payments on these new borrowings were not being treated by HEFCE as additional to the loss of the securitized income.

If this is a fair indication of HEFCE’s policy, it creates a clear incentive for cash-strapped managers in higher education to opt for schemes of securitization, an incentive additional to those described in the introduction to this paper. The consequence will be to burden their institutions with a degree of financial obligation which would not be permitted in the case of borrowing. There remains, of course, the additional hurdle of demonstrating value-for-money but the Keele appraisal suggests that this too can be surmounted.
A Transfer of Risk?

For the University, it was important that the Owengate transaction should qualify as a sale rather than a loan. Provided this was the case the access to capital would not be subject to the HEFCE restrictions on borrowing. Advice on the matter was taken from the consulting arm of the University’s auditors, KPMG, and it was on the basis of their opinion that the ‘S&H’ securitization was rejected as involving insufficient transfer of risk. In contrast, it was considered that the Owengate securitization would qualify as a sale on the basis of assurances that:

i) Owengate had been given no security to cover the payment of the £55.4m.

ii) The risks and rewards of the income stream (the rents, that is) had been substantially transferred to the buyer.

Recognising that the substance of transactions is often to be found in the fine print of the relevant contracts, the KPMG consultant’s opinion contained the following important caveat:

It should be stressed that our conclusions are currently reliant on verbal representations from [the proposers of the two schemes of securitization]. These representations are fundamental to our thinking which may need to change if they do not follow through to the final documentation.

With hindsight, this notably circumspect statement can be set against the actual provisions of the contracts which make up the Keele securitization. The information is taken, not from the contracts themselves, since these have been made available only to the NAO, but from the bond prospectus issued by Owengate’s controlling creditor, Financial Security Assurance (U.K.) Ltd.

Consider first the risks to the income stream. Basically these are of four kinds: the risk that the residences may be under-occupied, the risk that some of the occupants may default on their rents, the risk that the residences may be damaged or destroyed and the risk that the University may run down or cease to operate.

The first two risks – occupancy and delinquency - are transferred back to the students themselves by means of a contractually defined rent-setting procedure. Although it is the University which initially proposes the rents for the coming year, this proposal is then fed into a financial model operated by Owengate Structured Finance Ltd. This model projects the rent increases forward, allowing for past rates of occupancy and delinquency, so as to predict the consequences for the cash reserves held by Owengate Keele plc. On the basis that these reserves must not go into the red, Owengate Structured Finance Ltd. then makes its own recommendation to the controlling creditor, Financial Security Assurance (UK) Ltd (FSA). If there is disagreement, the final say lies with a technical advisor appointed by FSA. In this manner it is ensured that the current year’s students will pay for any shortfalls in occupancy or payments of rent by those of previous years.

The risk of damage to the residences is covered in the first instance by a requirement that the University must insure both against the damage itself and the consequent loss of business. Should actual damage ensue, the University is required to carry out any necessary repairs, supplementing any shortfall in the insurance payouts from its own resources. If the damage is such as to require a new build, the University must make
land available from its own estate at a nominal rent. If, for any reason, these repairs are not made, Owengate is entitled to receive from the University a sum equal to the present value of the rents which would have been received from the destroyed portion of the residences over the remainder of the thirty years.

The risk to the income stream that the University might cease to operate is covered by a contractual requirement that it must not vote for, or apply for, a winding-up until the whole of Owengate’s financial liabilities have been extinguished. These liabilities include all of the future payments due to the bondholders, since a cessation of operations by the University entitles the controlling creditor to direct Owengate either to redeem the bonds or to place an amount equal to all of the interest and capital repayments due on them in a debt service reserve account. In effect this places Owengate’s bondholders ahead of all other creditors of the University. If, short of termination, the University’s activities run down to the extent that its payments of rent to Owengate fall materially short of the amount needed to meet Owengate’s outgoings (‘materially’ defined as > £1/4m), the University can be required to let its residences to ‘people introduced by Owengate’. That should broaden the students’ education.

In the face of contractual terms like these, it is hard to see that much, if any, of the risks to the income stream have been transferred from the University to Owengate. By the same token, Owengate’s entitlement to this future income and the obligations on the University to provide it, must surely count as some security for what is, in substance if not in legal fiction, a repayment of the £55.4m advanced in the form of the student rents.

In addition to all this, there are circumstances in which Owengate is entitled to repossess that part of the cash premium which was placed in the refurbishment fund. It has already been pointed out that the University is contractually bound to ensure that the fund does not fall below 90% of the discounted value of the future schedule of refurbishment expenditures. If it does so, the operating lease rentals normally paid by Owengate to the University will be paid direct into the refurbishment fund. The University, meanwhile, is barred from accessing the fund but must continue to pay for the refurbishments using other money. If, despite these measures, the shortfall in the fund persists for 12 months or more, its ownership is transferred to Owengate Keele plc. If the deficit persist for a further two years, the controlling creditor may then commandeer the fund and use it to pay, or pay off, the bondholders. To the uninitiated this looks remarkably like security for the cash advance.

Notwithstanding the verbal assurances of its architects to the consultant from KPMG, contractual terms like the foregoing establish at least a primae facie case that the Owengate securitization was in substance a loan rather than a sale. The over-riding material fact, one ensured by the contracts, is that the minimum payments of rent which the University must make to Owengate are defined in advance by the payments which Owengate must make to its bondholders. All of the risks associated with this income stream are born either by the University itself, or by its students. The NAO letter contains nothing which casts doubt on this conclusion. Instead it relies on the contrary opinion of the University’s auditors, clearly an interested party, since on this matter it is the auditors’ opinion which is in question.
Imaginary Gardens with Real Toads\textsuperscript{9}: the accounting treatment

'We're Ahead on the Deal so far': Of time income and depreciation

In any highly-capitalized venture, depreciation places temptations in the way of accounting virtue, since it opens up the possibility of redistributing income over time. So it has been with the Owengate securitization.

As recommended and audited by KPMG, the receipt of the £55.4m cash premium was balanced in the University’s accounts by a corresponding entry in long term creditors. This debt is being amortized at a constant annual rate over the 30 years of the deal ‘in order to spread the benefits of the securitization’, as the treatment was explained by a member of the University’s management team. The effect is to release an annual £1.8m into the income and expenditure account. The contention of Armstrong and Fletcher (2004) was that this treatment is misleading in its implication that the long-term debt representing the University’s obligation to Owengate is steadily decreasing. If the debt is taken to be at a constant rate of interest – surely the only reasonable assumption – the minimum schedule of payments from the University to Owengate yields the trend of outstanding debt shown earlier in Fig 1. The increase in the University’s debt during the early years of the deal is not an artefact of the calculation, it must be stressed. It reflects the fact that the student rents were insufficient at that time to cover the service payments on the Owengate bonds, so that the University was effectively borrowing more money from Owengate in order to fulfil its contractual obligation to fund those payments. This, together with the fact that capital repayments on the bonds themselves did not begin until 2006, reveals the total unrealism of the linear depreciation of the debt in the University’s accounts. It overstates the University’s income – hugely at first - and it will continue to do so until the slope of the effective debt trendline is -£1.8m per annum, a situation which will occur in 2023 or thereabouts. Thereafter the University’s income will be understated, and massively so towards the end of the deal.

The problem is that the later understatement of income does not compensate for the earlier overstatement. Because it encourages present spending at the expense of future costs, it has implications for the responsible management of publicly-funded resources. Nor is this unsubstantiated speculation: at the 2003 meeting convened to discuss the securitization, one of the University’s management team claimed that ‘We’re ahead on the deal so far’ - and so they were, according to the University’s accounts. Fig. 2 shows the declared surplus on income and expenditure for the first six years of the Owengate securitization and it should be born in mind that the figures contain the £1.8m supplement from the non-existent depreciation of the Owengate debt.

Fig. 2. Surplus Reported in Keele University Accounts by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Reported Surplus</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{9} Marianne Moore’s description of poetry.
Without the supplementation of its income from the depreciation, the University would have reported a deficit in every one of these years. Had that been done, HEFCE might well have deemed it appropriate to take the institution into special measures.

The NAO letter gives no sign of having registered these arguments. Nor is it reassuring to be told that KPMG ‘have examined this issue on several occasions [and] on each occasion they concluded that the accounting treatment was appropriate’ Of course they did: it was they who recommended the treatment and they are the University’s auditors.

**Parking Losses in a Special Purpose Vehicle**

In a more substantial defence of KPMG’s position, the NAO letter points out that the treatment of the cash premium in the University’s accounts is mirrored in those of Owengate Keele plc. So far as it goes, this is perfectly true, but not everything appears in both sets of accounts. Specifically it will now be argued that the accounts of Owengate are working as a temporary repository for medium-term deficits which are not recognised in the University’s income and expenditure account.

Keele’s initial entry of £55.4m in long-term creditors was indeed reflected as a ‘tangible’ asset of the same amount on the balance sheet of Owengate Keele plc, and both are being amortized at an annual rate of £1.8m. This initial asset plus cash reserves of about £8.3m (The University’s initial investment of £0.5m, plus £5.6m held in the Fixed Drawdown Account plus a revolving Debt Service Reserve Account of £2.2m) were balanced by a long-term liability of £63.7m representing Owengate’s debt to its bondholders (not the full £69.4m actually borrowed, since the initial finance charge is being allocated over the life of the deal). This liability, however, did not diminish at all until 2006, because the payments to the bondholders were interest-only up to that date. Even thereafter, the capital repayments were scheduled to gather momentum only gradually.

Schematically, the initial balance-sheet of Owengate Keele plc looked like this:

<table>
<thead>
<tr>
<th>Assets £m</th>
<th>Liabilities £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Tangible’ asset</td>
<td>55.4</td>
</tr>
<tr>
<td>Cash from paid-up shares</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Once this balance sheet is set in motion, money from the Fixed Drawdown Account is paid as part of the interest to the bondholders so that this component of the assets decreases whilst the liability representing the capital owed to the bondholders remains static. The accounting treatment outlined above would maintain the balance of assets and liabilities by transferring the payments from the Fixed Drawdown Account into the ‘tangible’ asset representing the University’s obligation to Owengate. If the two sets of accounts are to maintain synchronicity, the increase in this asset then needs to be reflected on the University’s balance sheet by an increase in the debt shown in long-term creditors – as has been argued.

What is actually happening on the balance-sheets of Owengate is a depreciation of £1.8m per annum in the tangible asset, plus the aforesaid depletion of the Fixed Drawdown Account. These diminutions in assets are set against a liability which remains constant until 2006 and depreciates only slowly thereafter. Balance is being maintained – can only be maintained - by a rapid decrease in the shareholder’s funds, from minus £1m in 2001, to minus £3.5m in 2002, to minus £6.2m in 2003 to minus £7.7m in 2004 to minus £9.4m in 2005. The decrease would have been even more rapid had it not been for the recognition of Owengate’s losses as a deferred tax asset.

At this point, the reader may be wondering why Owengate was permitted to continue trading at all. This is explained in a note to the accounts which states that the auditors have been persuaded by a financial model that the company will gradually move into profitability as the rents increase to a level which matches the payments due to the bondholders. When this happens the depletion of the cash reserve will cease. Some time later the rents will have increased to a level which pays off the debt to the bondholders at a rate which exceeds the depreciation of the tangible asset. The shareholders funds will then begin to recover and on a ‘minimum rents’ scenario, they will reach zero by the end of the deal.

In the meantime, however, the large negative value of shareholders funds represents a real obligation on the University, since the University, via Owengate Keele (Holdings) Ltd., is by far the majority shareholder in Owengate Keele plc. Whilst limited liability means that the University cannot presently be called upon to make good these deficits, the securitization contracts – principally the rent-setting procedure - ensure that it will pay them off in the future. This is the liability which does not appear in both sets of accounts. It has been the subject of abduction from the balance sheet of the University and incarceration in Owengate’s, where it languishes as a depletion of shareholder’s funds. The intention is that it waste away there, and expire in the fullness of time. That the disappearance is temporary and that the liability will be paid off late in the contract, does not alter the fact that there is a temporal redistribution of the costs and benefits of the securitization. Indeed that is the essence of it.
Recent Experiments in Accounting

The arithmetical link with Owengate’s balance-sheet which the NAO cited in its justification of the University’s depreciation of its effective debt no longer exists. Fundamental changes in the treatment of Owengate’s assets and liabilities have had the incidental effect of severing any obvious connection between the two sets of accounts. In fact these changes have been the occasion of a certain promiscuity in the company’s relationships with its auditors. Now renamed Keele Residential Funding plc (KRF) the former Owengate is enjoying its third such relationship in 8 years. Baker Tilley, the original auditors resigned with effect from October 2004 and their replacements, Keens Shay Keens MK qualified the accounts to July 2004 and 2005, resigning in their turn in June 2007. The current auditors are Ernst and Young.

The problem for Keens Shay Keens lay with the treatment of the asset representing KRF’s entitlement to Keele’s student rents. Up to and including the 2005 accounts, that entitlement had been entered on the balance-sheet as already described: an asset initially equal to the cash premium paid to the university was depreciated over the 30 years at a constant annual rate. For Keens Shay Keens that treatment failed to comply with the UK Statement of Standard Accounting Practice 19 which required that an ‘investment property’ should be stated at its open market value. On that basis, they qualified the accounts, though in the absence of an actual valuation they declined to quantify the effects of ‘the departure’.

Reflecting that qualification, the accounts to July 2006 were prepared on a much-revised basis in which the investment property was professionally valued at an open market value whilst the main liabilities were stated at the net present values of the future payments due to the KRF Bondholders and the lease rental payable to the University. This resulted in huge increases in both assets and liabilities, the mismatch of which precipitated correspondingly large adjustments to the shareholder’s equity. Under the previous treatment, this had been stated at minus £9.4m in 2005. It now turned out that the true and fair figure for that year had really been plus £4.9m.

An interim report prepared for the KRF bond issue and reviewed by the new auditors, Ernst and Young, indicates that the foregoing treatment will continue. If so, KRF’s entitlement to Keele’s student rents will continue to be valued as an investment property, with all the fluctuations in earnings and shareholders’ equity which an open market valuation implies. Though allowable according to the relevant international standards\(^\text{10}\), this seems quite inappropriate for a property which is not in fact on the open market, since the University is contractually bound to ensure that the rooms are occupied by its own students. Nor is appropriate to a finite flow of income, the minimum present value of which is closely defined by the terms of the securitization contracts. One has to ask, for example, how it is possible for the valuation of such an income to increase by £2m over the course of a year as is stated in the accounts to July 2006. Does it perhaps reflect an opinion on the part of the valuers that the wider

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\(^\text{10}\) The move from UK to International reporting standards created the possibility of reverting to the original treatment of KRF’s balance-sheet. Keens Shay Keens’ note to KRF’s accounts to July 2006 states that International Accounting Standard 40 permits two treatments. The first is a ‘Cost Model’ which coincides with the cost-depreciation treatment which they had earlier rejected. The other is the ‘Fair Value’ model with which they replaced it. Preferring innovation to continuity, they elected to continue with the latter.
market for rented accommodation might make it possible to gouge more cash out of Keele’s students?

**The KRF Securitization**

The Owengate securitization no longer exists in its original form, though the lease on which it was based and some of its costs live on\(^\text{11}\). In order to preserve the analysis of its financial characteristics, however, and to avoid recourse to such grammatical forms as the pluperfect subjunctive, much of the foregoing account has been written as if it were still in operation.

That, however, is in a parallel universe. In ours, the students in Keele’s halls of residence now write their cheques to Keele Residential Funding plc (KRF), the renamed Owengate. Along with the alias, KRF’s accounts for 2005-2006 gave notice of an intention to redeem the existing Owengate Bonds and purchase two additional leases from the University. The costs of paying off the Owengate Bondholders and the payments to the University were to be funded by a new 40-year bond issue, running from 2007 to 2047. The Treasurer’s report to the University’s accounts for 2006-2007, explained the refinancing in the following terms:

In 2000, Keele granted a 30 year lease on the majority of student rooms within the Halls of Residence in return for a premium and an annual rental paid to the University for the management of the Halls. Whilst this was a vitally important deal at the time, allowing the University to restructure its finances and to set up a refurbishment fund to properly maintain the Halls of Residence, the administrative aspects of the deal were complex, driven by the requirements of the monoline insurer that underwrote the deal.

Given Keele’s success in servicing this lease agreement and in refurbishing the Halls of Residence, it was felt timely to seek to renegotiate the securitization deal. The renegotiation was aimed at raising additional premium by extending the lease period to 2047 and at removing some of the restrictions and administrative burdens inherent in the original agreement. The renegotiations were successful and the new deal was completed on 13th July 2007. An additional capital premium of £48m was raised. This is included as fixed asset investments on the balance sheet as at 31st July 2007. £15m of the premium is to be used to enhance the current Halls of Residence refurbishment programme. The balance of the premium will be progressively invested in projects which will yield good long-term financial benefit to the University.

As a rationale for the new securitization, this is unconvincing, though that may be to expect too much of the preamble to a set of accounts. The major ‘restrictions and administrative burdens’ of the Owengate contract consisted of penalties for a failure to maintain the refurbishment fund at the required value. These penalties would have been irrelevant if the University’s success in ‘servicing this lease agreement’ had included keeping the fund at that level. We have already seen that it failed to do so

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\(^\text{11}\) Notable hangovers include a penalty of £7.1m for the early redemption of the Owengate Bonds and a one-off charge to KRF’s income statement of £5m, this being the unexpired portion of the £5.7m finance charges for the Owengate securitization which were being allocated over the 30 years of the deal.
from 2002 onwards and that the deficit in 2004, at £800,000, was still outside the permissible limit. Given that the fund was invested in a GIC by then, with a consequent low growth rate, it is possible that the real reason for the new securitization was that it offered one of the few available means of replenishing the fund. This supposition makes sense of the fact that the penalties attached to any shortfall in the fund are almost identical to those of the Owengate contract, contrary to the Treasurer’s implication that they have been removed. Nor is that surprising since the insurer and controlling creditor of the new securitization is none other than the same ‘monoline insurer’ which insured the Owengate deal – FSA (UK) Ltd. Any gain to the University’s freedom of action lies not in the removal of the penalties but in the fact that they are now unlikely to be invoked and even this advantage comes at a price because more of the University’s cash must be locked up in the fund in order to compensate for the low return on the GIC.

By this time the security blanket surrounding the University’s financial decision-making had become impenetrable. There is no indication as to whether or not this new financial restructuring was the subject of competitive tender, or of what advice was taken. What is clear is that the KRF securitization was engineered by the same Mr Blonde and Mr Pink who were responsible for the original Owengate scheme, complete with the ‘complexities’, ‘restrictions and ‘burdens’ which the Treasurer considered it so urgent to remove. This, and most of the other information in relating to this second securitization is taken from the prospectus of the KRF bond prospectus (2007).

**The Application of The Proceeds**

The KRF bond issue raised £137.5m, creating a debt of the same amount which will need to be serviced from Keele’s student rents over the 40 years 2007-2047. The amount is almost twice as much as the Owengate securitization and nearly 50% greater than the entire annual income of the University.

Set-up costs apart, the proceeds have been principally used to redeem the existing Owengate Bonds and to purchase the two new leases from the University. The first is a ‘supplemental lease’ which entitles KRF to receive the student rents from additional halls of residence to be constructed on land designated for the purpose. As with the original Owengate lease, which will continue in operation, this supplemental lease will expire on 30th December 2029. On that date, a ‘reversionary lease’ will come into force which extends both agreements until 30th December 2046. In return, the University has received an initial cash payment of £48.2m made up of £5.2m for the supplemental lease and an initial premium of £43m for the reversionary lease. Of this, £15m is required to be deposited in the refurbishment account, the whole of which is now invested in a guaranteed investment contract (GIC) in order to prevent any further ‘administrative’ inconveniences. When the reversionary lease comes into force at the end of 2029, the University will also receive a ‘deferred premium’ of £5m. This deferred premium and any land tax payable on the grant of the reversionary lease is to be paid from an initial £2.6m invested by KRF in two guaranteed investment contracts (GICs).

Altogether, the funds raised by the bond issue have been disbursed as follows:

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Gross Proceeds from Issue of Bonds £137.5
Funds from KRF £1.0
£138.5

Disbursed as:
Redemption of capital outstanding on Owengate Bonds £69.2
Purchase of Supplemental lease from University £5.2
Purchase of Reversionary lease from University £43.0
GICs to fund deferred premium and stamp duty £2.6
Early Redemption Premium on Owengate Bonds £7.1
Directly attributable issue costs (estimate) £11.4
£138.5

Two things stand out from these figures. The first is that over the seven years of the Owengate securitization, very little of the original £69.4m borrowed from the bondholders has been repaid, the result of a service payment schedule which covered only the interest for the first six years. Less obviously, that fact underscores once again the unrealism of the University’s stated surplus of £0.6m for 2006-2007, since that included a depreciation of £1.8m in the debt representing the future payments which the University would have had to make to these bondholders through Owengate.

Also notable is the high set-up cost of the re-financing (£18.4m) in relation to the initial premium received by the University (£48.3m, inclusive of the obligatory £15m deposited in the refurbishment fund). In addition to these new refinancing costs, £5m of the original £5.7m issue costs relating to the Owengate securitization is still outstanding, since these costs were being allocated to Owengate’s profit and loss account over the life of the deal.

**Funding the Bond Service Payments**

Unlike the fixed-interest Owengate Bonds, the KRF issue is indexed-linked (all items) plus 2.108%. The repayment schedule to be factored up by the RPI is set out on p. 34 of the prospectus and these are the payments which must be funded from the net cash flows from the University to KRF. As before these consist of the student rents minus a lease rental paid to the University by KRF for the right to receive the rents, plus a licence payment to KRF by the University for the right to the income from out-of-term lets.

Compared to the Owengate securitization, the manner of setting the student rents has been considerably simplified. In place of the elaborate feedbacks from the state of Owengate’s various accounts, the University is now contracted simply to hand over an aggregate amount which is set with reference to a ‘base case rental’. For the year commencing 1st August 2006 the base case rental was £7.2m and it will increase annually at RPI (all items) plus ½%. The University must set its rents so that the anticipated total is at least 102.5% of the base case rental (103.06% if there has occurred a shortfall in the previous year). The ½% real annual increase in the rents
may sound innocuous but it means that the students of 2047 will be paying 22% more for their accommodation in real terms than those of today.

For the right to receive the student rents, KRF pays a lease rental to the University which increases annually at RPI only. This rental for 2006 was £3.3m. There is also the aforementioned licence fee payable to KRF by the University, indexed at RPI and with a starting value of £0.8m in 2007. It is the net flow of cash from the University to KRF which pays for the servicing of the KRF bonds.

**Computing the Cost of Capital**

As already mentioned, a substantial portion of the cash received in return for the future payments which the University must make to KRF has been used to repay the Owengate bondholders. This means that any estimate of the University’s cost of capital must take account of the value it has already received during the period of the Owengate securitization. This consists of the cash premium of £53.4m received in 2000, against which must be offset the net cash flows of about £30.5m nominal from the University to Owengate between January 2000 and July 2007. All of these amounts are matters of record in the relevant accounts as are the changes in the RPI through which they can be factored up to July 2007 prices. When this is done, the net value received by the University from the Owengate securitization at July 2007 prices computes at about £31.1m.

To this must be added the value received from the KRF securitization. The University received two cash premia totalling £48.2m in 2007 and it will additionally receive the £5m deferred premium at the end of 2046. The 2007 value of the deferred premium can be taken to be the initial £1.7m invested in the GIC from which it will eventually be paid since the assumed real return seems realistic at rather under 2%). Thus the total 2007 value of the monies received by the University is £90m (£31.1 + £48.2 + £1.7) as against the £137.5 of debt created by the KRF bond issue.

The net annual amount which the University must pay for these benefits consists of the student rents minus the KRF’s lease rental plus the licence fees for holiday lets. The initial values of all these amounts are stated in the bond prospectus. The minimum value of the student rents increases at RPI plus ½% whilst the other amounts are simply indexed. Thus the entire schedule of payments by the university to KRF is predefined and sums to £228.8m at 2007 prices\(^\text{12}\). This is the total lifetime cost of the £90m economic benefit received by the university as it stood in 2007. That is a cost of £2.54 per £1 received. Given the predefined schedule of service payments, it is also possible to compute the effective rate of interest on the University’s £90m. The result is 5.3% plus RPI. This compares with £2.17 per £1 and 8% without indexation for the earlier Owengate securitization: a slightly lower rate of interest provided inflation continues at 2.5%, but a higher lifetime cost per £1 due to the longer period of the KRF deal.

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\(^{12}\) A pro-forma balance sheet to January 2007 is included in the KRF Bond Prospectus. KRF’s “investment property” is valued at £227m, suggesting that the directors too think that the future income from it can be determined with some precision.
The Accounting Treatment: the Timing of Costs and Benefits

A similar calculation also enables a profile of the University’s effective outstanding debt to be produced. As with the Owengate securitization, the premia received in 2007 have been balanced by an entry in long term creditors representing the University’s future obligations to KRF. Together with the unamortized portion of the debt inherited from Owengate the total outstanding in 2007 is stated at £83.3m. If it is now assumed that this £83.3m debt is at a constant rate of interest and is serviced by the predefined schedule of payments to which the University is committed, the rate of interest is 5.9% (plus RPI) and the debt diminishes as shown in Fig 3.

Fig. 3. KRF Securitization: Trend of Outstanding Debt

As with the Owengate securitization, the capital repayments are skewed towards the end of the 40 years, though less extremely so. The half-life of the debt in this case is 32 years. As a consequence, the rate at which capital is being repaid in the first few years is very small, of the order of £0.1m. Again, this is not recognised in the University’s accounting treatment.

As with Owengate, the £83.3m debt is being depreciated evenly over the 40 years of the contract, thereby releasing an annual £2.1m into the University’s income and expenditure account. The effect during the first few years is therefore to overstate the university’s income by about £2m. At the time of writing, the accounts to July 2008, have not yet appeared so we do not yet know what surplus will be declared in the first year of the KRF securitization. The surplus for 2007, however, was £0.6m, a sum far less than the £1.8m diminution of debt it assumed at a time when very little of the bondholder’s capital was actually being repaid. Thus the accounting treatment of the KRF securitization, like that of the Owengate deal, distorts the timing of its costs and benefits. In its early years, the deal looks better than it is, and in its later years, correspondingly worse. As before, it is an incitement to irresponsible management.
Fees and Expenses: a Retrospective on Owengate

Having decided in principle to restructure its finances by means of a second securitization, the University turned for assistance to the same Mr Blonde and Mr Pink who had devised and facilitated the Owengate deal. A feature of that earlier deal was the network of private limited companies through which Mr Blonde and Mr Pink, assisted by their respective wives, serviced the Owengate securitization and received a variety of payments for doing so. In consequence of the rudimentary reports required of private limited companies, these arrangements were characterised by a certain opacity concerning both the services rendered and amounts paid for them. For this reason, the efforts of Armstrong (1997) to quantify the running expenses of the Owengate securitization were only partially successful.

An entirely incidental benefit of the KRF securitization has been the retrospective light which it has shed on the arrangements in question. The KRF Bond prospectus (pp. 195-6) reveals that a company called KRF Management Ltd. formerly owned by Mr Blonde and Mr Pink had been acquired by KRF plc at a cost of £0.8m. In its former incarnation, KRF Management Ltd. was Owengate Structured Finance Ltd. and under that name it operated the financial model which determined Keele’s student rents, receiving undisclosed fees from Owengate Keele plc for doing so. The cost of acquiring this company gives some insight into the magnitude of the fees in question and thence into the NAO’s idea of ‘the market rate for an independent party to provide these services’. Mr Blonde and Mr Pink were each paid £293,750 for their shares in KRF Management Ltd. and in addition Mr Blonde was paid £200,000 in respect of a management services contract subsisting between himself and KRF Management Ltd.

The same section of the KRF bond prospectus also reveals that Mr Blonde was paid £300,000 and Mr Pink £100,000 for their work on the KRF refinancing and that Mr Blonde also received £78,070 in respect of fees and expenses. Finally an interim report on KRF plc includes contingent liabilities for ‘success fees’ on completion of the securitization, the amounts payable being £1m to Mr Blonde and £600,000 to Mr Pink. Altogether, the payments to Mr Blonde and Mr Pink total £2.9m all of which will be financed by Keele’s student rents.

Conclusions

The securitization of Keele’s student rents in 2000, and again in 2007, appears to have been one small move in a global tendency on the part of finance capital to seek new sources of profit in the public services. The tendency is probably gathering pace since private sector securitization has come under something of a cloud as a result of the US sub-prime mortgage crisis which infiltrated huge quantities of ‘toxic debt’ into the international financial system.

Because of the contractual complexities and the many parties involved, it is almost inevitable that public sector income securitization will be costly as compared with direct public investment. At the same time, it is also likely, that the expertise of the financial services industry will be directed towards the obfuscation of that fact. In this endeavour the industry has a number of recourses at its disposal. The most fundamental is what might be called the mystique of creative finance: that there are arcane techniques whereby finance can be conjured up at bargain prices providing
only that one is willing to pay for the relevant expertise. As is illustrated by the Keele case, this mythos is bolstered by the creation of financial structures which front-load the benefits whilst deferring the costs. Keele’s second securitization can be seen as renewal of this process of front-loading and deferment. It is manoeuvre which gains both legitimacy and support from those politicians and public service managers who expect to move on before the bills come it. The Keele case also suggests that accounting technique is complicit in this postponement of financial responsibility, whether wittingly or otherwise, in its convention-driven treatments of the effective debt assumed by the seller of securitized income which fail to engage with its actual changes over time.

In the face of these developments, it is important that the relevant public watchdogs possess both the will and the capacity to monitor such schemes. For UK Higher Education, immediate oversight is the responsibility of HEFCE, whilst HEFCE itself, and public sector institutions in general, are overseen by the National Audit Office (NAO). Having established that the Keele securitization, in which HEFCE was involved, was poor value for money, the author referred the case to the NAO in 2003. After a two-year investigation, the NAO reported that it had found no evidence to substantiate this and other concerns. This paper has contested that conclusion on the basis of documentary evidence relating to both Keele securitizations. This re-examination of the evidence has also suggested the following:

- The delays and obstructions encountered by the NAO indicate that its powers to access the relevant documentation are not presently adequate where the private providers of financial services are involved. In particular, Keele’s first securitization involved a considerable seepage of its student rents into a network of private limited companies in the form of fees, dividends and expenses. The limited reports required of such companies meant that there was no way of monitoring the value received in exchange for these expenditures. Where public money is concerned, such services need to be properly specified and the amounts received for them properly recorded.

- The NAO’s uncertainties as to whether or not it had access to all the relevant documentation also extended to the University’s record-keeping, as well as that of HEFCE. Without proper records, it is impossible for the NAO to discharge its obligation to monitor the proper disbursal of public funds.

- The NAO’s comments on the duty of public bodies to ensure value for money display a tendency to concentrate on procedures rather than substance. Value for money is a substantive and not a procedural matter, from which it follows that it cannot properly be monitored by tests of correct procedure. Actual calculation is necessary.

- The policy limits on public borrowing (including finance leases) are there to limit the future burden of debt service payments. The logic implies that monies obtained by the securitization of predictable follows of income, however they are labelled, should be subjected to the same limits.

- Neither HEFCE nor the NAO appear to possess the expertise in management accounting needed to oversee the appraisals of public sector securitizations. Fundamental errors were made in the appraisal of Keele’s first scheme, all of
which biased the results in favour of the securitization and none of which were picked up by either body.

- Financial reporting standards as they apply to income securitization appear to be in considerable disarray. The accounts of Keele’s special purpose vehicle (SPV) display an unusual degree of experimentation, retrospective correction and auditor turnover. Those of the University itself incorporate a convention-driven depreciation of its effective debt to the SPV which presents a thoroughly misleading picture of the University’s actual income.

- Finally, the Keele case exposes the paradox involved in the securitization of public sector incomes. Whilst their particular attraction lies in their predictability, the legitimacy of the transaction as a sale of assets depends on a presumption that they are subject to risk. The case additionally suggests that what residual risk remains will be transferred back from the purchaser to the seller of the income by the fine print of the relevant contracts. Where this is the case, the transaction is in substance a loan and should be treated as such.

References


Appendix 1. Letter from The National Audit Office

KEELE UNIVERSITY - SECURITISATION OF RENTAL INCOME

As discussed in our various calls and email exchanges since you first wrote to the Comptroller and Auditor General, I am responding to your letter of 13 November 2003 and subsequent email of 9 December 2003, in which you raised concerns about the securitisation of rental income at the University of Keele.

I should begin by thanking you for your patience in waiting for my response. We were delayed in completing our investigation because of difficulty in obtaining key documents needed to provide a thorough and substantive reply. As you are aware, we are not the auditors of the University. While the University cooperated fully with our enquiries, it could not retrieve some of the information we required owing to the passage of time, and some of the people involved in the transaction had since left. We have therefore had to request documentation from both the University and third parties. For example, we did not receive the contract documentation until April this year. Although we are now fairly certain we have seen all the key documents, the piecemeal way we had to obtain them means we cannot be absolutely certain on this point.

Our review of this novel transaction has involved a large amount of data collection and analysis as well as consultation with a range of stakeholders, including meetings with the University and the Higher Education Funding Council for England. We have also consulted extensively with NAO colleagues who have expertise in examining transactions of this nature. I am pleased now to be able to respond to the issues you raised. I summarise our findings below.

Your overriding concern is that the University's sale in January 2000 of its student accommodation rents over 30 years might have been poor value for money and detrimental to the long-term future of the University. It is clear from our investigation that the University had to take action to address the refurbishment of its student accommodation. The University chose to do this through securitisation to meet three objectives:

- to accelerate the refurbishment of the halls of residence, which were in a poor state. Most of the buildings had been built in the 1960s and suffered from poor design;
- to reduce the pressure on the University's finances from existing borrowings of about £21 million which had interest rates fixed at around 13 per cent; and
- to raise funds for further investments.

In the University's view the securitisation has been successful, particularly in that refurbishment of the student accommodation is well under way. You had specific concerns about certain aspects of the deal. We found no evidence to support your specific concerns, though we did identify some issues with the University's approach. I address each of the points you raised below.
Firstly, you raised questions about the appraisal of the deal and suggested that the appraisal contained errors. In view of the limitations in the information provided to us, we cannot categorically rule out the existence of errors in the calculations, but our thorough examination of the available documents has not identified any errors. A reasonable range of sensitivities appear to have been examined using a defensible discount rate.

More specifically, we have reviewed a number of variations on the financial model produced to examine this deal. The model in possession of the University is derived from a pricing model and is not really suitable for scenario testing, though the University's auditors' records show that they understood that the models had been independently audited. Expertise in building such models was still developing at the time and we found that this model was of poor design, containing no calculation checks to verify that it is performing calculations without error. We have been unable to identify any other transaction model from this period and conclude that this model was used for any scenario testing done. Financial Security Assurance (UK) Ltd (FSA) is using another tracking model for ongoing monitoring of the transaction, which we understand the University is also using to track key variables.

The deal fell into the £5-£70 million bracket which the markets find difficult to assess, being rather large for retail business banking and too small to afford the full range of advisors needed for a large deal, as they add substantially to the cost relative to the amount of finance raised. The University, in common with many organisations faced with this situation, decided not to appoint a project financial advisor, but to take legal and financial advice on an individual basis. In our view, this decision increased the risks to the University, particularly given the lack of experience within the University of such a novel transaction. The University considers that it sought and received adequate expert advice in appraising the deal and that additional advice would have simply increased the transaction cost. We would generally recommend that bodies undertaking novel transactions should employ a project financial advisor, though such appointments clearly need to be made in the light of the balance of benefits and costs.

In deals of this kind, if new information appears that substantially changes the nature of a deal, we would expect the alternative options to be re-appraised. The original four options were not re-appraised at the time the bond financing was extended from 25 to 30 years and the quantum reduced from £65 million to £55 million. The University considers that there was no need to re-appraise the options as the period was extended to maximise proceeds and that there was not a material change in the structure of the deal. The changes in the quantum represented different applications of some of the premium -to the break costs on pre-existing fixed-rate funding to reduce the future interest burden to the University, and to the cost of the FSA insurance. The reasons for not re-appraising the options were not set out in papers we have seen from the time. In our view the University should, as a minimum, have documented for its Council the reasons for not carrying out are-appraisal.

Secondly, you suggested that the approval of the transaction broke the stipulated conditions given by the University Council. We have found nothing to suggest that the Approvals Group did not have appropriate approval from the Council for its actions. On 25 June 1999, the Council held a meeting and amended the approval to ".. .agree final terms not less advantageous than those described to the Council on 19
May 1999 save only where such disadvantage has arisen as a result of general changes in economic conditions that may have occurred since then.” The Council delegated authority to conclude the transaction to an Approvals Group. It was this Group which approved the final transaction, in line with its delegated authority. Without carrying out our own investment appraisal of all the various options available to the University, for which complete information is no longer available, it is not possible for us to conclude whether the option it approved represented best value for money.

Thirdly, you expressed concerns about whether a fall in the value of the refurbishment fund restricts the University's access to the fund. The initial investment strategy for the maintenance fund had a degree of exposure to equities. In common with investments by much of the financial community, poor performance of the stock market has hit projected long term returns to the fund. As a result the fund did fall below a threshold imposed by FSA, highlighting that the University's investment strategy was not working and prompting remedial action. The University informed us that the shortfall was in the order of £800,000 as at March 2004. With input from FSA, the University altered the investment strategy of the refurbishment fund to reduce the risk that there would be a shortfall in the fund at the end of the full term. The funds have been reinvested in an instrument to produce a fixed amount each year according to an agreed profile, as required for continued maintenance of the accommodation.

Fourthly, you suggested that advisors to the University were enriching themselves at the University's expense. The managers of Owengate were not advisors to the University. Their role was to provide funding and their fees derive from this aspect of the transaction. In addition, through ownership of Owengate Structured Finance they will manage the business of Owengate. For this service they are paid a fee based on the market rate for an independent party to provide these services.

Finally, you also expressed concern about the accounting treatment of the transaction, which appeared in the University's financial statements as a sale rather than a loan. As I have mentioned previously, we are not the auditors of the University. However, it is clear from the papers we have seen that the University sought and obtained specialist, professional accounting advice at an early stage. KPMG have examined this issue on several occasions. On each occasion they concluded that the accounting treatment was appropriate. We have also noted that the accounting treatment adopted by the University is mirrored in the accounts of Owengate (Keele) plc.

As the auditors of the Higher Education Funding Council for England (HEFCE), we also considered the role it played in this transaction. The Financial Memorandum between HEFCE and institutions sets out that it is the responsibility of institutions to ensure best value for money. It was clear from our meeting with officials at HEFCE and the documents we reviewed that the University informed HEFCE of the deal at an early stage and that the University complied with the terms of the Financial Memorandum. We consider that HEFCE was involved in the deal at an appropriate level and met its obligations in its role as supervisor of public funding. We have suggested to HEFCE that any lessons arising out of this novel transaction are considered as part of its ongoing work to update good practice guidance to the University sector.
Finally, I would like to take the opportunity to thank you for writing to us about this matter. Our investigation has led to some useful findings which we will take into account on other similar projects across government. Thank you again for your patience in waiting for us to complete our investigation.
## Capital Expenditure Project Appraisal

**Project:** Financial Restructuring - As Is

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<td>£</td>
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<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
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## KEELE UNIVERSITY

### CAPITAL EXPENDITURE

#### PROJECT Financ

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<td>(2,757)</td>
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#### 2. CASH INFLOWS

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<td>9,680</td>
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<td>10,963</td>
<td>11,237</td>
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<td><strong>TOTAL</strong></td>
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<td>8,564</td>
<td>8,779</td>
<td>8,998</td>
<td>9,223</td>
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#### 3. NET CASH FLOWS

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#### 4. INTEREST RATE

TDR
## CAPITAL EXPENDITURE PROJECT APPRAISAL

**PROJECT**  Financial Restructuring - Loan £65 million

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<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Refurbishment</td>
<td>(1,358)</td>
<td>(1,591)</td>
<td>(1,864)</td>
<td>(2,187)</td>
<td>(2,538)</td>
<td>(1,919)</td>
<td>(1,919)</td>
<td>(1,919)</td>
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<td>0</td>
<td>(2,560)</td>
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<tr>
<td>FM</td>
<td>(2,144)</td>
<td>(2,198)</td>
<td>(2,253)</td>
<td>(2,300)</td>
<td>(2,367)</td>
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<td>(2,486)</td>
<td>(2,549)</td>
<td>(2,612)</td>
<td>(2,678)</td>
<td>(2,745)</td>
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<tr>
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<td>(2,600)</td>
<td>(2,600)</td>
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<tr>
<td><strong>TOTAL OUTFLOW</strong></td>
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<td>(11,100)</td>
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<td>(10,344)</td>
<td>(6,306)</td>
<td>(6,190)</td>
<td>(10,635)</td>
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| 2.1  | £ | £ | £ | £ | £ | £ | £ | £ | £ | £ | £ | £ |
| Rents | 4,950 | 5,297 | 5,667 | 6,177 | 6,671 | 7,205 | 7,385 | 7,570 | 7,790 | 7,953 | 8,152 |
| Loan | 65,000 |
| Interest | 2,143 | 1,965 | 1,792 | 1,628 | 1,469 | 1,321 | 1,232 | 1,157 | 1,096 | 1,147 | 1,219 |
| **TOTAL INFLOW** | 65,000 | 7,093 | 7,262 | 7,459 | 7,803 | 8,140 | 8,526 | 8,617 | 8,727 | 8,855 | 9,100 | 9,371 |

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<th>£</th>
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### CAPITAL EXPENSES

#### PROJECT: Final

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<td>£</td>
<td>£</td>
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#### 2. CASH INFLOWS

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#### 3. NET CASH FLOWS

| 3.1  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 3.2  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 3.3  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 3.4  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 3.5  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 3.6  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 3.7  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 3.8  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 3.9  | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |
| 4.10 | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   | £   |

#### 4. INTEREST RATE

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## KEELE UNIVERSITY

### CAPITAL EXPENDITURE PROJECT APPRAISAL

#### PROJECT
- **Financial Restructuring - S & H**

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#### CASH INFLOWS

| 2.1 | Disposal proceeds | 26,400 | 2,845 | 2,900 | 2,555 | 3,010 | 3,065 | 3,120 | 3,175 | 3,230 | 3,285 | 3,340 |
| 2.2 | Gross Rental | 4,950 | 5,296 | 5,667 | 6,177 | 6,671 | 7,205 | 7,385 | 7,570 | 7,759 | 7,953 | 8,152 |
| 2.3 | Interest | 245 | 339 | 430 | 512 | 587 | 700 | 824 | 958 | 1,198 | 1,454 | 1,598 |
| TOTAL INFLOWS | 26,400 | 6,040 | 8,535 | 9,052 | 9,699 | 10,323 | 11,025 | 11,386 | 11,758 | 12,242 | 12,747 | 13,145 |

#### NET CASH FLOWS

- 4,750
- 2,131
- 2,076
- 1,976
- 1,835
- 1,653
- 2,484
- 2,678
- 2,882
- 5,112
- 5,438
- 3,093

#### INTEREST RATE
- **TDR**
- **7.00%**
- **NPV**
- **37,506**
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Keele University

Capital Expenditure Project Appraisal

Project: Financial Restructuring - Owengate Securities

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2.CASH INFLOWS

| 2.1 Disposal proceeds | 65,000 |
| 2.2 Interest | 2,077 | 2,161 | 2,210 | 2,228 | 2,230 | 2,214 | 2,229 | 2,245 | 2,261 | 2,374 | 2,493 |
| TOTAL INFLOWS | 65,000 | 2,077 | 2,161 | 2,210 | 2,228 | 2,230 | 2,214 | 2,229 | 2,245 | 2,261 | 2,374 | 2,493 |

3.NET CASH FLOWS

| 3 | 42,900 | 719 | 590 | 346 | 41 | (308) | 265 | 310 | 326 | 2,261 | 2,374 | (67) |

4. INTEREST RATE

TDR: 7.00% NPV: 51,046
# Capital Expenditure

**Project**  

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**4. Interest Rate**  

**TDR**
Appendix 3. Reconstruction of the Initial Appraisal

In what follows, the ‘S&H’ securitization will be ignored, for the reasons given in the main text.

In all of the appraisals, row 1.1 is the assumed schedule of future refurbishment expenditures.

In the ‘as is’ and loan appraisals, row 1.2 is also an assumed schedule of expenditures, this time on facilities and maintenance. This expenditure disappears from the Owengate securitization since an equivalent amount from the rents received is rebated to the University as an ‘operating lease rental’. A quick calculation reveals that the assumed expenditures on facilities and maintenance increase at a steady annual rate of 2.5%. Since this was, for a number of years, the UK government’s target for inflation, it is a reasonable inference that the whole table contains monetary rather than inflation-adjusted values. There are other sequences in the tables which bear this out.

In the ‘as is’ appraisal, row 1.3 is the first of a number of inadequately-labelled schedules of interest payment. These particular ones are the payments of interest on the University’s existing loans. The amount of the loans repaid is stated as £21.5m in row 1.7 of the loan appraisal and row 1.3 of the Owengate appraisal. The capital repayments are given in row 1.5 of the ‘as is appraisal’ and these repayments total £18.3m not £21.5m. From this initial debt and the annual capital repayments the running total of outstanding debt can be calculated and hence the rate of interest. This turns out to be about 9.1%, not the 13% quoted in the NAO letter. These payments disappear from the loan and Owengate securitization appraisals because in these scenarios, the existing loans are presumed to have been paid off.

In the ‘as is’ appraisal, row 1.4 refers to that on the additional borrowing which the University would have to undertake in order to fund the refurbishment expenditures of row 1.1. This is quite important since it tacitly assumes the same schedule of refurbishments for the ‘as is’ scenario as for the borrowing and the securitization. It means that the possibility of postponing the refurbishments until they can be paid for from the student rents is left out of account as explained in the main text. The amount of the additional borrowing on which this interest is paid can be computed from the cash inflows and outflows, using a starting value of zero. The rate of interest turns out to be a rather optimistic 5%.

‘Interest’, in all its ambiguities, also figures in the loan scenario. In row 1.3 it refers to interest paid out at 7% on the running total of the £65m loan repaid in 25 equal annual instalments of £2.6m (row 1.4). In row 2.3, on the other hand, ‘interest’ is the compounded return on the borrowed capital less expenditures from the refurbishment fund. In each year (except, for some reason, the first), it has been computed on opening cash balances, before the deduction of the expenditures on refurbishment.
Computing the interest after this deduction would have reduced the NPV by about £1.5m.

The greater part of this ‘interest’ is an assumed return on refurbishment fund whilst the rest is a proxy for the returns on projects funded by the remainder of the capital, i.e. that remaining after the repayment of the existing loans and the establishment of the refurbishment fund. A quick calculation shows that the presumed rate of interest is 5%. The same remarks apply to the ‘interest’ in row 2.2 of the Owengate appraisal.

With the annual cash flows calculated according to the foregoing assumptions, the NPVs of the three relevant scenarios have been calculated using a blanket discount rate of 7%. The documentation which accompanied the appraisals makes it clear that the label ‘TDR’ attached to this 7% stands for ‘Treasury Discount Rate’ though the Treasury Discount Rate has been 6% for many years and is a hurdle rate designed to ensure adequate returns on the investment of public money. As such, it is supposed to be applied to inflation-adjusted rather than monetary cash flows. It has never been proposed as a basis for comparing the benefits of present cash and future income.
Appendix 4: Companies Involved in the Owengate Securitization

Baker Tilley – Auditors to Owengate Keele plc until their replacement by in Keens Shay Keens in October 2004

Citibank N.A. – Bankers, and principal paying agent to Owengate Keele plc.

Citicorp Trustee Company Ltd – acts as trustee for the payments by Owengate Keele plc to its bond holders.

Dibb Lupton Alsop – A Commercial Law firm which advised Owengate Securities Ltd.

F. D Savilles – technical advisor to the controlling creditor on the refurbishment works required on Keele’s student residences.

Financial Security Assurance (UK) Ltd – The UK branch of a multinational monoline insurer which secures the payments by Owengate Keele plc to its bond holders. Also the controlling creditor of Owengate Keele plc.

Keens Shay Keens - Auditors of Owengate Keele plc from October 2004. Qualified the accounts to July 2004 and 2005 and were replaced by Ernst and Young in June 2007.

KPMG – Auditors to Keele University. On the basis of verbal information provided by the proposers, KPMG also advised the University on the accounting treatments implied by the two shortlisted securitization tenders.

Millslade Charitable Trust – The legal owner of the only voting shares in Owengate Keele (Holdings). The assignment of ownership to a charitable trust isolates the securitized rental income from any claim on Keele University or Owengate Keele plc.

Owengate Keele Holdings Ltd – a Holding company which controls Owengate Keele plc, holding all but one of the 50,000 shares. Renamed KRF Holdings Ltd. in 2006

Owengate Keele plc – The special-purpose company which issued the bonds which financed the purchase of the rents from Keele’s student residences and to which the students now make out the cheques for their rent. Company renamed Keele Residential Funding plc in 2006.

Owengate Securities Ltd – A private limited company which was awarded the contract to raise the finance by Keele University.

Owengate Structured Finance Ltd – A private limited company which held a contract with Owengate Keele (Holdings) Ltd to provide management services until the financial restructuring of 2007. These services included the calculation of the student rents necessary to finance the bond service payments and for this the company received an undisclosed annual fee from Owengate Keele plc.

Paribas – An international investment bank, which acted as underwriters for the bond issue.

PriceWaterhouse-Coopers - Consultants to the University on the risks attached to the financial restructuring as a whole. The PWC risk assessment failed to identify the
risks attached to the investment part of the refurbishment fund in equities. PWC had previously advised the University on a ‘tax efficient’ profit-related pay scheme, which fell foul of Inland Revenue regulations and was the subject of a successful legal action by the University in 2003.

Royal Bank of Scotland – Co-underwriters with Paribas for the bond issue.

SPV Management Ltd – a company which specialises in the management of securitization structures. SPV Management Ltd holds the only voting shares in Owengate Keele (Holdings) Ltd. in trust for the Millslade Charitable Trust and receives an annual fee from Owengate Keele plc for the management of the holding company on behalf of the trust. Renamed Wilmongton Trust Sp Services (London) Ltd. in 2006.

Structured Finance Product Marketing Ltd – A private limited company which, in financial year 2001-2, received £41,227 (2001: £50,250) for ‘management costs’ from Owengate Structured Finance Ltd. Established late in 1999, Structured Finance Product Marketing Ltd. ceased to trade with effect from 1st June 2002, having paid a final dividend of £130,207 to its two shareholders (2001, £102,250). In addition, £39,685 (2001; £1,920) was credited to the current accounts of the same two individuals, this time in their capacity as directors.

Tilney Fund Management – a company which managed the refurbishment fund for the University during the Owengate securitization.
Appendix 5. Keele University, Owengate Securitization 2000 – 2007

Keele University

Student Rents

Lease Rental

Admin Expenses

Owengate Keele plc

Control

Owengate Keele
(Holdings) Ltd

Ownership

Millslade Charitable Trust

SPV Management Ltd

Financial Security Assurance
(UK) Ltd

Controlling Creditor

Bond Service Payments

Owengate Structured
Finance Ltd

Calculation of Rents

Bondholders