THE ECONOMIC RATIONALE OF UNIVERSITIES: A RECONSIDERATION*

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This paper is an attempt to make a contribution to current debates about the reform of higher education by using the work of Ronald Coase on the nature of the firm as a framework for considering alternative institutional structures for delivering educational services. Attention is focused particularly on rival ways of coordinating the delivery of educational services and guaranteeing standards. Extreme market-based scenarios involving freelance academics and itemised billing for specific services are contrasted with the present system involving very incomplete contracts for academic employees and package deal purchases of degrees by students. Costs and benefits of different institutional structures are examined. The role of academic professionalism in limiting opportunistic behaviour is considered in relation to policies that involve an increase in auditing of tertiary institutions.

Keywords: accreditation, economic coordination, education policy, franchising, professional services, transaction costs.

INTRODUCTION

The aim of this paper is to explore whether universities as we nowadays take them for granted are necessarily the most appropriate institutions for delivering efficiently the kinds of products that their customers and/or society at large wish for them to provide. My focus here arises partly because of my reflections on the changes that have been taking place in the tertiary education sector over the past decade. These include:

- (i) well publicised central audits of research and audits of teaching performance by visiting panels of academics (for example, in the United Kingdom), with subsequent allocations of funds being made dependent on the results of these audits;
- (ii) mergers of institutions and the emergence of autonomous 'new universities' from former university colleges and polytechnics;
- (iii) the growth of private universities;
- (iv) articulation agreements between universities and other institutions and the advocacy, particularly in New Zealand, of 'seamless' education systems in which students might begin tertiary studies at school and subsequently take course credits with them as they moved on to and/or between polytechnics and universities without having to surmount bureaucratic hurdles;

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- (v) increasingly open rights to tender for research funds, which have left university staff in some countries competing with private individuals and private research institutes or other government agencies;
- (vi) the rise of new information technologies such as email and CD ROM storage systems; and
- (vii) the erosion of academic tenure and increasing talk of privatisation, corporatisation and user charges.

My interest in the delivery of tertiary education is also due partly to an impression I believe I have in common with many academics, namely that universities are prone to be highly politicised, bureaucratic leviathans that are slow moving and difficult to change, where there are quite major differences in performance associated with any level of remuneration. Finally, my interest in this topic has grown out of much of the work in industrial economics that I have undertaken over the past five years, based around the so-called New Institutional Economics that has belatedly grown out of a pioneering 1937 article by Ronald Coase, winner of the 1991 Nobel Prize in Economics.¹ Here, I apply Coase's thinking to the education industry.

THE SIGNIFICANCE OF CONTRACTUAL INCOMPLETENESS

Coase asked and attempted to answer a fundamental question; what is the nature of a firm? As befits someone who was subsequently to play a central role in developing links between economics and law, Coase saw the essence of firms not in terms of physical structures such as factories, machines and offices but in terms of a distinctive contractual system for getting things done. In his view, the firm appears more like a miniature command economy with voluntary membership, than as a market-based way of organising economic activity. A market contract is typically for something quite specific, such as an economy class seat on the 12.15 Air New Zealand flight from Christchurch to Wellington on 25 May 1994, or for a taxi from Christchurch airport taxi rank to Lincoln University right now. Some contracts are very specific indeed, containing all sorts of contingent clauses (X will be undertaken if and only if Y happens) and very precise details concerning the quality of what will be supplied and penalty payments that will be due if it is not supplied.² By contrast, the contracts that bring employees and shareholders together in a firm are very loosely specified in comparison to the roles that they involve. Shareholders have some well-defined rights but these stop short of any right to a particular stream of dividends. Employees may be hired in particular roles within a management hierarchy and with some specification of the terms by which satisfactory performance may be judged and conditions under which the contract may be terminated, but their employment contracts will give them very little guidance about what they will be doing at any particular point of time during their association with the firm. They do what they themselves decide to do, in the light of their assessments of the work environment and directives issued by their bosses from time to time.

An academic's employment contract epitomises Coase's notion of an incom-

pletely specified contract. My own one, for example, formally runs for eight pages plus a covering letter from the Personnel Registrar, but it seems to reduce to barely five lines:

The successful applicant will be expected to serve terms as Head of Department. The Professor of Economics will be responsible either directly or through the Head of Department to the Vice-Chancellor for teaching and supervision of courses in Economics at graduate, undergraduate and diploma level. He/she will be expected to initiate and develop research in the field of economics and to participate in the University's extension and consulting activities.

This is very vague indeed, as far as saying when I will do which tasks, or in defining terms. Does an inaugural lecture come under the heading of extension activities, for example, and would I have run into trouble with the University had I refused to accept the role of supervisor for the two Masters dissertations in Marketing that I am overseeing, given that the contract refers only to Economics? A substantial part of many employment contracts is implicit: both parties have overlapping expectations about reasonable demands that are not written down (everyone knows that new professors do inaugural lectures, don't they?). If expectations are somewhat divergent the relationship between employer and employee nonetheless often lasts for considerable periods, not through formal contract renegotiation but instead on the basis of give and take, until either party decides they have had enough and can make superior alternative arrangements.

Vague contracts are potentially open to what Oliver Williamson³ has called opportunistic behaviour: guileful, self-serving action based on the exploitation of some kind of information advantage. For example, a head of department cannot be monitoring all his/her staff simultaneously and hence staff may be able to get away with doing less for their employers than they would be prepared to do if their efforts could easily be monitored: a lecturer might *claim* to be at home marking assignments if not present at the university, but he or she might actually be spending time running a consulting operation or personal farm. Vague employment contracts also tend to be associated with expenditure on managers, who themselves will have vague contractual ties to their employers. They are needed not merely to extract a fair day's work for a fair day's pay but also because, without a team of managers to coordinate activities and give out directions, a group of employees could end up pulling in conflicting directions if they each tried independently to decide what to do when they encountered events that were not specified in their contracts.

Coase argued that such costs of contractual incompleteness are only willingly incurred by employers/entrepreneurs in order to avoid, at the margin, even more significant costs associated with getting things done by more specific contracts. To design contracts that cover a long period of time is a very costly business if one is dealing with a world of change and wants to make sure the contract is not rendered invalid by a significant event that was not built into the contract. A highly detailed contract *may* cover the contingencies that arise, with no need to have a team of managers to work out what to do, but there may be a surprise because something hitherto unimagined occurs, or there may be ambiguity about what has occurred. Either way, there is likely to be an awful lot of redundancy in the contract, for many

things that the parties worry about will never occur. Contracts can be simplified by making them very short-term, but then the parties will be forever coming back to the negotiating table to work out terms and conditions for new tasks. The beauty of Coasian employment contracts is that they involve relatively low set up costs, since they lack fine print, and they can be in place for a long period. What Coase might have added was that, when employers leave output requirements rather vague, employees may actually do a lot more for a given remuneration than they would if they were only obliged to deliver a particular amount: for academics on probation it is never very clear what the minimum requirements for tenure are, so there will be hesitancy about saying 'No' if senior staff keep putting more tasks on their desks.

Coase sums up the firm as a device for superseding the market mechanism and avoiding the costs that go with using markets to get things done. Once an entrepreneur has decided which sorts of product to be involved in making, the key strategic task then becomes deciding on which activities should be internalised — brought within corporate boundaries to be undertaken by employees — and which should be commissioned from subcontractors. For example, should a university employ computing staff to deal with hardware and software problems, or should it call in outside firms that specialise in handling computing difficulties, as and when the need arises? Between internalisation and subcontracting there lies the fuzzy world of relational contracting: developing goodwill relationships and implicit long-term contracts with outside contractors, even though the latter are formally only hired on the spot. Such trading relationships encourage the subcontractors to make investments that help them deliver a better service for their customers: for example, part-time tutors hired on an hourly basis may tool up with course-specific knowledge if they are given reason to believe they will get called upon regularly, just as lecturers will make similar investments on an understanding, nowhere written down, that they will get to teach the course for several years in a row.

With the recognition of phenomena such as relational contracting, the boundaries and defining features of firms have become fuzzier to economists in recent years as Coase's ideas have been extended. But with this fuzziness has also come an increasing tendency to analyse economic organisation in terms of alternative contractual systems, to ask 'Would it not make sense to arrange things differently?' Let us now go through just such a comparative institutional analysis of methods for delivering tertiary-level education.

A DECENTRALISED, USER-PAYS MARKET-BASED SCENARIO

The degree and diploma industry is largely the preserve of state-owned, budgetbased institutions rather than privately owned profit seeking firms. It shows how much can be achieved on the basis of very vague contracts and relational contracting, rather than through legalistic specification of tasks in fine print. Academics carve out their niches not merely within the universities that employ them but also as members of professional networks where implicit contracts and a concern with goodwill are much in evidence: for example, much refereeing and journal management is done on an unpaid basis or for nominal fees that in no way reflect the opportunity costs of time foregone from activities such as consulting. However, it is quite easy to imagine tertiary-level teaching and research activities being arranged without any involvement of institutions like present-day universities.

In a fully decentralised, user-pays market-based delivery system, customers students and research clients — would make contracts with self-employed academics just as some students hire private tutors and individuals or organisations purchase professional services from lawyers, dentists or management consultants. Some education services might also be sold by firms whose primary business activities involved the delivery of related services (why not even study accountancy with an accountancy firm?). If self-employment arrangements are common with other 'professions', it is not obvious why academia is not built around them too, particularly given the common view that academics are people who tend to avoid working in the private sector or public service because they want to be their own bosses with control over how they spend their time. The net earnings of freelance academics would be derived in the manner set out in Table 1.

Income

- A Fees from students taking one's own subject units
- B Earnings as a subcontractor to other academics' subject units
- C Fees as a student advisor or personal tutor
- D Earnings as an external examiner
- E Earnings as a referee
- F Earnings as a research consultant
- G Earnings as an educational consultant (e.g., as a mentor to peers or for services to an accreditation body)
- H Research grants received
- I Income from article photocopy/CD-ROM usage royalties and lending rights
- J Royalty income

LESS

Expenses

- K Rental of lecture rooms, teaching laboratories and tutorial rooms
- L Rental of office space
- M Secretarial fees and computing assistance
- N Payments to subject subcontractors (e.g., tutors, demonstrators)
- O Payments to external examiners of one's subject units
- P Payments for educational consulting (e.g., mentoring services, advice on teaching and subject design)
- Q Accreditation fees and membership of professional bodies
- R Promotion expenses
- S Payments to research assistants
- T Rental of computing equipment and laboratory space and equipment

- U Purchase of data, books and journals
- V Library fees
- W Communication costs (fax, post, telephone, email)
- X Printing and stationery
- Y Depreciation and maintenance of own computing equipment; purchase of software
- Z Submission fees to journals
- AA Accountant's fee

 Table 1: The A to Z of being a self-employed academic in a decentralised tertiary education system

The picture here is perhaps best understood via a parallel with how musicians assemble a living from teaching, performing with orchestral groups, session work and so on. Students might not emerge with degrees after studying with particular suppliers of educational services (though I will consider this possibility shortly). Instead, they would be able to report to potential employers that they had, say, studied behavioural economics with Peter Earl, just as a freelance classical guitarist might be able to report studying with John Williams. A market-based delivery system by no means precludes continuation of professional work and activities that do not involve fees, such as less prestigious journals continuing not to demand submission fees so long as they could find academics prepared to spend their time refereeing for no fee (possibly because these academics were interested in fostering non-mainstream work or the kind of research that would lead their own ideas to become more widely known).

The student fees that academics received under such a system could come from government vouchers given to tertiary students and/or from self-funded students: a user-pays delivery system is entirely compatible with a continuing government involvement in funding tertiary studies. Decisions about the level of funding per student would affect academic incomes somewhat indirectly, depending on the number of academics willing to contest the market for students in particular disciplinary areas. Students would have to decide for themselves how to budget their finances between different academics' offerings: they might opt for relatively poorly rated but cheap units in some areas of study in order to invest more to study other subjects with renowned scholars. Academics would thus have to compete with each other for business, just as they do within present university systems. However, the pay-offs to competitive success would accrue directly to individual academics rather than, as at present, taking the form of greater staffing allocations to the departments of which they are members. It would be up to individual academics how to price the subjects that they offered and the terms under which they would accept students: those who were in high demand might opt to run large classes and subcontract tutorial work, or they might opt to limit admission to particular kinds of students. Decisions here would probably depend on the standards they wished to set with a view to the long-run generation of their reputations as

teachers. Some of those who could command high fees as teachers might opt to teach fewer hours in order to spend time on developing teaching materials (texts, study guides and so on) based on their expertise and from which they might earn additional incomes; others might choose to spend more time on unfunded research or in chasing research funds.

There is no inherent need for a nesting together of tertiary teaching activities to be accommodated in a set of buildings owned by a single institution known as a university. Just as it would be possible for universities around the world to sell off their physical assets to property companies and then pay fees for using them, so it would be possible for freelance academics to rent the infrastructure facilities that they needed to run the subject units they were selling to student clients. The situation would be very much analogous with that of, say, a psychologist who opts to go into private practice and rents office space and secretarial services for normal consulting activities and who occasionally puts on seminars for fellow practitioners in hotel conference facilities rented out specially for the occasion. There might, of course, be marketing advantages from being located near to fellow academics offering both competitive and complementary subject units. If so, suppliers of office and lecture spaces in particularly sought after locations would be expected to ration their scarce resources by charging premium rentals. It is possible also that teams of academics, like private health professionals and lawyers, might actually form partnership arrangements and invest in their own work accommodation if they felt there were advantages compared with renting. However, difficulties in arranging for prompt exits from partnerships would tend to militate against joint ownership of academic premises by those academics who were not confident of being able to generate a steady stream of earnings to support their practices.

QUALITY ASSURANCE IN EDUCATIONAL MARKETS

I think it is necessary, before I consider the pros and cons of a delivery system based around freelance academics, to devote careful attention to the nature of what is being delivered and alternative ways in which the educational services might be packaged for students. At the outset it should be noted that, under present arrangements, university students are buyers of a product whose nature is incompletely specified. This is not a simple, one-off impersonal transaction like the purchase of a taxi ride; rather, students have a contractual relationship with universities that has much in common with an employment contract. Education is a product that cannot be summed up in a fully specified contract, even though many modern textbooks try to delude students to the contrary with promises that 'By the end of this chapter you will be able to....' For one thing, there is the paradox noted by Arrow⁴: insofar as a contract concerns the supply of information, the actual delivery of information becomes unnecessary if it is detailed in the contract. Someone who had an unsigned copy of the contract would never need to sign it and pay for the information. Another area of difficulty is that what students get out of the educational process will depend very much on what they put into it. It will be very difficult to specify the intellectual capacities they will need to apply to make progress at a particular rate, and very difficult indeed to monitor the extent to which their progress is being

hindered by their lack of effort rather than intellectual difficulties or poor quality teaching.

Now, if academic incomes depend on maintaining a throughput of fee-paying students, and if the achievements of students can be affected by the intensity of teaching, then academics face a conflict of interest that would not exist if educational services could be delivered via fully specified contracts. There is potential for them to succumb to the temptations to accept as students anyone who has the where with a to pay for tuition, and to award degrees to them after giving little by way of tuition services and expecting little in terms of effort and ability. Working against this temptation are, in addition to personal integrity, the difficulties they may expect to run into in the long run if people start to think that the degrees they award signify little about intellectual achievements. Buyers of tertiary-level education need to be able to signal to potential employers that their education has reached a particular standard. They also require a means of judging the quality of tuition they are likely to receive from choosing a particular course of study. In short, students do not want to hand over money only to find that they get little by way of services in return and that even if they contribute a lot themselves their qualifications are not taken seriously.

Under present institutional arrangements, senior staff in universities can be seen as having a key role to play in guaranteeing standards of tuition and attainments. They select teaching staff with reference to their qualifications and professional standing. They oversee the introduction of new subjects. They are in a position to audit teaching and examination processes. They can attempt to demonstrate their students' levels of attainment by commissioning peer reviews of their processes, for example by appointing external examiners or by having their activities audited externally by teams whose members comprise senior staff from rival institutions. University management teams have expertise for judging the quality of academic staff and relative performance, that students cannot hope to possess. If universities vanished as legal entities and freelance academics began to deliver tertiary educational services, students would need new ways of judging the quality of tuition and of signalling the quality of their educational achievements.

Many different kinds of quality guaranteeing devices could appear if tertiary education were market-based. Indeed, Geoffrey Hodgson⁵ goes so far as to suggest that a market can only really be said to exist as an *arena* for arranging transactions — as distinct from a set of bilateral exchanges — if institutions have developed to enable customers to make competent judgments about rival suppliers' offerings without investing inordinate amounts of time in examining suppliers' proposals and haggling with them. Some entrepreneurs might get into the business of providing directories of good academics, just as Egon Ronay prepares good food guides, or the Automobile Association rates hotels and garages. Even now, of course, students' associations offer their own ratings of staff within particular universities and directories of universities are published: universities are by no means functioning perfectly as agencies for guaranteeing and signalling academic quality. Students and employers may not have heard of a particular academic who teaches or examines a subject, but this might not matter if the person were listed on the transcript as

rated by an academic rating agency as a four-star lecturer on a scale of one to five in the area in question, and that the person's subject was rated as a 100-level, 200level or whatever-level unit. Indeed, such an agency might even offer a transcript preparation service for students whereby it collated and rated the results listed on certificates that freelance academics had awarded to them. These transcripts would take the place of traditional degree certificates and transcripts.

Given the wide range of subjects that students might wish to study, the whole business (note the word, business) of rating academics would probably be a multilevel operation. I might find myself wanting to pay, say, the New Zealand Society of Economics to consider my skills for accreditation at particular levels in particular areas and then pay, say, Moody's Directories to have my ratings entered into their publications. I might also receive some fees as a consultant writing references for fellow economists seeking accreditation. All this may seem rather odd to academics brought up under present institutional arrangements, but it is quite normal experience for, say, a clinical psychologist, who may find it difficult, even in the absence of legal restraints, to earn a living without being accepted as a member of a professional association or as an accredited counsellor of a particular kind. The same may be said for used car dealers, plumbers, international removalists, and so on: as Hodgson stresses, professional bodies are a key means by which suppliers of particular services signal the quality of their work.

Franchise arrangements are an institutional device that we might see emerging as a half way house between academic freelancing and traditional universities; indeed, they are already starting to appear even in the present university system and Sir Roger Douglas⁶ has argued a case for private schools using them as a device to expand their geographical coverage without using the boarding-school strategy.⁷ Under this system, the franchiser typically invests in pioneering the teaching system, trains staff in its delivery, undertakes nationwide marketing of the product and acts as a monitor of quality; franchisees pay a fee for the right to offer the teaching programme along quite heavily specified lines within a particular territory. A royalty per student would be paid to the franchiser to give an incentive to ensure that the educational product remained of a standard that kept attracting fee-paying students to study with the franchisee.

TABLE D'HOTE VERSUS A LA CARTE EDUCATIONAL SERVICES?

When students enrol at a typical university, the tuition that they purchase comes as a package deal. The only additional study-related bills they expect to incur are for textbooks, stationery, a personal computer, photocopying and printing. Minor challenges to this philosophy have been going on for some time, with varying degrees of success. For example, in the face of escalating departmental photocopying bills, it is sometimes suggested that students might be expected to pay for extensive handouts of course materials. This sort of suggestion is prone not to be implemented, however, due to worries about administrative costs and fears that students may protest about paying on the ground that this is one of the sort of things that their up-front lump sum fees are supposed to cover. By contrast, universities have been willing to charge students to have their exam grades reconsidered — the charge is apparently there to discourage frivolous requests, but none of the revenue finds its way to from registry offices to the hapless academics who find their research time eaten up by requests to reconsider most of the C or D grades that they dared to award. In this section I intend to consider the economics of a much more radical unbundling of the degree package.

Modern information technology makes it possible for students to be billed on an itemised basis for the educational services that they consume. It is already common for attendances at tutorials to be collected and then recorded on subject spreadsheets. With on-line or full-text CD-ROM sourcing of journal articles being increasingly the path ahead, it is probably inevitable that libraries will start operating increasingly on a user-pays basis in order to ration their scarce supplies of information technology. But we could go much further than this by issuing each student with an ID card with a personal bar code and installing bar code readers linked to individual academics' computers and, if felt necessary, from there to an agency that specialised in billing students on behalf of the academics. Such equipment is already being advertised in the Times Higher Education Supplement, for monitoring examination attendance and library usage. In technical terms it is but a short step to a world in which students are charged on a minute by minute basis for their use of the library and for the borrowings they make. There would no longer be a need for photocopy cards of the kind we presently have, merely for bar code readers integrated with photocopiers, printers and other library information systems. An extension of this technology would involve requiring students to have their bar codes scanned before lecture theatre turnstiles would let them in, and at the start and finish of each consultation in a lecturer's office.

In a market-based educational system, some academics might find that they could make their services appeal to some students by delivering them in this unbundled sort of way, giving the students greater freedom of choice to invest their scarce funds in ways that seemed best to suit their needs. Other students might prefer to forego opportunities for an *a la carte* kind of education in favour of one based around a programme more like a *table d'hote* meal, that involved little scope for paying more for customised service. Programmes might include particular sets of courses, with guaranteed admission to a particular number of lectures, tutorials and hours of office consultations, types of feedback on assignments and so on. Such programmes might be assembled and marketed by entrepreneurs who specialised as educational wholesalers offering branded products that were easier for employers to judge than would be the kinds of educational transcripts produced by rating agencies. Some wholesalers might organise activities in a franchise manner, whilst acting as a fee collection and student-forwarding agency for franchisees. Others might subcontract a range of quite specific tasks to various freelance academics, as well as arranging rental of facilities for the academics to perform in, just as a rock concert promoter may arrange ticket sales, hire a set of venues, PA systems and artists, and the artists have simply to present their acts for a flat fee without having to spend time making all the necessary prior arrangements.

The parallells between a wholesaler of tertiary-level study programmes and a promoter of concerts may be extended into the question of who bears the risks

under alternative systems of organisation. This is a major issue, for there is no guarantee that freelance academics will find enough demand for the services they wish to sell as a means towards earning a living. Under the present system, the universities' balance sheets bear the immediate brunt of unexpectedly low enrolments; staff incomes are not reduced, though staff on short-term contracts may find that their employment is not rolled over into a new contract. Unexpectedly high enrolments are often a gain for the university and a burden for the staff whose teaching loads rise until additional staff are eventually hired but whose incomes do not adjust in line with increases with their teaching productivity. University heads of departments allocate teaching duties to staff over a limited set of courses, so competition for numbers is between a few institutions who can keep an eye on each other's course offerings. Academics in a freelance system of teaching would be prone to offer too many courses, in order to guarantee their incomes: if I don't have a local monopoly over offering second year microeconomics units, then I might also offer, say, a macroeconomics unit in case competitors offer microeconomics units, and likewise, a macroeconomics teacher, fearing competitive offerings, might hedge his or her bets by also offering a microeconomics unit. To the extent the academics can credibly teach in a range of areas there is potential for poor coordination and unduly cut throat competition.⁸

Uneconomic duplication of subject offerings could be reduced somewhat if academics moved from individual self-employment to cooperative ventures in which they offered a range of subjects but specialised in which ones they taught. Academic wholesale operations could provide another means for such coordination problems to be reduced to acceptable levels, a means which does not involve internalisation. Wholesaler entrepreneurs could negotiate contracts with particular academics for block purchases of student places on their courses. They would then seek to fill these places via a retail network of student advisers who, like travel agents, would book places for students once they had worked out their goals and capabilities. The wholesalers would thus offer a guaranteed income for the selfemployed academics but then take the initiative in pricing and marketing subject units and take any profits or losses as their rewards. Permutations involving sharing risks may also be envisaged and might appeal more to some academics and would-be intermediaries.

ADVANTAGES AND PROBLEMS OF A MARKET-BASED SYSTEM

The analysis so far presented may be easier to keep in mind with reference to Figure 1. It is an analysis intended to show that, in principle, those who wish to receive a tertiary-level education do not have to deal with modern universities, typically large organisations employing hundreds or thousands of teaching staff with extensive investments in physical infrastructure. It is easy to envisage the delivery of education being arranged instead in ways similar to those employed in professional and leisure services. I now turn to consider some of the pros and cons of the kinds of contracting systems I have been outlining.

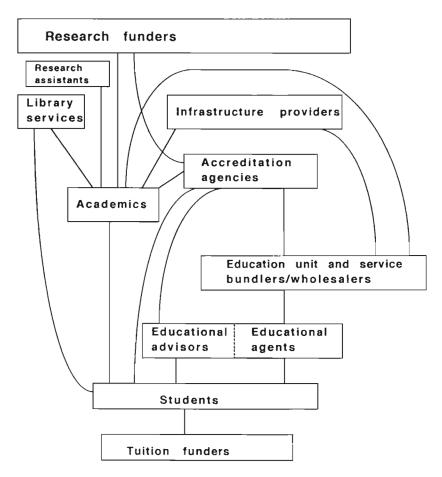


Figure 1: Decentralised funding, coordination and delivery

Advantage 1: improved utilisation of physical resources

The combination of privatised physical assets and freelance academic providers of human assets sounds like a recipe for greatly reduced infrastructure costs. The typical university at present makes little use of the potential for internal pricing systems to ensure that its physical resources are efficiently used. Many lecturers' offices are empty for major parts of the working week whilst their supposed occupants are elsewhere teaching, researching or working at home. If lecturers had to rent their own offices there would be a major incentive to devise space roster arrangements similar to those that private sector suppliers of other professional services are used to contracting from companies that sell serviced office space on an hourly or daily basis. Problems with safeguarding property such as academic libraries and files might tend to make academics keep these resources at home, and in some countries they would be able to claim tax relief against the parts of their homes devoted to work activities.

If academics had to pay for their own teaching facilities from their own teaching budgets, they would have an incentive to shop around in terms of both location and time of day for economical deals. No longer would prime timetable slots and soughtafter modern lecture theatres be made available very much at the whim of timetable committees with no use made of prices to ration scarce space; rather, suppliers and consumers of educational services would be encouraged to ask serious questions about what they were prepared to pay in order for subjects to be offered at particular times of day and in particular kinds of premises. In the event that owners of teaching and office spaces did not offer deals as appealing as those available elsewhere, freelance academics could signal this by *exiting* — in contrast to the situation at present in some universities where lecturers can voice their objections to the way that resources are being allocated but often feel powerless to do very much in the face of an unresponsive bureaucracy.9 I would predict that in a decentralised system of provision of tertiary education much more teaching would be conducted outside of normal office hours, using space rented from schools and firms and that purpose-built accommodation would also have higher rates of occupancy. Owners of school and business premises would be more inclined to have their facilities designed to capture the tertiary market, trading the costs of doing so against the cost of receiving no revenue during periods when they were not being used.

Advantage 2: a heightened concentration on servicing clients

In general there would be more scope for academics to experiment with innovative subjects and teaching styles. Academics with good reputations who wanted to pioneer subjects that threatened to steal numbers from colleagues' enrolments would no longer have to battle through departmental 'retreats' and subsequent endless layers of faculty and university committees before being given approval and being *allowed* to teach their subjects. Rather, they would pay to have their proposals rated for academic level by an accreditation body and entered in databases used by professional advisors of students; then they would be able *freely* take their chances over whether they achieved any sales. In order to stay in business, accreditation agencies and academic database compilers would need to offer a service at least as good as potential suppliers of such services; as with international credit rating agencies such as Moody's Investors' Services and Standard and Poors, we might well expect there to be actual competition rather than monopolistic provision of accreditation services.

Libraries provide another area where services can be more entrepreneurial and responsive to client needs if privatised and run on a user-pays basis. Library firms could engage in cooperative interloan arrangements just as they do at present, but one might also expect academics in some cases to deal direct (via email and courier services) with distant libraries that offer access to superior collections if this ena-

bled them to obtain books and papers more rapidly or at less cost than they could if they used local libraries as intermediaries. One might also expect that, as email networks develop, a further source of supply would be direct from authors, in the event that enough libraries failed to stock their books or deterred their use via high lending charges. Under a user-pays system, private enterprise libraries would be under market pressure to develop their collections in ways that ministered to the preferences of their customers: it would be in their interests to ensure that ordering of stock were not the haphazard process it tends to be under the common present system of relying on recommendations from academic staff, many of whom are too busy to make orders or too inclined to presume that someone else will be ordering even if they are not. Either libraries would employ subject librarians who had considerable expertise in their subjects, or they would buy advice in from academic consultants or from agencies that specialised in keeping an eye on what was being published and how it was being received by reviewers.

Advantage 3: More efficient use of human resources

With coordination dealt with via individual responses to market conditions or, for a fee, by organisers of degree package deals and academic database services, there would be little need for academics to spend their time in meetings of the kind often satirised by novelists such as Malcolm Bradbury and David Lodge. Present systems of departmental and faculty board meetings are conducted in many universities with little regard for their cost in terms of academic time foregone from other uses, or with any consideration for resources eaten up in photocopying. Many staff are present at such meetings merely in order to ensure that the numbers will guarantee the fates of particular politically-based proposals or simply to speak very briefly on particular issues; much of the time, they have little reason to be there. Under a market-based system, where academics charge for their time, interchanges between individual academics and/or between academics and entrepreneurs specialising in providing coordination services will be avoided unless they concern specific inquiries; committees would be replaced by consultancy investigations.

The unbundling of teaching services seems likely to assist in bringing the marginal benefits that students derive from the services they consume more into line with the marginal cost of providing them. This is more likely to be a consequence with itemised billing for office consultations, since it is easy to monitor who is receiving a private consultation and each consultation involves an additional demand on the lecturer's time. (With large lecture theatres, turnstile devices would be needed to monitor attendance and indivisibilities of size mean that empty seats could accommodate extra students at no cost to the lecturer.) Here, there are some parallells between the problems that arise in the bundled fees approach to charging students and those associated with a charge-free health care system a small proportion of whose customers are hypochondriacs. Professionals in both systems end up spending a disproportionate amount of their time seeing a few of their clients again and again — clients who in most cases would have more fulfilling lives in the long run if they could be eased out of being dependent.

At present, the chief cost to the student of a consultation with a member of staff

consists of time foregone from the next best alternative activity, including time spent queuing to get to see the member of staff. A further restraining factor may be the feelings of guilt that the student might feel from seeing the lecturer too frequently, insofar as this conflicts with expectations about what it is reasonable to get from the lecturer rather than achieve by one's own work. However, students ---particularly full-fee-paying overseas students --- may start feeling less guilty about demanding more when increasingly high bundled fees are demanded by universities. If the returns to private study time in a library and/or private thinking about how to answer a question are seen as low, there will seem little reason not to call for advice from a lecturer, in the hope that the advice will short-cut the need to read or think. No wonder, then, that students may be prepared to sit and wait for the next vacant opportunity to seek advice from lecturers in universities that pride themselves in offering an open door policy. Under a bundled fees system, the student is not encouraged to think of the lecturers' time as having any opportunity cost and is not given a great incentive to try to become more self-reliant and develop vital skills in studying and tackling problems. Such incentives only arise insofar as it proves difficult to get to see the lecturer because so many other students are queuing up to do so. Under such a system it seems likely that the bulk of office consultations will be with students with poorly developed study skills since those who can work effectively on their own will normally be unwilling to risk having to queue for a long while and forego productive study time.

In the absence of a formal system of charging for consultations, lecturers are likely to begin to find the open door policy becomes completely unworkable once the staff/student ratio deteriorates beyond a particular point. (With small class sizes the implicit contract over reasonable conduct may limit the number of times their students see them on average even though queuing is not a problem.) They will begin to incur so many interruptions to their other tasks that in order to avoid burnout they will start imposing prices on the students, whether in the form of limited office hour consulting times (to raise queuing costs), consultations by appointment only (to impose at least some kind of an upfront administrative hurdle and so that they can use long lead times to deter those who seem particularly lacking in selfreliance), or simply offering perfunctory rather than consummate assistance (in other words, they give advice but with 'frown costs' as part of the atmosphere of the transaction). This outcome is understandable in economic terms but is hardly a sign of efficient delivery of educational services, particularly if institutions promise more than their staff can deliver by way of personal advice.

Advantage 4: Greater choice of work lifestyle

Under a freelancing system academics would have greater scope for piecing together the sorts of working lives that most appealed to them. Academics could control their lives more by choosing which individual tasks to sell their labour time to implement, instead of buying into a vague contract that might result in them finding more and more tasks put on their desks with vacation leave being foregone merely to enable them to keep abreast of the demands of the workplace. Academics who wished to specialise in teaching particular kinds of classes and who wish to avoid being involved in administrative matters could do so, by bidding for the

kinds of subjects they preferred and by using the services of coordination agencies — signing up simply to teach with all the hiring of facilities and registration handled by the agencies — and by not selling their time on educational consultancies. Those who wanted to work part-time or teach less and spend more time as paid referees, or in chasing research funds, could likewise do so. So long as contracted tasks were done according to contract, recipients of a service would be in no position to ask questions about how academics choose to use their time when not engaged providing that service.

Possible disadvantage 1: Academics may spend a considerable amount of time negotiating contracts

This possibility is hard to ignore, given my opening discussion of Coase's analysis of the nature of the firm versus the market as a means of coordinating economic activities. However, as we think about it we should keep in mind the likely emergence of coordination services competing for good academic inputs just like holiday package tour firms need the goodwill of their client suppliers of tourism services just as they need the tourist clients who wish to consume them. Just as academics who decide that their present university employers run an overly bureaucratic or chaotic system can seek to move to better managed institutions, freelance academics could experiment with alternative strategies and suppliers if they felt they were spending too much time fixing things up for themselves or dealing with poor quality suppliers of coordination and other services.

Possible disadvantage 2: It might be too difficult (or easy) for deviant academics to gain accreditation

If professional bodies took a narrow view of what constitutes acceptable or excellent academic performances in their disciplinary areas, those academics who failed to fit in with the party line could find it difficult to gain approval and hence to win places in academic directories vital for marketing themselves to students. The closed shop tendencies of many professional bodies are well-known and are of great concern to those who take a relativistic view of scientific knowledge.¹⁰ However, so long as there is a free market for accreditation services, then deviants might seek recognition elsewhere. In economics there are clear signs of how deviants do get organised into professional groups that run their own journals, for example, the Association for Evolutionary Economics and the Society for the Advancement of Socio-Economics. Probably the real disadvantage of a free market in tertiary education in respect of accreditation is not that some academics will experience difficulties in gaining recognition but the opposite — that, for a fee, anyone might gain accreditation, just as people can buy 'degrees' from unrecognised but plausibly named 'universities' and rusting hulks can gain certificates of seaworthiness from profit-making agencies associated with governments who let their insignia be used as flags of convenience. In the absence of public sector regulation, students might need to be educated at school in ways of judging between types of accreditation or might purchase advice from higher level market or public agency that specialises in accrediting accreditation agencies.

Possible disadvantage 3: Short-term contracts may bias the direction of research

This possibility is related to familiar arguments in favour of university staff being hired on contracts that, following a successful probationary period, provide for lifetime employment. The tenure argument is normally advanced with respect to a need to guarantee academic freedom. However, a further dimension is that those who are on short-term contracts may work out research programmes very much with a view to keeping themselves marketable, going for projects that will rapidly bear fruit in the form of articles and steering clear of major acts of scholarship that have very long gestation periods. Freelance academics might be able to reduce such pressures insofar as they could negotiate, say, five year forward sales of block bookings for their services with educational package deal agencies. The costs of reviewing academics for accreditation might also mean that this procedure were undertaken somewhat infrequently, unless the academic were seeking to be elevated to a higher level of accreditation.

Possible disadvantage 4: Students may not see merit in spending more than the bare minimum on their studies

Students may be inexpert judges of what it is in their best long-term interests to do. Prior to their choices of educational programmes, and subsequently when they a reundertaking them, they could pay for advice, but they might be suspicious that advice could be coming from those who stood to gain from giving particular kinds of advice. It might be necessary for governments to introduce a regulatory framework similar to those used in to deal with analogous conflict of interest problems in the financial services industry. Something less than a free market might be needed to counter a further problem: unbundled, fee-for-service forms of delivery of tertiary education involve greater risks that students might try to get their degrees on the cheap and actually end up paying more in the long run because they were too conscious of the costs of seeking advice and prone to underestimate the benefits of individual consultations. A possible strategy for dealing with this arises quite simply if students are only partially funding their tertiary studies and are required to purchase study vouchers from the government, at a discount. These could be made student-specific, so that no secondary market emerged, and the government could oblige students to purchase a minimum number per year of full-time tertiary studies. It would then be up to the students to decide how to use their vouchers and, with their funds sunk into the vouchers at the outset, students would be inclined to use them up to the full.

Possible disadvantage 5: The range of options available to students may decline

This possibility is related to the one just considered. At present, subjects with low enrolments are cross-subsidised by service courses where one academic lectures to several hundred students. With a market-based system more attention would be given to the costs and benefits of offering unpopular subject units. Cost-conscious students might be inclined to take cheaper units where low prices were achieved on the basis of large enrolments. An apparent consequence would be in-

creasing similarity among patterns of study in particular areas and a bias against new units because of their set-up costs. Two main forces could work against such an outcome. First, costs could be contained by designing teaching methods to economise in respect of lecturing to small groups. Subjects could be based more around guided private reading, whilst localised small groups of students in particular subject areas could be concentrated together via the use of distance education methods. Secondly, if the kind of voucher-based system discussed in the previous paragraph were introduced, then, in order to make the most of their budgets, students might opt to use some of their vouchers to pay for studying relatively unpopular subjects, rather than to pay for, say, more intensive tuition as a means of achieving higher grades on popular subjects whose basic costs were lower.

Possible disadvantage 6: A loss of equity for students

A student with a great inclination and ability to invest in a programme of high quality tertiary education might opt to spend more than less affluent and less well motivated students. For example, under a freelancing system one would expect tuition from academics involved in unfunded research to be more expensive: unless they were prepared to buy research time as a luxury by foregoing income below target levels, academics would only be able to engage in unfunded research if they could earn at a higher rate per hour when teaching, for time spent doing research is time not available for teaching. Such higher teaching fees would not be paid by students unless they were convinced that their education would be enhanced (or would appear to prospective employers to have benefited) by being bestowed by active researchers. In an unbundled system, slow-learning students who needed more consultations with their lecturers would, other things equal, be less able to afford an education with research-oriented academics, and similarly for less affluent students, unless scholarships were available.

Valid though these claims might be, some other points can be made in opposition to them. First, this analysis does tend to ignore the possibility that academic highfliers might be the ones most prone to want to spend a lot on their education: they might be more likely to see the benefits of investing in computing equipment and know-how, paying to be members of classes given by renowned and more intellectually demanding scholars, and making voracious use of library facilities whilst their less able peers stuck to basic texts. Secondly, we might note that prevailing systems whereby universities charge pretty much the same fees but choose whom to admit on the basis of academic records are hardly equitable themselves: if academic high-flyers wish to be taught by academics whose teaching loads are low enough to enable them to push back the frontiers of knowledge, they tend to find that such academics are very happy to admit them in preference to those with less promising records of academic achievement.

Possible disadvantage 7: Loss of 'atmosphere'

Following the work of Oliver Williamson,¹¹ New Institutional economists have recognised that the productivity of systems of economic organisation are affected

by their atmosphere and that attempts to contrive a particular kind of atmosphere as part of a contractual arrangement may be very difficult to engineer. Even in present systems it is clear that the atmosphere of distance learning and commuter universities is different from that at residential universities, and learning processes are probably affected by this. It is doubtful that a decentralised tertiary education system in which students bought unbundled packages of educational services would have the kind of collegial atmosphere offered by a typical university where most students reside on campus. Consultations with staff, and between staff, would just not be the same if accompanied by the sound of a ticking clock against which consulting fees would be calculated. If students were piecing together their educations in all manner of different ways they would be less likely to intermingle and learn outside the classroom on a social basis. Having seen how few of my commuter students realise what they may be missing in terms of social learning by not being resident on campus, I wonder how far educational entrepreneurs would be successful in selling the benefits of franchised package deals that sought to enhance the social side of the learning process. Freelance academics would face much the same problems as students with disparate learning programmes. However, they might be expected to attempt to overcome them by investing more in attending conferences and participating in local gatherings of professional societies.

CONCLUSION

From the standpoint of the New Institutional Economics a university is seen as a coordinating device that signals and upholds academic standards as well as allocating resources. But it is by no means the only conceivable way of achieving these ends. If a government with a New Right persuasion closed existing universities, auctioned off their assets and opted out of any further involvement in arranging the delivery of higher education, it is by no means obvious the forces of free enterprise would select universities --- albeit private ones --- as the dominant delivery system for tertiary teaching and research. It is quite possible that several systems would prove viable in the long run, though it is likely that the transition process would be quite messy unless the change to the free market system were signalled well in advance of its implementation — in contrast to what has happened in countries such as the UK where almost overnight many new universities were created out of former polytechnics. In New Zealand the Education Minister's attempts to foster a seamless education system fell a long way short of promoting the extreme free market system outlined in this paper. However, they do recognise that if a variety of institutions (schools, polytechnics and universities) have the capacity to offer similar services to students then students might benefit from being given more choice in how they put their educations together and when they make the move from one institution to another. Universities themselves also appear to be opening their minds about possible ways of delivering educational services that increase student choices without compromising standards: they are making cross-creditation of subjects much easier; they are increasingly making use of specialist consultants or external teaching contractors rather than presuming that, wherever possible, tasks should be handled internally by long-term employees; and they are even getting involved in franchising activities.

It remains unclear to me how far the extension of the market should go in tertiary education. Signs of institutional failure are certainly not hard to uncover. Here I will mention just three examples. First, private sector personnel managers must be astonished by the way that some universities take years to fill vacancies, particularly at a professorial level, or hire manifestly undergualified junior staff (particularly in the business area), because senior management are out of touch with the realities of the labour market. Considerable staff time can be eaten up in these processes. Secondly, in the United Kingdom, the tendency of new universities to award chairs to senior staff with research records nowhere near to those typical in established universities has caused much disquiet for example, the *Times Higher* Education Supplement, 18 March 1994, reported that Dr Phil O'Keefe of the new University of Northumbria resigned his chair in protest in his own inaugural lecture. Parallel but less dramatic grumbling was heard in Australia a few years earlier as the binary divide there came to an end. Thirdly, as someone who originally trained and taught in the United Kingdom, I have been horrified over the past decade to observe relatively little inclination to engage in double marking and external examining of undergraduates in Australasia. When answers are marked only by a single examiner, lecturers who believe that degrees are being awarded in too slack a manner can appeal to no external reference point if trying to uphold their raw marks against empire-building heads of department who would prefer to cook the marks into something more palatable to those who allocate resources between departments and institutions.

On the other hand, universities can be portrayed as remarkably effective devices for economising on the costs of using markets by offering flexible bundled products called degree or diploma programmes and hiring staff on exceedingly vague contracts. Academic professionalism and dedication have enabled many universities to function on the basis of much give and take with much smaller management structures than private firms with comparable numbers of employees. By not making many things the subject of fresh contracts they have sidestepped the problem that, if items have to be charged for on an individual basis, the number of things that can be purchased may be reduced by the consumption of resources in the contracting and billing process. It is conceivable that opportunistic behaviour may be far less in universities than in the world of business. Thus in many cases academic integrity may have been sufficient to stop standards from being compromised despite minimal formal monitoring and auditing of performance.

Insofar as the delivery of tertiary education is indeed based on professional expertise and non-opportunistic conduct, it may be unfortunate that education ministers are, via their demands for greater accountability, leading to growth in corporate-style management with expensive new senior appointments and demands that staff fill out audit forms in triplicate. Such costs of management could be a major drain on resources that might have been used for teaching and research, for little or no gain in operating efficiency. It is paradoxical that government demands for accountability are increasing at the same time as governments are trying to facilitate competition in the delivery of higher education. If competition between alternative delivery modes is intense, it will be in the long-run interests of those who provide educational services to take their own steps to ensure they are not squandering their resources and that they can convince potential customers of the quality of their products.

NOTES AND REFERENCES

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- 10 Such a view of knowledge is epitomised by the work of Paul K. Feyerabend, Against Method: Outline of an Anarchistic Theory of Knowledge, London, New Left Books, London, 1975.
- 11 Williamson, 1975, op. cit.