CHAPTER 7

FUNDING METHODOLOGY, INSTITUTIONS' RELATIONSHIPS WITH THEIR SELF-FINANCING OPERATIONS, AND EFFICIENCY

SECTION I. FUNDING METHODOLOGY

7.1 In Chapter 6, we argued that:

(a) institutions have made impressive strides in establishing their research capability: it is now time for them to focus on the enhancement of teaching and learning;

(b) attaining and maintaining a high quality of provision in all programmes is essential;

(c) research funding and resources should be much more competitively allocated; and

(d) role differentiation within the UGC sector is essential.

It is clear that in the UGC sector – as in any higher education sector – the way that the funding authority channels and allocates resources is one of the key drivers of institutional behaviour. (The other is the promotion/tenure policy of institutions, which is the key driver of individual academic behaviour.) We have also acknowledged that as performance in research influences the level of research funding, this is also one of the factors contributing to the undue emphasis on research. In this section, we briefly describe the current funding methodology, consider whether it is still fit for its purpose, and set out how we believe assessment and allocation tools available to the UGC can address the issues mentioned in this paragraph.

The Funding Formula

7.2 The vast bulk of UGC funding is provided to institutions in the form of a Block Grant. The Block Grant has two key components to it. About 75% of the Block Grant is made up of the teaching element, and about 25% is made up of the research element. The current funding methodology was originally developed by the UGC in the mid-1990s. It has stood the test of time well.

The Teaching Element of the Block Grant

7.3 For taught programmes, the formula differentiates funding between three broad types of programmes: medicine and dentistry, engineering and laboratory-based and others. The same amount of funding is awarded per student irrespective of the institution in which the programme is taking place. The formula also differentiates funding by level – sub-degree, undergraduate, taught postgraduate and research postgraduate – and by mode, full time or part time. We have commissioned two consultancies to look at the funding methodologies employed by respected systems around the world [E31]. These have shown clearly that the above types of funding systems or formulae are widely used by other funding agencies and seen as successful. We do not see a need for any fundamental change. However, we do see a need for a move away from relying solely on input funding to a method that focuses increasingly on output measures – as set out below.

The Research Element of the Block Grant

7.4 The research portion of the Block Grant is designed to provide infrastructure funding to enable the institutions to provide both the staffing and physical infrastructure necessary to carry out research, and to fund a certain level of research. There is also specific funding for the RGC to support individual research projects in UGC-funded institutions. Having these two sources of research funding (in the Block Grant and separately for research projects) is known as the "dual funding method". The distribution of funding through the research portion has been informed by the Research Assessment Exercise to determine the relative quality of the research being undertaken in institutions.

7.5 The dual funding method was inherited from the UK system. It does apply in a number of successful research jurisdictions but it is by no means a prerequisite for excellent research – as demonstrated, for example, in the US system, where it does not exist. We do not believe that a radical move completely to disband the dual funding method and remove all of the research element funding would be appropriate for Hong Kong. However, the balance of funding in the research element of the Block Grant compared to that available for individual projects under the RGC needs to change. We discuss this in paragraphs 7.16 to 7.18 below.

7.6 The current funding methodology is fit for its purpose, but the way in which funding is assessed and allocated needs change and refinement. It is clear that the major effort of institutions is now on chasing the marginal research dollar. This is perhaps inevitable when research funding must be based on competition and excellence. Our challenge is thus to make teaching funding equally dependent on achieving excellence in teaching – and this must be reflected in the output of programmes. That will not be an easy task because assessing whether teaching quality is good or indifferent is exceedingly challenging to do, although – as discussed in Chapter 6 – not impossible. It is also clear from the experience of over 15 years of seeking to embed role differentiation, that the UGC's efforts to persuade institutions to distinguish themselves and develop distinctive strengths have not been overly successful.

7.7 At the same time, we do not wish to burden institutions with a multitude of different assessments and funding hoops to go through because we are very aware of the regulatory burden this would impose. However, there is a ready-made mechanism that can be better utilised to achieve the above aims: the Academic Development Proposal process.

The Academic Development Proposal Process

7.8 The UGC and its funded institutions operate on a triennial funding and planning cycle. Every three years there is a significant exercise to review performance, to map out the academic direction for the next three-year funding period and to work out the costs involved, working within an indicative overall funding limit determined by the Government. The details are set out in Chapter 2 of the UGC Notes on Procedures – http://www.ugc.edu.hk/eng/ugc/publication/note/nop.htm. The key documentation in this exercise is the production by the institutions of their Academic Development Proposals for submission to and discussion with the UGC.

7.9 We use this exercise to help in the assessment of where to allocate resources. In the 2009-12 triennium, the UGC initiated a competitive allocation process to allocate a percentage of first-year, first-degree places according to an assessment exercise it conducted based on the institutions' Academic Development Proposals. The exercise was guided by two principles: to enhance the role of each institution and to advance the international competitiveness of individual institutions, as well as that of the UGC sector as a whole. The exercise took place in 2008, and provided a valuable opportunity for institutions to reflect on their key areas of activity, primarily in terms of undergraduate programmes. It involved institutions identifying areas that might be slimmed (if necessary) and those that they felt were promisingly new or expanding. It sought qualitative and quantitative input and output data from institutions to back up their assertions. We were able to move student places between institutions to reflect comparative merit, both on the basis of the submissions/assessments made and because of other factors that meant first-year, first-degree places were available for redistribution [E32].

7.10 We have decided to build on the competitive allocation process of the Academic Development Proposal exercise to help achieve two of the main aims set out in this report: a refocusing on teaching and giving role differentiation legitimacy and encouragement. In doing so, one of the key components will be the acquisition and presentation of data on the quality of provision as illustrated increasingly by output assessments and value-added. This will take time to achieve but is something we believe to be vital for the sector.

Recommendation 29:

The UGC should transition to a funding regime based on the assessed quality of outputs and outcomes, reducing the current regulatory burden.

Recommendation 30:

The funding regime should reflect high-quality teaching outcomes.

Key Elements in the 2012-15 Academic Development Proposal Exercise

7.11 The next Academic Development Proposal exercise will be for the 2012-15 triennium and has already started. The 2012-15 Academic Development Proposal will be guided by the two defining principles of the 2009-12 competitive bidding exercise. For 2012, we intend the exercise to be broader in scope, while still focusing primarily on undergraduate development, quality, output/outcomes, *etc*. An institution's strategy and vision for its taught endeavours cannot be separated from its strategy: regarding its role, for research, for business/community engagement (including knowledge transfer/exchange), for self-financing activity and for collaboration. We propose to utilise four broad indicators for identifying the key activities of institutions:

(a) Strategy
(b) Teaching and Learning

(c) Advanced Scholarship
(d) Community (including Culture and Business)

The information provided within the above areas will allow us to deal competently with both competitive allocation and role differentiation in the same exercise.

Research

Current Sources of and Competition for Research Resources

7.12 There are three main sources of research funding and resources under the UGC:

(a) the research portion of the Block Grant (approximately $2.7 billion per annum);

(b) the allocation of research postgraduate places to institutions (approximately $1.4 billion teaching funding per annum); and

(c) the funding disbursed through the RGC (approximately $750 million per annum) [E33].

The extent of competition within these three elements varies considerably.

The Research Portion of the Block Grant and Research Assessment Exercises

7.13 The allocation of the research portion of the block grant has been driven primarily by an institution's performance in the latest Research Assessment Exercise. The Research Assessment Exercise is intended to allow peer-reviewed discrimination between outstanding researchers and those who are merely excellent. However, it is clear that the threshold – or benchmark – used in the 2006 Exercise (the latest) did not achieve this well, as there was bunching of results for most institutions towards the top end of being considered as at the "fully research active" level.

7.14 This is not a problem unique to Hong Kong. In the UK, which is where the Research Assessment Exercise concept was initiated and is best developed, the exercise has become increasingly discriminating, complex, time-consuming and expensive to run. This has proved necessary to allow it to discriminate successfully and gain the general acceptance of the participating institutions. The UK authorities are trying to make their next exercise much more metrics (mechanically) based. Nevertheless, consultation has pushed the model increasingly towards the highly discriminating, peer-assessed exercise previously employed.

7.15 In Hong Kong, we have also tried to move away from Research Assessment Exercises – perhaps altogether – and have consulted the UGC-funded institutions on the matter over a number of years. While there remains a significant research portion in the Block Grant, neither the UGC nor the institutions have been able to come up with a satisfactory alternative. Nevertheless, we consider that the worth, necessity and feasibility of conducting a further Research Assessment Exercise should be seriously reconsidered in light of proposals in this report – set out below – and decisions that the UGC has already made to ensure that research funding is considerably more competitive.

Recommendation 31:

A thorough review of the practical effectiveness of the periodic Research Assessment Exercise should be undertaken before it is held again.

The Quantum in the Research Portion of the Block Grant

7.16 We consider it important to look at the balance of research funding available from the various sources. The research portion of the Block Grant is the largest source of research funds – $2.7 billion per annum. It dwarfs the amount granted for peer assessed research projects under the RGC – $750 million per annum. The ratio is about 75/25. We have examined a report on other systems that also employ the dual funding model. The amount of public funding in those systems that comes through the research portion is much lower at approximately 50%. We believe that the balance in Hong Kong needs to be adjusted so that more funding is provided in association with research projects, rather than to the institution as a whole. We have proposed to institutions that over a period of up to ten years about $1.3 billion should be transferred from the research portion of the Block Grant to the RGC.

7.17 There should be no illusion that this re-balancing will be a simple exercise or that it will be warmly applauded by all. Having a large research portion in the Block Grant gives Heads of Institutions great flexibility to allocate funds as they see fit. Moreover, a significant element of the research portion is used for research infrastructure in an institution: the payment of professors/technicians' salaries, laboratories, consumables, *etc*. However, we strongly believe that the quantum of funding available under the RGC is insufficient for it to drive and nourish world-class research, and it should be increased. We have also taken into account the $1.4 billion of resources in the form of teaching funding for research postgraduate places, which provide institutions' administrators with a significant source of funding for research-related activity.

7.18 One key element in this change will be to ensure that the real costs of doing research are properly identified and funded. These real costs – or full costs – need to include both the time of the Principal Investigator involved and the extensive "on-costs" associated with carrying out research project work. It follows that the quantum of full costs/on-costs must be increased concomitantly with the transfer of funds from the research portion of the Block Grant to the RGC. Importantly, this will allow Heads of Institutions to manage the transition, as we will ensure that on-costs are returned to the institutions and not to the Principal Investigators.

Allocation of Research Postgraduate places and the Assessment of their Quality

7.19 The current allocation of almost all research postgraduate places is historically based. Apart from the 800 new research postgraduate places that the Government granted to the UGC for deployment in the 2009-12 triennium, basically all the existing 4,765 places are simply allocated by the UGC, without reference to performance, quality assessment or competition. Several Heads of Institutions have argued that although such a methodology was appropriate in the past, when there was a clear differentiation in the research capability of institutions, it is not appropriate now. It is to the credit of the heads of those institutions now being allocated the bulk of the research postgraduate places that they have also agreed that the system should change. Institutions believe that genuine competitive conditions for research postgraduate places will allow them to flourish, and this is a fair and healthy development.

7.20 We have thus decided to introduce competition for research postgraduate places as rapidly as possible. The process has already started with the 800 new research postgraduate places, where some 400 are being allocated to the new PhD Fellowship Scheme of the RGC and the remaining 400 by reference to institutional performance in the various competitive research schemes that the UGC and RGC have. It is intended that within five years, starting from 2012/13, 50% of all research postgraduate places (2,800 places in total) will be competitively allocated. As these changes are being introduced it will become important to be able to assess the quality of the research postgraduate students emerging from the system. We are consulting the

UGC-funded institutions on how best to achieve this across the system.

Recommendation 32:

> **Means of assessing the quality of research postgraduate students emerging from the system should be implemented to inform decisions on the allocation of research postgraduate places.**

SECTION II. INSTITUTIONS' RELATIONSHIP WITH THEIR SELF-FINANCING OPERATIONS

7.21 In Chapter 3, we described that there is now a thriving and expanding self-financing element to the post-secondary education sector. What may not be so apparent is the fact that a very significant element of the self-financing provision is in reality provided by community colleges closely or loosely affiliated with UGC-funded institutions (largely at the sub-degree level) or by self-financing units within the institutions themselves (largely at taught postgraduate level). Approximately 80% of all self-financing provision is carried out by arms of publicly funded institutions, including the Vocational Training Council. This would be highly unusual in other jurisdictions, and has implications.

The Sub-degree Sector

7.22 There was some logic and merit in UGC-funded institutions taking the lead to build up the self-financing sub-degree sector. They had good brand names and thus prospective students were given a level of assurance that the programmes provided would be of sufficient quality. UGC-funded institutions could, moreover, use their self-accrediting status (see Chapter 8 on Quality Matters) to launch programmes quickly. They could draw on a ready pool of competent academics to teach at least some of the programmes. Finally, they could also be trusted by the Government to take forward the large campus building projects, which have now recently opened or are coming to fruition.

7.23 Nonetheless, there are also drawbacks. With all of these advantages, the community colleges were extremely competitive compared with their private sector emulators that did not have parent universities to draw help and resources from. The "independent" self-financing sector has represented to us that it feels the playing field is not level. The ability to draw on a pool of respected professionals and the possession of an established brand name do not in themselves imply that the playing field is tilted: these are facts of life in any business, even education. Yet cross subsidies from publicly funded institutions to self-financing arms would imply such a thing. Does this happen?

7.24 The UGC has stipulated that there should be no cross subsidisation from its provision to self-financing activity by institutions. However, it is easier to state the rule than to verify and enforce its application. Examples of possible cross subsidisation occur when the community college is physically located on the campus of a publicly funded institution and shares resources – whether lecture rooms, laboratories, the library, swimming pool, or back office functions (finance, student affairs and personnel). In such situations, there must be appropriate cross-charging arrangements. These are in place, yet it is difficult to establish with clarity whether the cross-charging levels fully meet all of the costs involved.

Recommendation 33:

Public funds should not be used by UGC-funded institutions as cross-subsidies for self-financing educational activities. There should be greater transparency in the financial relationship between UGC-funded institutions and self-financing courses either within the institution or in an affiliate, such as a community college.

Taught Postgraduate Sector

7.25 As a result of Government and UGC policy decisions flowing from the 2002 Review Report, UGC-funded taught postgraduate programmes (including both part- and full-time modes) have shrunk significantly since 2003/04, from over 130 to 30 in 2009/10 (or from 5,700 to 2,200 in terms of first year student intakes). However, far more impressive has been the response of the institutions to launching self-financing taught postgraduate programmes. The number of self-financing taught postgraduate programmes (including both part- and full-time modes) in UGC-funded institutions has increased from about 280 in 2003/04 to 510 in 2009/10 (or from approximately 9,700 to 17,600 in terms of first year student intakes). These are largely conducted by units of the "institution proper". The same issues of possible cross-subsidisation identified above apply and do so with greater intensity.

Conclusions

7.26 It is important that institutions have diversified sources of income. This is to be encouraged and, indeed, was recommended in the 2002 Review Report. As noted previously, the Hong Kong Government has the growth of a thriving self-financing sector, at all levels, as a key policy. Nonetheless, it is also necessary that public funds should be properly applied to the purposes for which they are intended. We consider that the balance here is a difficult one. The boundary between public and private provision in many publicly funded institutions has become blurred. As far as taught postgraduate courses are concerned, we consider strongly that they are proper functions of UGC-funded institutions. They are research-based courses that universities are eminently equipped to deliver, they offer a natural progression from undergraduate study and they provide a bridge toward research postgraduate work. We are, however, not convinced that UGC-funded institutions should be heavily involved in the provision of self-financing sub-degree programmes.

7.27 The solution has two elements. First, there should be much greater accountability and transparency in the financial relationship between publicly funded institutions and any self-financing affiliations or direct operations. This was a recommendation in the 2002 Review Report; it should now to be implemented. Second, we believe that the community college operations of UGC-funded institutions should be completely separated from their parent institutions. We recommend that this separation take place within three years. As several community colleges are considering applying to become private universities, this will allow time for that to be put in train and for the public/self-financing arms to come to amicable agreements about how much of the often substantial reserves built up from self-financing community college operation should move to the separate entity.

Recommendation 34:

The community college operations of UGC-funded institutions should be completely separated from their parent institutions within three years of the acceptance of this recommendation.

SECTION III. EFFICIENCY AND COLLABORATION IN UGC FUNDED INSTITUTIONS

7.28 It is incumbent on all recipients of public funds to use them efficiently and effectively in pursuit of their agreed objectives. The same is true of UGC-funded institutions (and of the UGC itself). Since the 1998-2001 triennium, unit funding per place in the UGC sector has been cut in real terms by about 15% (a 5% cut in 1998-2001 and a 10% cut in 2004). These cuts were a factor in our efforts to promote both efficiency and collaboration within and between UGC-funded institutions. In the context of its March 2004 Report on Institutional Integration and the recommendation for exploring deep collaboration between institutions, one of the recommendations was that:

> the UGC should as a matter of priority, examine ways in which university administrative systems can be improved and made more efficient. The scope of such an exercise, which may need to utilise external professional expertise, should cover a wide range of matters, including business process reengineering, coordinated service provision, and stand alone "back office" arrangements to provide common service and outsourcing strategies.

7.29 We established the Restructuring and Collaboration Fund in 2004 to take this forward. It was not particularly successful and no major proposals were made for restructuring or collaboration. In the context of planning new IT systems for "3+3+4", we also encouraged institutions to consider joint systems and purchases, but this has not happened.

7.30 The Government has also stated that the funding for the new fourth year of the undergraduate curriculum will be at 62.5% of a "normal" year's funding – putting further pressure on budgets. Further, institutions consider the amount of public funds that can be made available for research to be inadequate. Both of these points suggest that there is ever more urgency in seeking out efficiency gains so that funding is spent as much as possible on the key activity of academic endeavour.

7.31 We are bound to note that all institutions duplicate in full all "back office" functions. It would be advisable to scrutinise these carefully for potential collaboration or joint outsourcing. Areas could include some elements of finance and personnel management, information technology systems, facilities management and library purchases, *etc.* We also note that the ratio of non-academic staff to academic staff across the UGC-funded institutions is 6 to 4. This is a higher ratio of non-academics than in the UK or the USA.

7.32 It is never easy to re-engineer processes or challenge established practices. Yet with the challenges set out in paragraph 7.30 above, we would have expected more effort on the part of institutions. There are, however, areas of success: the Joint University Programmes Admissions System and the collaboration by libraries on a new joint storage facility and sharing of books. Institutions can and should build on these successes. We are thus, in general, disappointed at the level of collaboration and joint outsourcing – particularly in the back office areas. With the advance of information technology systems, keeping each institution's data separate and confidential is not a problem. We believe that institutions should examine their internal operations as a first port of call when considering new initiatives outside the context of this report.

7.33 As regards the cost of the UGC Secretariat and the bodies and Councils under our aegis, (*i.e.* the "overhead" on the sector), this is currently about 0.6% of the total financial provision the Government allocates to the UGC for the sector. That is to say, we pass on 99.4% of the money that the Government allocates to us. The 0.6% also includes a significant element for the servicing of the RGC, which is not a function carried out by comparable funding bodies. The RGC component comprises about 45% of UGC Secretariat expenditure. We believe that the UGC operation represents good value for money.