How should university research be funded?

Universities are eagerly awaiting the report of the Ramaphosa Commission into a new funding formula for the sector, delayed yet again and due now by the end of November. The backdrop to which the report will be released is an interesting one – the Minister of Higher Education Blade Nzimande last month announced the establishment of universities next year in the provinces of Mpumalanga (in Nelspruit) and the Northern Cape (in Kimberley), with a view to commence teaching programmes in 2014. At the same time, a recent academic staff strike at the University of the Witwatersrand has highlighted discontent among academics concerning remuneration, teaching loads and research.

Nzimande’s announcement is welcome, as the university sector has grown hugely since the advent of democracy in 1994, and ironically, particularly since the country’s 36 institutions were merged into 23 in 2003. Several of the largest institutions are now of unmanageable proportions, as witnessed by recent problems at the Tshwane Institute of Technology, and rather than existing institutions experiencing unbridled growth, it is appropriate that universities be founded in the flourishing provincial capitals of the two provinces which have hitherto lacked them. Wits academics have a case when they complain that student numbers and, inter alia, teaching loads have risen and that numbers of academic appointments have not matched this increase.

It is less clear that claims about remuneration are well founded: average academic salaries in South African universities in fact increased marginally above inflation between 2005 and 2010, and the release of details of salaries at Wits suggest that they are near the top of the pile. It is probably unrealistic for academics to expect much more than inflation-related salary increases in the context of a recessionary climate – what they should expect, however, is for salary increases in university management to be of a similar magnitude. If they are higher at certain universities, then this should be closely interrogated.

Where academics at Wits – and indeed across the land - have an undisputed claim, relates to research funding. Academics now not only have less time for research, as they have to teach more students, but, with the replacement of the National Research Foundation (NRF)’s Focus Area Programmes (FAPs) with incentive funding, they now also have inadequate funds to train graduate students (http://www.sajs.co.za/index.php/Sajs/article/view/1161/1172). Neither condition, of course, applies to the research chairs or those who are associated with centres of excellence. The NRF President, Albert van Jaarsveld, acknowledges that incentive funding is inadequate to train graduate students, and that this funding should be provided through its Competitive Programme for Rated Researchers (CRR). However, there has been no call for CRR grants for the period 2013–2016; and only a small fraction of the proposals approved in last year’s call have been funded.

Much recent debate (http://saknowledge.blogspot.com/2012/03/sa-knowledge-research-universities-dual_04.html) has focused on whether the research councils or the universities are to blame for this situation. The research councils claim that since the present funding formula was changed in 2003 to include a complementary stream of research funding to that from the councils, directly to universities, and based on research outputs, their expectation was that the universities would use these additional funds to supplement the declining funding stream from the NRF and the Medical Research Council. Although institutions continue to support research to different degrees and in different ways, as they did prior to 2003, how universities have differed in their responses to the changed circumstances merits close inspection. At some institutions there is evidence of a declining rather than an increasing proportion of the budget being spent on research. University managements, by contrast, claim that no injection of new money has been forthcoming, and that government simply repackaged the way that the subsidy was calculated.

While the blame game continues, striking is the least of our problems. Far more important, in the long term, will be the decline of the country’s research base, which cannot be sustained by the country’s astronomers, 152 research chair incumbents, the handful of individuals attached to seven centres of excellence and the enterprise in a few areas such as infectious diseases, which have attracted significant foreign funding. The rest of our researchers are being forced to cease to enroll additional graduate students, particularly in the natural sciences where the associated running costs are high. It is a bitter irony that this is happening in the middle of an initiative of the Department of Science and Technology to increase five-fold the number of doctoral graduates by 2018. In 2011, this number, which has hovered around the 1200 mark for several years, finally increased significantly for the first time – to 1576. But as the FAPs were phased out at the end of 2011, enrolments for 2012 are expected to drop for the first time since they dipped in response to the advent of the recession in 2009. Mr Ramaphosa and his committee have much upon which to ponder.