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In modern economic research, we have clever techniques and grand questions. Alas, the clever techniques typically don't work on the grand questions. Consequently, our best journals are filled with precise answers to not-so-interesting questions, while lesser-ranked journals (and books) proffer rough-and-ready answers to the big questions.

So there is something bittersweet about reading a report titled that aims to 'measure the net economic benefits over time of government policies aimed at increasing university funding' (p1). The quest is bolder than most academic economists would dare attempt to answer. But given the gaps in our knowledge, the reader knows that there will be some canyon-like leaps of faith between the introduction and the conclusion.

The benefits of boosting university funding, we are told by [this report](#), will fall into five categories: increased productivity, increased labour force participation, more cash from international student fees, public returns from university research, and a bigger population. Let's take them in turn.

Increased productivity: The report's estimate of the impact on productivity is the part of the report that I find hardest to critique. This is due to the authors' cunning propensity to refer to 'the Leigh wage premium' at regular intervals (this actually gives me more credit than I deserve, since my numbers are estimated from a bog-standard Mincer model on HILDA data). My best guess is that a university degree raises annual earnings by 45-50%, which the report scales down to 40% to be conservative. Of course, it is possible that the marginal university student would have a higher or lower rate of return, but the quasi-experimental literature suggests that the Mincerian number is a useful starting point.

Increased labour force participation: At risk of sounding like a spurned lover, I wasn't sure why the report used my estimates of the impact of education on productivity, but the ABS's estimates of the impact on participation. My estimate is that those with a bachelor degree are 10 percentage points more likely to be working (ie. to have positive earnings) than those with just year 12. By contrast, the ABS numbers (used in the report) are 16 percentage points for men, and 23 percentage points for women (p40). The disparity is most likely due to the fact that the ABS report does not make any adjustment for age. Since older cohorts are less educated and less likely to be working, this approach probably over-estimates the causal impact of university attendance on workforce participation.

More cash from international student fees? Well, perhaps. But it is a little odd to read at one point that universities have turned to international student fees to make up for a shortfall in Commonwealth cash. If so, wouldn't it be reasonable to think that a new injection of government funding will reduce the income that they garner from international students?

Public returns from university research: Reviewing 21 studies, the report concludes that a ‘conservative estimate’ of the rate of return to publicly funded research is 20%. But when your rate of return is [nearly twice as high](#) as Bernard Madoff’s, it’s worth pausing to check the numbers. It turns out that the studies on which the report relies are generally based on scientific research, such as on tomato harvesting or cardiovascular disease. The problem with extrapolating these studies to all university research is that they are not necessarily characteristic of what the typical university faculty does. Raising GDP may be a useful by-product of scientific research, but intellectual exploration in the humanities and social sciences is rarely aimed at boosting national income. For example, would we really expect an Australian Research Council on ‘Economic Inequality: Trends, Causes and Consequences’ to increase GDP? If anything, such a project might well produce proposals that reduce national income. I expect that the same goes for much of the research currently being undertaken in Australian universities.

A bigger population: The last channel through which more university funding can boost GDP is via its impact on increasing Australia’s population. Since some international students become permanent residents, an expansion of the government sector means a bigger population. But is that a gain in social welfare? If all that mattered was a nation’s GDP, Americans would be [18 times](#) better off than Australians. Perhaps our nation would be a smidgin better off if we had more people, but as a first pass, per capita GDP is a better metric of wellbeing than total GDP.

Although the report probably overstates the public returns to an increase in university funding, I enjoyed reading it nonetheless. The analysis is intellectually curious, and peppered with interesting findings. For example, did you know that the completion rates for undergraduates and PhD students are just 65% and 54% respectively? Or that staff-student ratios in universities rose from 15.6 in 1996 to 20.5 in 2006? If this report were a piece of university research, I wouldn’t expect it to boost GDP, but I would appreciate its contribution to a complex debate.