

“University Funding Systems: Impact on Research and Teaching”

The authors address the question of how the higher education funding system affects the trade-off universities make between teaching and research. They do so in an elegant model that is as simple as possible, but has all elements necessary to make an interesting, robust, and policy-relevant point.

There are three crucial assumptions in the model. (1) Universities are funded for teaching and research. Teaching funding is flat per student. Research funding consists of a payment per researcher and a payment that increases in research quality. (2) There is a minimum teaching quality universities need to ensure. (3) Universities exogenously differ in the weight they put on research and teaching in their objective function.

Assumption (1) leads to a research-teaching efficiency frontier that has either one or two modi, and if it has one modus, it can be convex or non-convex. Whether we are in one regime or another depends on the relative weight of the quality-dependent over the quality-independent research funding. Assumption (2) restricts the choices universities can take on the research-teaching efficiency frontier by imposing a minimum teaching quality requirement. Combining these two assumptions with assumption (3) leads to three possible and interesting equilibria, the “research elite”, the “flat system”, and the “binary divide”.

“Research elite”: If the quality-independent part of research funding is small and the research quality premium is not too high, the frontier is strictly decreasing, but non-convex. In this case, there will be bunching of universities with respect to both research and teaching quality: There will be no universities with intermediate

research and teaching quality. “Flat system”: If, starting from the research elite system, the quality-independent part of research funding is increased, holding the research quality premium fixed, the frontier becomes convex. In this case, there is no bunching and universities distribute across the whole research-teaching efficiency frontier, according to their exogenous preferences. “Binary divide”: If starting from the flat system, the research quality premium, that is, if the payment per research quality unit, is increased, holding the quality-independent part of research funding constant, the frontier becomes divided in two parts. It is no longer strictly decreasing, and we have two possible outcomes: either there is bunching of universities with respect to both research and teaching quality without universities with intermediate research and teaching quality or there are only high-research-quality, low-teaching-quality universities.

The authors make two non-crucial assumptions: (1) academics are identical with respect to their research ability and hence there is no positive externality high-quality researchers exert on other researchers; and (2) there is no competition between universities. Relaxing the first of the two non-crucial assumptions might be interesting if one was to explore moral hazard or adverse selection issues. Relaxing it together with the second non-crucial assumption would likely lead to a strengthening of the authors results: My conjecture is that we would observe more of the research-elite and the binary divide systems and less of the flat system. This might be done in future research.

Overall, I think the paper touches an extremely important part of the education system, its results seem very robust, and they should be very interesting to policy makers.