

'Elite university' strategies might boost rankings – but at what cost?

Japan plans to share US\$2 billion annually between a handful of top universities. Experience elsewhere suggests the negatives of this approach might outweigh the positives.

Japan is an exemplar in global research funding. It is one of a small cluster of countries, including Israel, South Korea and Sweden, that consistently spend upwards of 3% of gross domestic product on research and development (R&D). The 2020 average for countries in the Organisation for Economic Co-operation and Development comes in at just under 2.7%.

But investment alone doesn't guarantee R&D success, and the nation's policymakers worry that not enough of Japan's top universities have the kind of autonomy afforded to their counterparts in Western nations, as Nature Index reports in a Japan-focused issue this week (see page S86). Officials are also concerned about the fact that Japan's universities have been dropping in international rankings.

The government's response, announced in 2021, is to create a ¥10-trillion (US\$75-billion) national endowment fund for research. This will be invested, with the annual returns – expected to be around ¥300 billion – distributed between a select group of institutions. These will be called universities for international research excellence.

Japan's move to separate a subset of its universities is not unprecedented. Indeed, it comes at a time when prominent institutions elsewhere, such as those of the US Ivy League, Australia's Group of Eight and the United Kingdom's Russell Group, are having to think harder about the consequences of their exclusivity, both positive and negative – particularly when it comes to diversity, equity and inclusion.

The inspiration for Japan's fund comes, at least in part, from the endowment model of private institutions in the United States, but there are key differences that must be borne in mind. Harvard University in Cambridge, Massachusetts, for instance, has the world's largest endowment, totalling \$50.9 billion at the end of the fiscal year 2022, and this delivers an annual payout to the university of around \$2 billion. Some of this is used for research. But Harvard's endowment is made up of contributions from more than 14,000 individual donors, whereas Japan's fund is a public endowment. As Nature Index reports, this is fuelling concerns about possible political interference (see page S84), which risks undermining the ambition for more autonomy.

Eligible Japanese universities must apply by the end of

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this month. A board of expert advisers to the nation's Ministry of Education, Culture, Sports, Science and Technology will select the candidates by the autumn. But it is the government, not the research community, that will make the final call, which is far from ideal.

In the United Kingdom, where the practice of concentrating some research funding is well established, it has helped to boost the outputs and profiles of recipient institutions. Members of the Russell Group (comprising 24 research-intensive universities) receive around two-thirds of one of the main sources of public research funding, known as quality-related (QR) funding. This means that the country's roughly 130 remaining eligible universities share just one-third. In 2022, the QR pot exceeded £2 billion (US\$2.4 billion).

Reactions to Japan's move have been mixed. Some researchers and policy analysts welcome the country taking a well-trodden path. Others argue that if redistribution of funding is needed, universities in Japan's poorer parts should benefit more, and that this would tap into previously unexplored avenues for boosting economic growth.

It's not often that countries shake up their funding arrangements so radically, but Germany offers an example. In 2005, the nation ushered in its Excellence Initiative, at least in part to distribute more funding among a subset of its largest universities. France has wanted to move in a similar direction, but researchers have resisted the idea.

Predictably, the German initiative has widened the funding gap between those institutions that have received excellence money and those that have not (L. Mergele and F. Winkelmayer *High. Educ. Policy* **35**, 789–807; 2022). And, after more than a decade, the initiative is changing. In its latest iteration, comparatively more funding is going to smaller universities and to interdisciplinary research. The United Kingdom is also facing calls for its next Research Excellence Framework – the scoring system for assessing research and distributing QR funding – to give greater weight to measures of research culture and the quality of a research environment.

Japan's chosen universities must increase the value of their research, develop new disciplines, target global issues and gain worldwide visibility. Loss of visibility is evident among Japan's top universities, some of which have dropped in the rankings in recent years. In 2013, 5 Japanese universities made the top 200 of the Times Higher Education's World University Rankings; a decade later, that figure has dropped to just 2. Concentrating research funding at a handful of institutions is one way to help universities achieve league-table positions, because some ranking methodologies give weight to funding for research, alongside staff numbers and publication data.

Japan is embarking on a path that is likely to enrich a small number of universities and might well have positive results in areas including research outputs and rankings. But amid mounting evidence of rising levels of burnout and staff turnover – and low job satisfaction – in academia worldwide, the country's policymakers should consider both what might be gained and what might be lost by pursuing a strategy of concentrating funding in this way.