appropriately trained academic staff been available or been prepared to look after the needs of new cohorts of students, many of whom come from families that lack traditions of higher learning? Most governments have tried to "soak up" demand by allowing the entry into the sector of a range of private providers with varying degrees of commitment, expertise, and resources to provide quality higher education. The approval and quality assurance processes to which these hastily established private institutions are subjected have been, at best, uneven. It is important to ask, moreover, if government bureaucracies themselves have the expertise to develop and implement the mechanisms necessary to coordinate the work of private HEIs.

The use of technology has often been considered as a viable option for meeting the growing demand for higher education at a reasonable cost. Experience around the world has shown, however, that online learning can often be much more expensive and complex than traditional "brick and mortar" education if it is to be done properly and sustainably. It is a folly to assume that pedagogic expertise in this area can be developed cheaply and quickly without sacrificing quality.

A number of universities in developing economies, both public and private, have been created as a result of rebadging or rebranding existing technical schools, polytechnics, and teachers' colleges, without any substantial shifts in the ways in which they are expected to operate, or in the types of students they recruit. Many are grossly underfunded and are widely regarded as "overcrowded factories." They lack the libraries and laboratories that any decent HEI should possess. At the same time, little is done to forge systems designed to develop academic staff professionally. While it is true that not every member of staff employed at HEIs needs to be a researcher or publish in international journals, an institution that is committed to higher learning must not be permitted to overlook its responsibility to ensure that its staff possess advanced levels of knowledge in their subject area, as well as a scholarly disposition. In this way, the task of capacity building should be regarded as central in any attempts at massification.

ISSUES OF CAPACITY

In the haste to establish new universities and expand existing ones without any substantial focus on capacity building, curriculum options at most HEIs in developing economies have inevitably been narrow, often restricted to subjects that do not require expensive laboratories, extensive libraries, and highly qualified staff. For example, programs in business and management, which are assumed to be cost effective and affordable to many new students, have in recent decades experienced explosive growth, while the number of programs in much-needed STEM areas has been limited.

As a result, there has been an oversupply of graduates in some areas, while a shortage exists in others. Many graduates, moreover, do not possess the knowledge and skills that employers consider necessary in the changing labor market geared toward the global economy. The students are often unable to secure a job in their area of study, therefore creating a risk that, in the longer term, systems of higher education might generate a legitimation and motivation crisis among their graduates. Nor will these graduates be able to make the kind of contribution to national economic development that governments hope from the massification of their systems of higher education. What this shows is that massification is not inevitably a good thing. Much depends on its purposes and outcomes, the ways it is organized and coordinated, and the contribution it is able to make to the development of the knowledge and skills needed in the global economy.

An increase in GER in higher education may thus be necessary but is not sufficient to drive economic growth and prosperity. What is required, additionally, are more comprehensive programs of higher education reform. This would involve reimagining and renewing curriculum and teaching methods, as well as the ways in which HEIs are structured and governed. Above all, it demands capacity building and adequate measures in planning and quality assurance. The question of the forms in which massification is achieved should therefore lie at the heart of debates over the expansion of systems of higher education. Broader questions about the purposes of higher learning are just as crucial, not only in relation to economic growth, but also with respect to social and cultural development. These imperatives cannot be realized by relying on emerging higher education market forces alone.

DOI: http://dx.doi.org/10.6017/ihe.2018.94.10522

Universal Access to Quality Tertiary Education in the Philippines

MIGUEL ANTONIO LIM, SYLVIE LOMER, AND CHRISTOPHER MILLORA

Miguel Antonio Lim, University of Manchester, UK, is adviser at the Office for International Linkages of the University of the Philippines. E-mail: miguelantonio.lim@manchester.ac.uk. Sylvie Lomer is lecturer in education at the University of Manchester, UK. E-mail: sylvie. lomer@manchester.ac.uk. Christopher Millora is a PhD fellow at the University of East Anglia, UK, and a former lecturer at the University of

Iloilo, Philippines. E-mail: C.Millora@uea.ac.uk.

There is increasing attention worldwide on the debate regarding who pays university tuition fees. In contrast to other governments, the Philippine authorities have recently introduced a subsidy to cover tuition fees for Philippine students at all State Universities and Colleges (SUCs). This Universal Access to Quality Tertiary Education Act was signed into law on August 3, 2017. It commits to "provide adequate funding ... to increase the participation rate among all socioeconomic classes in tertiary education." The subsidy applies to first undergraduate degrees in all tertiary education institutions. The Act also increases income-contingent loans available to the poorest.

There is a concern that the policy will lead to an exodus of students from private to public providers. As a result of a constitutional commitment to maintaining both public and private institutions, the Act allows for a subsidy toward fees at private institutions at a rate equivalent to their near-

The Act aims principally to address dropout rates: only a quarter of students in higher education graduate at present.

est SUC. Students can also benefit from support for books, supplies, transportation, accommodation, and other related expenses. The Act counters a longstanding trend of increasing fees in higher education. Philippine Senator Benjamin Aquino IV, the Act's key supporter, suggested that the provision of free tuition would "unlock the door to a brighter future," thus "empower(ing) more Filipinos with the promise of a college diploma." This resounded strongly among Filipinos, who value higher education qualifications.

The government's allocation to higher education has recently seen significant increases, doubling from US\$484.47 million in 2010 to approximately US\$1 billion in 2016, although spending per capita remains relatively low. The Philippine constitution demands that education receive the largest share of the national budget, and national authorities have allocated US\$793 million (1 percent of the budget) to introduce the subsidy in 2018. The national economy is projected to expand at over 6 percent in the medium term and the subsidy appears affordable. However, while the measure is politically popular, it has been fiercely debated.

SUPPORT AND OPPOSITION

The Act aims principally to address dropout rates: only a quarter of students in higher education graduate at present. The Act is meant to help those dropping out because of a financial shortfall. This support would not primarily redistribute resources, but rather assist those who face difficulties in the last phase of their studies. The Act is also intended to enhance quality. Tertiary institutions in the Philippines are governed by the Commission for Higher Education Development (CHED), which monitors, evaluates, and manages quality assurance and enhancement. The Act originally included an enrollment cap for every SUC, which could only be increased if SUCs met increased quality standards set by the regulator. However, in the final version of the Act, there is no longer a cap; SUCs will be able to set student numbers themselves.

Stakeholders express three key criticisms. First, there are already a number of programs in place to improve equitable access. SUCs are already subsidized by the government and tuition is significantly cheaper than in the private sector. The system of "socialized tuition" also implies that students pay in proportion to their family income. Second, the Act disproportionately benefits the middle-to-upper classes, because the bulk of SUC students come from moderate to well-off backgrounds. Only 12 percent of SUC students belong to the first and second poorest deciles—while 17 percent come from the ninth and richest deciles. The Act is characterized as having an "unintended regressive impact." The National Union of Students raise concerns that SUCs might raise other school fees to compensate for their lack of control over tuition fee income. These other fees are not automatically covered by the subsidy and could penalize the poorest students further (tuition fees comprise only between 20 to 30 percent of the total cost of a degree.) Third, reducing the cost of SUCs could lead to an exodus out of private and into public institutions. Of the 1,943 Philippine tertiary institutions, 88 percent are private and 12 percent are public. Approximately 54 percent of students are enrolled in private higher education and 46 percent in public. Given that enrollment is already on the increase in public higher education institutions, there is concern that this initiative could dramatically alter the sector. This comes in conjunction with the move to extend compulsory education from 11 to 13 years in the "K-to-12" program. During the transition period, which ends in 2018, smaller cohorts have entered university as students have been kept for an additional year in secondary education. This has affected the finances of higher education institutions, placing particular pressure on private institutions. The exodus of students could also be mirrored by a migration of faculty, as salaries are often lower in private institutions, whereas SUCs pay a standardized government salary.

CONCLUSION

The Act's potential effects go beyond economic efficiency

and targeting specific economic groups. It sends a powerful signal, particularly to poor and struggling students, that higher education is accessible to all. The rhetoric of "life dreams" establishes a narrative of prosperity based on merit and work, in which higher education plays a critical role.

However, there are important questions about this initiative's sustainability. In principle, the Act allows all Filipinos to access quality tertiary education and commits to "provide adequate funding," potentially establishing universal access. The Philippines has a young and growing population: the number of 15-24 year olds has increased from 17.6 million in 2006 to 19.9 million in 2016. As the "K-to-12" transition period ends, more students will be entering higher education. Given the powerful hold of the higher education "dream" among Filipinos, we expect a large increase in entrants into higher education, which may not have been expected when preparing the Act's budget. The absence of a cap on student numbers in the final version of the law confirms an intention to expand the sector, incentivizing SUC leaders to raise revenue by increasing student numbers. This could exacerbate the projected flight of students and faculty from private to public institutions. Thanks to the expanding economy, the Act is affordable in the short-to-medium term. But concerns about a rapid expansion of student numbers call its long-term sustainability into question.

Can the Philippines afford *not* to introduce such a policy? For the country to compete with its regional rivals as a knowledge economy, expanding access to higher education would likely provide a competitive advantage. With its large service sector and rapid industrialization, the Philippines is well equipped to take advantage of the skilled workforce provided by expanding enrollment in higher education.

DOI: http://dx.doi.org/10.6017/ihe.2018.94.10523

The "Champagne Tower" of Science Publishing

SABINE SIEBERT

Sabina Siebert is professor of management, Adam Smith Business School, University of Glasgow, UK. E-mail: sabina.siebert@glasgow.ac.uk.

S ince World War II, there has been an exponential growth of publications in life sciences. Between the late 1960s and 2000, the number of publications doubled approximately every 14 years, but more recently, the rate has in-

creased even further, doubling approximately every 12 years. On the one hand, this growth can be seen as positive in signifying investment in science, especially in emerging economies, which should lead to faster scientific progress. On the other hand, however, the exponential growth of published papers means that journal editors are "flooded" by publications, which they find difficult to process, while scientists find it ever more difficult to keep on top of them. The more science is produced, the more noise in the system, and the more difficult it is for scientists to tell what is trustworthy and what is not. Thus, scientists are increasingly concerned about the ability of the scientific community to control the quality of the increasing flow of scientific outputs.

And, unsurprisingly, open-access journals often charge significant publication fees.

SCARCITY OF PUBLICATION SPACE IN TOP JOURNALS

In my research funded by the British Academy, I investigated the nature of the overflow in science publications by asking the question: how are paper submissions distributed among journals? Unsurprisingly, I found that publishing in the top-tier journals—Cell, Nature, or Science—appears to be the Holy Grail of science as it guarantees academic positions, grants, and membership on editorial boards. A scientist's career success depends on publishing as many papers as possible in these prestigious journals. Additionally, publishing in the top journals is said by scientists to increase their chances of publishing in the top journals in the future. But these journals maintain an artificial scarcity of spaces, which Neal Young and his colleagues in 2008 labelled as the "winner's curse" in their influential article. The authors likened the artificial page limits in prestigious journals to artificial scarcity in economics to restrict supply of a commodity. In the past, before the era of online journals, print page limits were limited so the scarcity of publication slots was justified; nowadays, however, it is harder to justify high rejection rates other than by the rationale that extremely low acceptance rates signal high status to successful authors.

THE HIERARCHIES IN LIFE SCIENCE JOURNALS

So what happens to the papers rejected from these three top journals? The traditional response was that most authors of rejected papers would aim for a lower tier of journals, with some choosing smaller specialist journals for the outlet of