2,500 scientists, researchers, and engineers reportedly sent overseas by the PLA to work with international researchers in recent years, has only sharpened debate on the issue.

CONFUCIUS INSTITUTES

Unlike in Canada and the United States, no Australian Confucius Institute (CI) has been closed due to concerns about Chinese influence or political control. Among Australia's 40 universities, 13 host Confucius Institutes, including six of the eight leading Go8 tier. This does not imply an absence of debate as to their role and significance. Some critics in the media, and a few China hawks, have argued that CIs should be forced to register as foreign entities under Australia's sweeping new foreign interference laws (similar to the US Foreign Agents Registration Act), passed in mid-2018. Arguing that CIs receive funding from Beijing's Hanban agency, and that their activities seek to influence views about China and perhaps their host universities' international engagement strategy, some have criticized vicechancellors for failing to register CIs as foreign entities, and characterized this failure as kowtowing to Beijing for fear of losing students or Chinese research funds. Other centers, such as the USAsia Centre at the University of Western

> Individuals from mainland China comprise by far the largest cohort among international students in Australia.

Australia and the United States Studies Centre at the University of Sydney, have registered under the new legislation, and the federal government recently sent letters about the new policy to all CIs, signaling that they could be targeted. By contrast, some China scholars have juxtaposed the University of Sydney's well-endowed United States Studies Centre, for example—charged with advocating the importance of the US defense and strategic alliance and running a wide range of courses as a regular part of the university's curriculum—with the much smaller and much more modestly funded CIs, which offer a sprinkling of language and Tai Chi courses but play no role in undergraduate or graduate teaching. Openness and intellectual freedom, it is argued, demand that, if universities allow such centers as Sydney's United States Studies Centre to actively seek to shape debate on Australia's security and strategic alliance, it is illegitimate to target CIs as potential agents of foreign influence. If CIs were listed, might not France's Alliance Française and Germany's Goethe-Institut, for example, also

fall under the sweeping new national legislation?

Unlike in the United States, where politicians from both left and right agree that China is a strategic rival that should be contained, especially in key areas of high-tech research and development such as those highlighted in China's signature Made in China 2025 policy, the debate in Australia is more polarized. Part of the reason is that, given its geography and increasing integration within the region, Australia recognizes that its future lies in Asia, including its expanding collaborative research profile—notably with China. At the same time, its strategic and defense alliances remain tied to the United States, including via the Five Eyes intelligence network. Quite how the country manages these competing interests is yet to be seen. Its universities are increasingly engaged in international collaborative research, including with China, which has become a major knowledge partner over recent years. China's knowledge diaspora, an important and growing component of Australian university staff, is anxiously watching developments, including incidents of anti-Chinese rhetoric. Traditionally committed to making their research accessible, but now under pressure to audit international collaborative research on security grounds, Australia's universities are one site where some of these tensions and contradictions will play out. Their ongoing high-level dependence on international student fees, especially from China, will be a key factor in shaping their responses.

Taiwan: Universities in an Aging Society

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Colleges and universities in developed nations will face the impact of demographic change sooner rather than later. As numbers shrink in the younger age cohorts, enrollments will be negatively affected. In parallel, expanding higher education remains a stated policy goal in most countries. A far less attractive topic for decision-makers to bring up is how the inevitable opposite trend will affect institutions.

In Taiwan, universities are already confronted with

these shortfalls. In the past, the government implemented expansion policies in higher education. With its 23 million inhabitants, the island features one of the highest university enrollment rates, concurrent with one of the lowest birthrates in the world. This matter has already become an important policy issue and has resulted in—broadly speaking—the implementation of three different strategies that could be adapted elsewhere in the future: mergers, closures, and internationalization.

MERGERS

Up until the early 2000s, college mergers in Taiwan usually went hand in hand with upgrading a newly formed institution to university status. In recent years, mergers of public universities have also served as a measure to deal with declining enrollments. The power dynamics and outcomes of such mergers have varied. In 2013, the University of Taipei came about as a combination of two existing, specialized universities, as did the National Pingtung University, in 2014. The National Kaohsiung University of Science and Technology, established in 2018, is a public university combining three existing schools. In two other cases, smaller colleges were absorbed into more prestigious institutions, merging with the National Taiwan University and National Tsinghua University.

Another merger is on the horizon, as National Yang-Ming University has started talks with National Chiao Tung University. Both institutions are considered among the best in Taiwan. A union between them will take time, yet would see the emergence of a powerhouse in Taiwanese higher education. Along with other measures, including increased institutional autonomy and stronger integration with local industries, public universities have been given a tool set that should allow them to enroll sufficient student numbers even as age cohorts continue to shrink in size.

Among private universities, full mergers have not happened, though in 2015, the University of Kang Ning integrated an independent medical college into its structure. While a number of older, more reputable private colleges still attract enough applicants and do not have to worry just yet, the outlook for second-tier schools is bleaker.

CLOSURES

Between 2014 and 2018, four vocational colleges have closed down completely. No university has as of now shut its gates, but enrollments have dropped sharply at a number of institutions, reaching a rate just shy of 30 percent at the Taiwan Culinary Institute, which fares the worst among those institutions remaining in operation. With enrollment at 32 percent of its previous total, Nan Jeon University of Science and Technology performs barely better. This, along with

persistent doubt about the financial situation and teaching quality of the school, prompted the ministry of education to revoke the right of Nan Jeon University to recruit new students from 2019 onward. It is likely to become the first bachelor-level institution to go defunct in the near future.

Downscaling the level of enrollment and closing institutes is already under way among dozens of universities. In 2019 alone, 172 departments will stop matriculating new students. This adjustment process is mostly in the hands of the universities themselves, but will inevitably be met with opposition by the affected staff. In the case of Shixin University, the decision to suspend further enrollment at its Institute for Social Development sparked demonstrations from the faculty, who called on the ministry of education to halt the planned closure.

With its 23 million inhabitants, the island features one of the highest university enrollment rates, concurrent with one of the lowest birthrates in the world.

Early retirement options for older faculty and decreasing the student—teacher ratio are two measures listed by the ministry to cope with lower enrollment numbers. The shutdown of whole departments and institutes is a problem that requires innovative solutions. One proposal would be to offer incentives for career transfers in academic units that are likely to close in the coming years. This has already been implemented among public universities.

INTERNATIONALIZATION

Not only do most high school graduates in Taiwan go on to attend university; they also tend to go abroad in sizable numbers. Every year, 35,000 to 40,000 Taiwanese choose that option, with the large majority heading toward English-speaking countries. For universities, higher outbound student mobility means an even smaller pool of local students. However, their internationalization efforts have also been successful, with a rise in the overall number of foreign students from 33,600 in 2008 to 118,000 in 2017. The proportional increase of the international student body, from 2.5 percent to 9.7 percent, was substantial. Close to half of all foreign students in Taiwan are enrolled in degree-conferring courses. Mainland Chinese make up the largest proportion, with 35,000 students. Yet, only 9,500 among them stay in Taiwan for a full degree course. In that category,

Malaysians take the top spot with 13,400 enrolled students, with Hong Kong and Macao also well represented.

Since Beijing is keen to isolate Taiwan under President Tsai Ing-wen, since 2017 it has capped the number of Mainland Chinese students allowed to attend degree courses on the island at 1,000 per year. This move has adversely affected private universities, which are dependent on revenue from the higher tuition fees paid by foreign students. The government of Taiwan is thus doubling down on its New Southbound Policy toward Southeast Asia and has offered scholarships and other incentives to students from that region.

Yet, criticism abounds on the treatment of students from countries such as the Philippines and Indonesia. Several private universities have forced them to do factory work as part of their degree programs, allegedly threatened them with financial penalties and withdrawal of their scholarships, and subjected them to verbal and physical abuse. Since international student numbers are set to rise further, it is in the interest of Taiwan to ensure an adequate oversight of programs that target foreign students, especially at private institutions.

CONCLUSION

Taiwan provides an example of the challenges posed by an aging society to the management of educational institutions. While the prospect of a decline in enrollments may seem daunting at first, it can bring about positive effects. If done right, this process can help realign curricula to better suit current needs, concentrate resources to strengthen the quality of education, and foster a drive to reach across borders. As policy decisions will affect faculty, students, and the broader society, they should not be rushed, but rather take into account all parties and allow for adequate transitional periods.

Taiwan: Higher Education under Pressure

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After a period of expansion and reform, Taiwan's higher education system currently enjoys a high level of participation and a reputation for quality in Asia. The percentage of the population between ages 25 and 64 with a university or an advanced degree reached 46 percent in 2016, significantly higher than the 37 percent average in OECD countries. But the system has been facing increasing pressure from within and outside of the country, making its future seem less optimistic.

A CANDLE BURNING AT BOTH ENDS

During the period from 1949 to 1987, Taiwan's higher education system underwent a phase of planned growth. Many junior colleges and private universities were established to train skilled human resources for emerging industries. During the 1990s, the deregulation of education was broadly advocated. In 1994, the "410 Demonstration for Education Reform" called for an increased number of senior high schools and universities in each city in order to reduce the pressure of massification. In response to public demand, the number of higher education institutions increased considerably, from 130 in 1994 to 164 in 2007. Some were new, but many were upgraded junior colleges or technical institutes. In 1991, the net enrollment rate (NER) was 20 percent, only slightly above the threshold of an "elite" system. It quickly increased to 50 percent in 2004, reaching the "mass" threshold, and to 70 percent in 2013, reaching "universal" coverage. The percentage of high school graduates entering university reached 95 percent in 2008 and has since remained constant. However, this extremely high enrollment rate also reflects the failure of the system to be selective and a decline of competitiveness within higher education.

LOW BIRTHRATE

A significant risk factor for Taiwan is its low birthrate. According to the data released by the Central Intelligence Agency (CIA) World Factbook in 2018, Taiwan has the third-lowest birthrate in the world. Young couples in Taiwan worry about low salaries, the cost of housing, the cost of education, and achieving a satisfactory standard of living; some embrace DINK ("double income no kids") as an attractive lifestyle. The Taiwanese government sensed that the situation was critical already in 2011, but is still grappling with how to solve the problem. According to the ministry of education, higher education enrollment is expected to decrease from 273,000 in 2015 to 158,000 by 2028. This decrease will have a huge impact on the higher education system, with 20 to 40 universities estimated to be in danger of disappearing within five years, especially small and private universities in the suburbs.