tions are "the best" in any given system of higher education. Whether this needs to be reproduced by rankings or by the identification of world-class universities, often with questionable methodologies, remains an open question. As early as 1983, Burton Clark emphasized that the knowledge created in universities is contextual, integrated, and culturally embedded. It is not something that can easily be measured. ■

# "Taking a Closer Look at the OECD Tertiary Statistics": A Response

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*The editor of* IHE *suggested that colleagues at OECD might wish to respond to the article on "Taking a Closer Look at the OECD Tertiary Statistics" by Arthur Hauptman, which was published in no. 55, Spring 2009.*

*Education at a Glance* is the annual result of a long collaboration between governments of OECD countries, experts, and institutions that participate in the Indicators of Education Systems program of the Organization for Economic Cooperation and Development (OECD). The publication is comprised of around 30 indicators along with over 100 tables and charts—that is, more than 25,000 figures closely verified every year.

Indicators are selected for their cohesiveness; together, they tell a coherent story, analyzing trends and challenges that face governments in the years to come. Cultural differences and peculiar features of education systems are carefully considered in order to create common definitions and a single methodology that countries need to observe. If these technical standards are not respected, data can and will be removed from the publication, either by the countries themselves or by the OECD.

Even with all these precautions, the quality of indicators can always be reinforced, and the constant improvement of national data collection is a good step in this direction. While Arthur Hautpman expresses his concerns about the methods used to calculate and report our indicators, several of his remarks deserve further comment.

### International Students and Enrollment Ratio

The high proportion of international students in some countries does have an impact on the indicators, especially in Australia and New Zealand where international students make up over 15 percent of the enrolled student population. However, even when international students are excluded from the calculation (this is planned for the next edition of *Education at a Glance*, where the two different measures are available) the ranking of these two countries remains identical for the indicator on tertiary graduation rates.

Arthur Hauptman inaccurately described the calculation of enrollment rates. Enrollment rates are calculated as net enrollment rates, by dividing the number of students of a particular age or age group enrolled in all levels of education by the number of people in the population of that age or age group. The data are presented by age group (i.e., enrolled 20- to 29-year-olds as a percentage of the total 20- to 29-year-old population), and not by level of education. Additionally, international students are included in the numerator and the denominator of this ratio. The only potential skewing of data could be in situations where students residing in one country study in another, despite being accounted for in their resident country's population data. Such is the case for students in Luxembourg who reside there but most of whom study in tertiary programs in neighboring countries such as Germany, Belgium, and France.

### Indicators to Interpret the Results

It is not necessarily an anomaly that university-level graduation and completion rates differ because access to tertiary education often influences the results. Japan is a case in point, with only 45 percent of young people entering university, compared to an average of 56 percent in OECD countries. The high completion rate (over 90%) compensates low access and allows Japan to rank at the level of the OECD average when analyzing the graduation rates.

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It is true that the data extracted from labor-force surveys and data coming from institutions need to be closely checked to ensure their coherence, particularly with regard to the classification of educational programs covered in both types of surveys. However, the number of university-level graduates in Canada is below the level of education attained by the total population of 25- to 34-year-olds because the data coverage is not the same. When taking into account only the university level, Canada appears to be close to the OECD average for both indicators.

### Private Funding and R&D

The United States' high level of expenditure on tertiary education is influenced by endowments and tuition fees that are

higher than in any other OECD country. However, the impact of university hospitals is relatively minor because only expenditure related to teaching of medical students and to R&D in teaching hospitals are included. Other countries—including Australia, Canada, Chile, Israel, Japan, South Korea, and New Zealand—are in a similar situation to that of the United States since more than 40 percent of their total expenditures are funded privately. Private funding increases the resources available to universities, and so it is therefore legitimate to take this spending into account in the indicators, especially in a period where many universities have difficulties to increase their resources.

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R&D activities do influence the positions of countries in the ranking of expenditure per tertiary student. In Germany, the Netherlands, Norway, Sweden, and Switzerland, R&D activities represent over 40 percent of total expenditure on education. However, *Education at a Glance* presents two types of indicators, one that includes R&D activities and another that excludes them in order to show just the results for educational core services.

### Similar Criteria May Not Lead to Similar Outcomes

Countries do vary in terms of size, level of wealth, and composition of the population, and these criteria need to be taken into account when interpreting the results and implementing reforms. Yet, it would be restrictive to consider that this does not allow comparison between OECD countries. Countries with seemingly similar situations show significant differences in performance. The OECD Programme for International Student Assessment study shows that the performances of 15-year-old students with an immigrant background (rather than native backgrounds) vary markedly across OECD countries that have a large proportion of immigrants. In Canada and Sweden, for instance, the performances in science of 15-year-olds are better for second-generation than for first-generation immigrants. On the other hand, Germany experienced a significant setback in performances, which recently led the German government to reform its education system.

### Strategies for Investing in Expanding Education Systems

Methodological clarifications on tertiary education data contained in this article should not overshadow the main trends reported in *Education at a Glance*. As discussed in this publication, the most important challenge facing all OECD countries in the years to come will be to find a balance between public and private funding while concurrently providing different forms of public subsidies to tertiary students. Some countries have successfully identified new sources of private funding, and others have increased their public spending. Countries that have chosen neither option are experiencing increasing difficulties to reconcile development with quality and equity. This challenge is and will continue to be a notable one, as all statistics published in the past 20 years have confirmed that tertiary education is expanding at an extremely fast pace. This expansion is caused both by labor-market demands, where the quantity of highly qualified jobs is generally superior to the potential number of tertiary graduates in almost all countries, and by the individual benefits brought about by a tertiary degree, in terms of higher salaries and improved job perspectives. Of course, some countries will even have difficulties replacing their retiring workforce in the coming decade.

Tertiary education will certainly continue to develop in the years to come, and every country will need to take significant measures to face this expansion while still maintaining the quality of university programs as well as equitable access. As the current economic situation hinders the financing of tertiary education, the pressure to develop will be even stronger. International comparisons will continue to fuel the public debate by describing and analyzing the efficiency of the different policies put in place by decision makers.