Measuring Access to Higher Education in India

Pankaj Mittal and Bhushan Patwardhan

Abstract
The gross enrollment ratio (GER) is a universally accepted indicator for the level of participation in higher education. India has adopted policies to increase the GER by expanding its higher education capacity and by promoting distance and online modes of delivery. However, the low number of students eligible for admission to higher education is a major limiting factor. The eligible enrollment ratio (EER) is a more realistic indicator.

The GER is the ratio between the number of enrollments in higher education and the total population in the 18–23 age group. A high GER indicates a high degree of participation. According to 2017 UNESCO data, the GER in higher education in India is relatively low, at 27.4 percent, compared to the global average (29 percent), and it is substantially lower than the GER of higher-income countries such as the United States (88.2 percent), Germany (70.3 percent), and the United Kingdom (60 percent). It is low even in comparison with other lower-middle-income economies such as Brazil (51.3 percent) and China (49.1 percent). In this article, we discuss the appropriateness of the GER for a country like India.

Why Is the Indian GER Low?

In India, successful completion of the 12th grade in secondary school grants basic eligibility for enrollment in higher education. The relatively low GER in higher education in India is primarily due to a shortage of eligible candidates. This shortage is mainly the result of low enrollments and high dropout rates at the school level. Several factors, including gender, language of instruction, and socioeconomic constraints are responsible for the gradual decrease of the number of students during secondary school. This shortage of eligible candidates represents a major bottleneck hindering an increase of the GER in higher education.

Obviously, this cannot be resolved by increasing the number of colleges or universities, or by promoting higher education via distance or online modes. To increase the number of students who are eligible to enroll into higher education, India needs to focus on increasing the number of youth completing higher secondary school. The availability, accessibility, affordability, and quality of higher education and its relevance for employment also have significant bearing on the GER. Many countries with a substantial gap between the gross number of individuals in the 18–23 age group and the number of those actually eligible to enter higher education face a similar situation. For lower-middle-income countries like India, the GER may not be the most appropriate indicator to measure access.

Eligible Enrollment Ratio (EER)

For a fairer comparison between higher- and lower-income countries, the EER may be a more appropriate indicator. The EER is defined as the ratio between the number of students enrolled in higher education and the number of students in the 18–23 age group having successfully completed 12th grade. The EER is a judicious measurement of enrollment because it takes the eligibility parameter into account, thus improving the precision of the indicator.

As data on the number of students having passed 12th grade in the relevant age group is not readily available in most countries, we used data relating to the completion rate (CR) for our study to compare GER and EER (Measuring Access, Quality and Relevance in Higher Education). According to the UNESCO Institute for Statistics, the CR is defined as the number of individuals in the relevant age group who have completed the last grade of a given level of education, expressed as a percentage of the total population of that same age group. The EER can be expressed in terms of the formula EER=GER/CR. We used this formula to determine the EER of 10 representative countries from both higher- and lower/middle-income economies, including Brazil, China, France, Germany, India, Indonesia, Pakistan, South Africa, the United Kingdom, and the United States.

Comparing GER and EER

We studied data collected over five years (2013–2017) by the UNESCO Institute for Statistics. The missing data for the CR was calculated using a forecast tool incorporating a linear regression model. The EER obtained for the 10 selected countries was compared with their respective GER. We discovered that the absolute difference between the EER values of higher-income countries and those of lower-middle-income countries was much smaller than the respective differences in GER values.

Interestingly, we also noticed that while the GER and EER were both consistently high for higher-income countries such as the United States (GER 88.2 percent, EER 93.5 percent), France (65.6 percent, 75.5 percent) and the United Kingdom (60.0 percent, 63.1 percent), the difference between GER and EER for these same countries was less than 10 percentage points, which is an indication of relatively stable and mature education systems. Our study shows that India (EER 64.3 percent) offers better access to higher education than the United Kingdom (EER 63.1 percent). The GER of Indonesia (36.4 percent) is higher than in India, however its EER (57.7 percent) is lower. Pakistan ranks last among the selected countries both in terms of GER (9.4 percent) and EER (43.3 percent). India ranks eighth in terms of GER, but ranks sixth when using the EER as an indicator. A large difference between GER and EER indicates a large gap between age group and eligible population. In 2017, the difference between GER and EER in India was 37.5, the highest among all selected countries. This is an indication of the poor state of the school system, aggravated by a low rate of access to higher education. For a country like India, the EER offers a more realistic estimation: Considering educational eligibility in addition to age gives better precision when measuring the level of participation in higher education.

Our study shows that India (EER 64.3 percent) offers better access to higher education than the United Kingdom (EER 63.1 percent).

The hallmark of policy for any country is the quality of its higher education. Higher-income countries like Australia, the United Kingdom, and the United States are able to effectively participate in the knowledge economy thanks to their high quality education focusing on skills acquisition and concern for employability. These countries also attract a large number of international students—which contributes to boosting enrollments. In addition, with the current trend of making use of continuing education coupled with rapid changes in technology and job markets, the working population above 23 make up an increasing share of enrollments. Therefore, the definition of the GER, which is linked to a specific age group, needs to be reconsidered.

Conclusion

Higher-income and lower-income countries should be compared on equal terms. The GER is not an appropriate indicator to measure the level of participation in lower-income countries, where school systems are less developed and the number of international students is minimal. The EER is a more relevant indicator, as it takes into account imbalances at entry level. More in-depth study is necessary to optimize the EER as a new indicator to measure the level of participation in higher education. ◢

Pankaj Mittal is secretary general, Association of Indian Universities, New Delhi, India. E-mail pankajugc@gmail.com. Bhushan Patwardhan is vice chairman, University Grants Commission, New Delhi, India. E-mail: bpatwardhan@gmail.com.

This article draws data from the study Measuring Access, Quality and Relevance in Higher Education, Economic & Political Weekly, 2020. *The authors thank their coauthors Anjali Radkar, Anitha Kurup, and Ashwani Kharola.*