

MARCH 2021

FACT SHEET

ACCESS TO TERTIARY EDUCATION

COUNTRY COMPARISON USING GROSS ENROLMENT RATIO

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Khuluvhe, M. and Ganyaupfu, E. (2021). *Access to Tertiary Education: Country Comparison using Gross Enrolments Ratio*. Department of Higher Education and Training, Pretoria.

This Fact Sheet is available on the Department of Higher Education and Training's website: www.dhet.gov.za

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Date of publication: March 2021



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1. Background

The extent of participation in tertiary education, has critical implications for a country's relative international position on the production of human capital stock. The National Planning Commission¹ notes that although the South African higher education² system functions relatively well, the system still suffers from low participation rates, making it a mid-level performer in terms of knowledge production by international standards.

A commonly used proxy measure of the degree of participation in tertiary education is the Gross Enrolment Ratio (GER). The GER is often used internationally to compare participation in education across various countries.

2. Purpose

The aim of this Fact Sheet is to assess how South Africa's participation rate at universities fares when compared to other countries.

3. Definition and Interpretation of GER

Gross Enrolment Ratio (also known as participation rate) for tertiary education is calculated by dividing the number of students enrolled in tertiary education regardless of age by the population of the age group which officially corresponds to tertiary education and multiplying by 100³. According to UNESCO, the population of the official age for tertiary education is estimated to be the 5-year age group immediately following upper secondary education. For example, if the official entrance age to upper secondary is 15 years and the duration is 3 years, then a is the age group 18-22 years⁴.

The GER indicator values used in this Fact Sheet have been sourced from the World Bank. The data elements required to calculate GER values were obtained from the UNESCO Institute for Statistics and the United Nations Development Programme (UNDP). Data on tertiary education are collected by the UNESCO Institute for Statistics and are mapped to the International Standard Classification of Education (ISCED) to facilitate the comparability of education programs at the international level. Population data are drawn from the United Nations Population Division. Therefore, all the GER

¹ National Planning Commission (2012). National Development Plan 2030. Our Future-make it work. Chapter 9: Improving Education, Training and Innovation. The Presidency, Republic of South Africa.

https://www.nationalplanningcommission.org.za/assets/Documents/NDP_Chapters/devplan_ch9_0.pdf

² Refers to university education in the South African context.

³ <https://data.worldbank.org/indicator/SE.TER.ENRR>

⁴ <http://uis.unesco.org/en/glossary-term/gross-enrolment-ratio-tertiary-education#:~:text=The%20gross%20enrolment%20ratio%20is,education%20and%20fields%20of%20study>

statistics presented in this Fact Sheet were obtained as precisely calculated and reported by the World Bank to allow the use of a single source and to ensure a consistent methodology across countries.

With regards to interpretation, a high value of the computed GER indicates a high degree of participation in tertiary education by students of all ages in the country, and vice versa. It is important to note that the GER is not a measure of the extent to which a particular age cohort of people participate in higher education⁵. As indicated, it measures participation levels irrespective of the age of participants. In the case of some countries, a trend towards higher GER could be attributed to a declining population in the age group used in the calculation of GER instead of improvements in enrolments.

4. Limitation of GER

The GER is a broad measure of participation in tertiary education and does not take into account the differences in duration of programmes between countries or between different levels of education and fields of study. The indicator is standardised to some extent by measuring it relative to a 5-year age group for all countries and may underestimate participation especially in countries with poorly developed tertiary education systems or those where provision is limited to first tertiary programmes, which are generally shorter than 5 years in duration⁶.

5. Definition of Tertiary Education

Tertiary education builds on secondary education, providing learning activities in specialised fields of education. It aims at learning at a high level of complexity and specialisation. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education. It comprises ISCED level 5 (labelled as Short-cycle tertiary education), ISCED level 6 (labelled as Bachelor's or equivalent level), ISCED level 7 (labelled as Master's or equivalent level) and ISCED level 8 (labelled as Doctoral or equivalent level).

According to World Bank⁷, tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

⁵ This is a different indicator – often referred to as Net Enrolment Rate and sometimes as Specific Age Group Enrolment Rate.

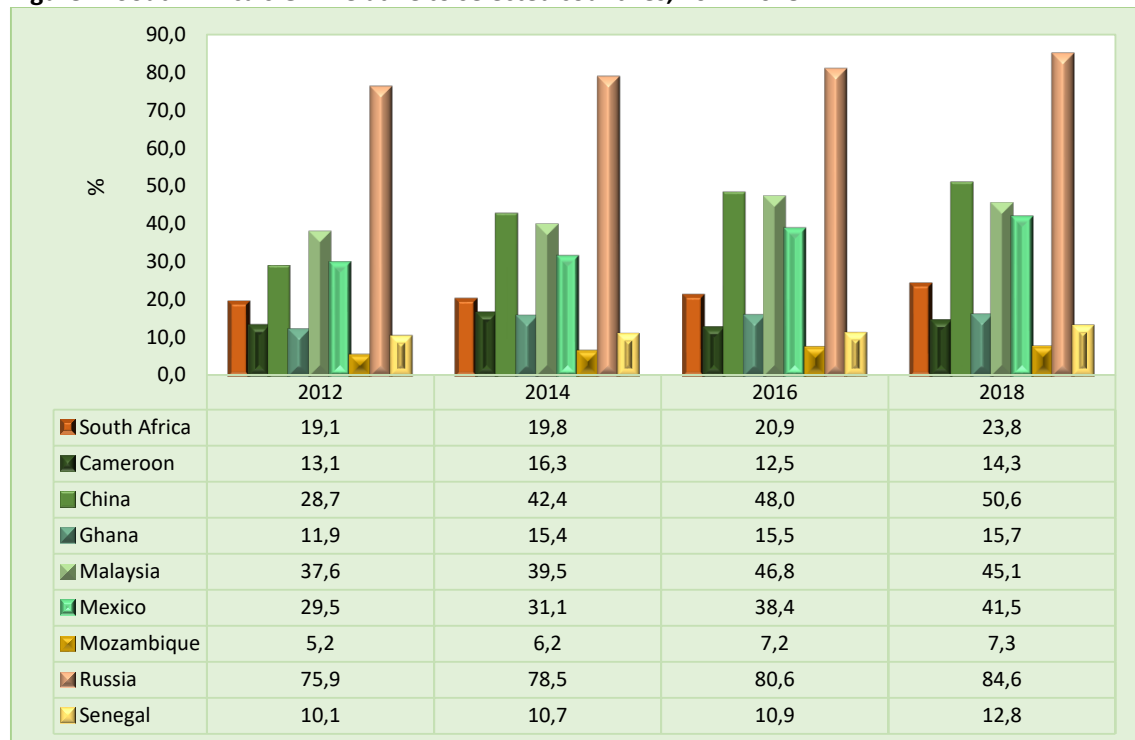
⁶ UNESCO Institute for Statistics (2021). Glossary: Gross enrolment ratio for tertiary education. UNESCO. Accessed 23 March 2021. <http://uis.unesco.org/en/glossary-term/gross-enrolment-ratio-tertiary>

⁷ <https://data.worldbank.org/indicator/SE.TER.ENRR>

6. Summary of Findings

Figure 1 shows that South Africa's overall GER remained much lower than GERs of comparable middle-income countries such as Russia, China, Malaysia and Mexico over the period 2012-2018. In 2018, South Africa's GER was 23.8% while that of Russia was 84.6%. Conversely, South Africa's participation rate in tertiary education remained much higher than GERs for African countries over the 2012 to 2018 period, namely Cameroon, Ghana, Mozambique and Senegal.

Figure 1: South Africa's GER relative to selected countries, 2012-2018⁸



Source: World Bank, 2021

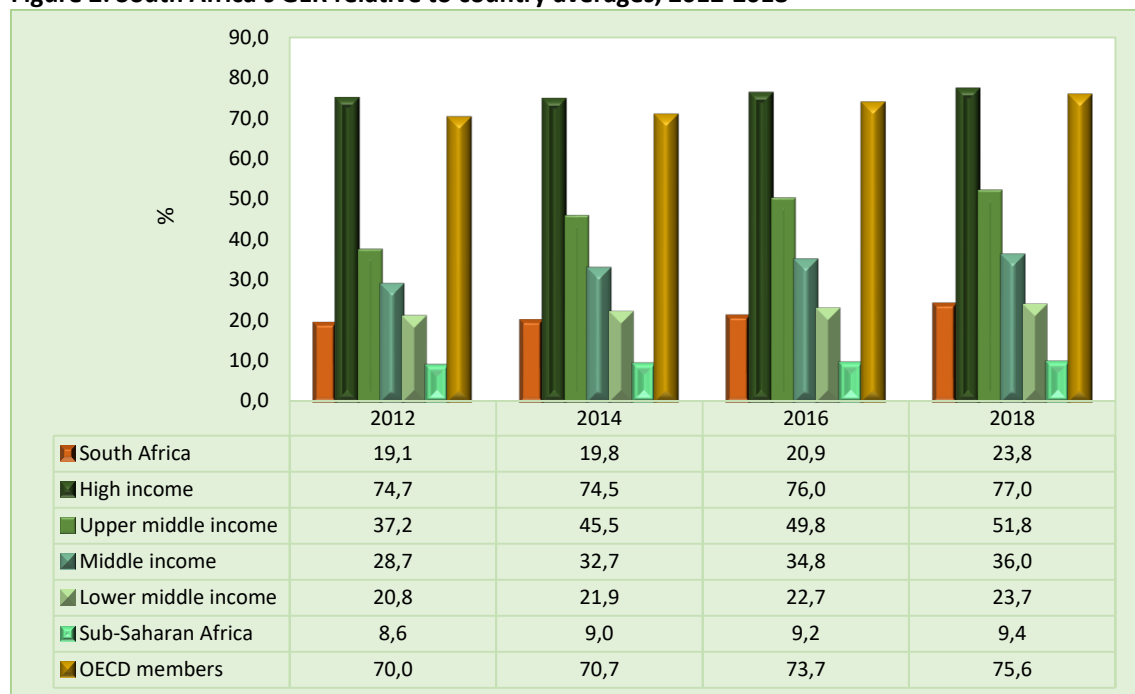
Note 1: Countries included in the analysis were selected based on consistent availability of data.

Note 2: All the GER statistics presented in this Fact Sheet were obtained as precisely calculated and reported by the World Bank.

⁸ World Bank (2021). World Development Indicators. Gross enrolment, tertiary (%). Accessed 21 March 2021. <https://data.worldbank.org/indicator/SE.TER.ENRR>

Figure 2 shows that South Africa's Gross Enrolment Ratio is lower than the averages of OECD, high income, upper middle income and middle income countries for the three years under review. In 2018, South Africa's GER was much lower than the averages of OECD (75.6%) and middle income countries (36%). By contrast, South Africa's participation rate was higher than the averages of the Sub-Saharan African region (9.4%) and lower middle income countries (23.7%).

Figure 2: South Africa's GER relative to country averages, 2012-2018⁹



Source: World Bank, 2021

Note 1: Countries included in the analysis were selected based on consistent availability of data.

Note 2: All the GER statistics presented in this Fact Sheet were obtained as precisely calculated and reported by the World Bank.

⁹ World Bank (2021). World Development Indicators. Gross enrolment, tertiary (%). Accessed 21 March 2021. <https://data.worldbank.org/indicator/SE.TER.ENRR>

Table 1 depicts South Africa’s participation rates in tertiary education disaggregated by gender, relative to analogous participation rates in selected comparable international countries. Between 2012 and 2018, female GER in South Africa constantly remained higher than the GER of male counterparts. Female GER increased from 22.4% in 2012 to 28.3% in 2018, while male GER increased from 15.9% in 2012 to 19.4% in 2018, showing higher participation rate among females in the country.

Participation in tertiary education by females in South Africa generally remained higher than female participation rates in all African countries, particularly Cameroon, Ghana, Mozambique and Senegal.

Throughout the period 2012 to 2018, both female and male participation rates in South Africa constantly remained much lower than analogous participation rates in comparable emerging economies, particularly China, Malaysia, Mexico and Russia.

Table 1: South Africa’s GER by gender relative to selected countries, 2012-2018^{10, 11}

Country	2012		2014		2016		2018	
	Female	Male	Female	Male	Female	Male	Female	Male
South Africa	22.4	15.9	23.2	16.5	24.5	17.4	28.3	19.4
Cameroon	11.4	14.8	14.3	18.3	11.7	13.3	13.4	15.1
China	30.3	27.3	45.8	39.4	52.7	43.8	55.9	45.9
Ghana	9.2	14.6	12.4	18.3	13.0	18.0	13.6	17.7
Malaysia	43.3	32.2	45.4	33.9	50.6	43.2	49.9	40.7
Mexico	29.2	29.8	30.8	31.4	38.6	38.3	42.3	40.7
Mozambique	4.1	6.4	5.1	7.3	6.3	8.2	6.5	8.1
Russia	85.2	67.0	85.8	71.5	87.7	73.9	91.7	77.8
Senegal	7.4	12.8	7.9	13.5	8.1	13.7	10.3	15.2

Source: World Bank, 2021

Note 1: Countries included in the analysis were selected based on consistent availability of data.

Note 2: All the GER statistics presented in this Fact Sheet were obtained as precisely calculated and reported by the World Bank.

¹⁰ World Bank (2021). World Development Indicators. Gross enrolment, tertiary, female (%). Accessed 21 March 2021.

<https://data.worldbank.org/indicator/SE.TER.ENRR.FE>

¹¹ World Bank (2021). World Development Indicators. Gross enrolment, tertiary, male (%). Accessed 21 March 2021.

<https://data.worldbank.org/indicator/SE.TER.ENRR.MA>

7. Conclusion

South Africa's participation rates in tertiary education generally compare markedly lower relative to participation rates in comparable emerging economies such as China, Malaysia, Mexico and Russia. Despite having higher participation rates than other African countries and the average of Sub-Saharan Africa, South Africa's low performance by international standards suggests the need to implement policy measures that accelerate expansion of access to higher education by the country's population. The National Development Plan (NDP) claims that South Africa can realise an improvement in the production of the required skills and human capital stock in the economy through higher participation rates in tertiary education. It therefore targets participation rate of more than 30% by 2030; one that is likely to be achieved if current trends in enrolment growth are maintained for the next decade.