

GLOBAL ESTIMATES OF THE MARKET SHARE OF CATHOLIC SCHOOLS AND UNIVERSITIES



Quentin Wodon
February 2021

Analytics series

KEY MESSAGES:

- More than 40 percent of all students in Catholic primary schools live in low-income countries, with another 30 percent in lower-middle income countries. By contrast, almost 70 percent of all students in Catholic higher education live in upper-middle and high income countries.
- Globally, the market share of Catholic education is estimated at 4.8 percent at the primary level, 3.2 percent at the secondary level, and 2.8 percent at the higher education level. For primary education, it is much higher in sub-Saharan Africa (11.0 percent) and in low income countries (13.7 percent).

Introduction

Globally, the Catholic Church estimates that 35.0 million children were enrolled in Catholic primary schools in 2018, with 19.3 million children enrolled in Catholic secondary schools and 7.4 million children enrolled at the preschool level. In addition, 6.5 million students are enrolled in Catholic higher education institutions. As the largest non-state provider of education in the world, the Catholic Church plays a significant role in efforts to achieve the fourth Sustainable Development Goal¹. Yet this role is rarely acknowledged in policy discussions, probably in part because the scale of the contribution of Catholic schools and universities is not fully understood.

In separate notes in this series (Wodon, 2020a, 2020b), trends over time in enrollment in Catholic education were documented based on the regional categories used by the Catholic Church in its annual statistical yearbooks. This note provides instead estimates of the market share for Catholic education in 2018 at the primary, secondary, and higher levels for the more commonly used regional and income group classifications of the World Bank.

¹ The fourth Sustainable Development Goal (SDG4) is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Box 1: Knowledge Notes

What is the mission of the Global Catholic Education website? The site informs and connects Catholic educators globally. It provides them with data, analysis, opportunities to learn, and other resources to help them fulfill their mission with a focus on the preferential option for the poor.

Which topics are covered in the Knowledge Notes Series? The series explores achievements and challenges for Catholic schools globally, including in terms of enrollment, reach to the poor, academic performance, parental priorities, costs and affordability, and religious education. Interesting innovations are also featured.

What is the focus of this note? Globally, the Catholic Church estimates that 68 million students are enrolled in its schools and universities (data for 2018). This note provides estimates of the market share of Catholic education at the primary, secondary, and higher levels globally, by regions, and by country income groups using the standard classifications of the World Bank.

Visit us at www.GlobalCatholicEducation.org

Enrollment Data

The analysis of trends in enrollment provided in other Knowledge notes in this series (Wodon, 2020a, 2020b) relies on the geographic categories available in the statistical yearbooks of the Church, such as the Americas, Europe, Africa, Asia, and Oceania. These are the groupings used in the yearbooks, and readers may be familiar with them. But they do not correspond to regional groupings commonly used in international work. Therefore, we rely instead in this note on regional groupings used by the World Bank. In addition, we provide data according to income groups.

The World Bank classifies countries in six regions (East Asia and Pacific, Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, North America, South Asia, and Sub-Saharan Africa) and four income groups (low, lower-middle, upper-middle, and high income). For the World Bank's 2021 fiscal year, low-income countries are those with a Gross National Income (GNI) per capita calculated using the World Bank Atlas method of \$1,035 or less in 2019. Lower-middle-income countries are those with a GNI per capita between \$1,036 and \$4,045. Upper-middle-income countries are those with a GNI per capita between \$4,046 and \$12,535. Finally high-income countries are those with a GNI per capita of \$12,536 or more².

Box 1: Data on Catholic Education

Data on the number of students in K12 Catholic schools and universities are available in the Catholic Church's annual statistical yearbooks, with the most recent data available for 2018 (Secretariat of State, 2020). For K12 education, the yearbooks provide data on enrollment in preschools, primary schools, and secondary schools for each country and some territories. For higher education, enrollment data are available for students in higher institutes, students in ecclesiastical studies at the university level, students in other types of university studies. While the data are self-reported by the chancery offices of ecclesiastical jurisdictions that fill the annual questionnaire, the data seem to be of sufficient quality to document broad trends over time. In a typical year, about five percent of the ecclesiastical jurisdictions do not fill the questionnaire, but this is the case mostly for small jurisdictions, so that the missing data should not affect the overall results substantially for most countries, or at the regional and global levels.

Primary and Secondary Education

Table 1 provides estimates of enrollment for 2018 in Catholic education by level for the six World Bank regions and the four country income groups. For primary and secondary education, both the number of students and the number of schools are reported. The analysis is not carried for pre-primary education because country coverage at that level is lower.

Much of the growth in enrollment in Catholic schools globally over time in the last few decades has concentrated in sub-Saharan Africa. As shown in Figure 1, in 2018 the region accounted for 55.0 percent of all students in Catholic primary schools globally, and 28.0 percent of all students in Catholic secondary schools. After sub-Saharan Africa, Latin America and the Caribbean and South Asia have the largest enrollment at the primary level, while for enrollment in secondary schools the South Asia region comes in second place, followed by Europe and Central Asia in third place.

More than 40 percent of all students in Catholic primary schools are located in low-income countries, with another 30 percent in lower-middle income countries. Less than 30 percent live in upper-middle and high income countries.

In terms of income groups, 40.9 percent of all students in Catholic primary schools are located in low-income countries, with another 29.7 percent in lower-middle income countries. Less than 30 percent of students in primary Catholic schools live in upper-middle and high income countries. For secondary school enrollment, the proportion of students who live in low income countries is smaller, because educational attainment in those countries remains low, but together, low income and lower-middle income countries still account for more than half of total enrollment.

Overall it seems fair to state that at the primary and to a lower extent at the secondary level, the Catholic Church serves primarily children in countries with comparatively low levels of economic development. This is good news for the emphasis of the Church placed on the preferential option for the poor, but it also means in the context of the current crisis that children in Catholic schools are likely to have been affected severely by the COVID-19 crisis.

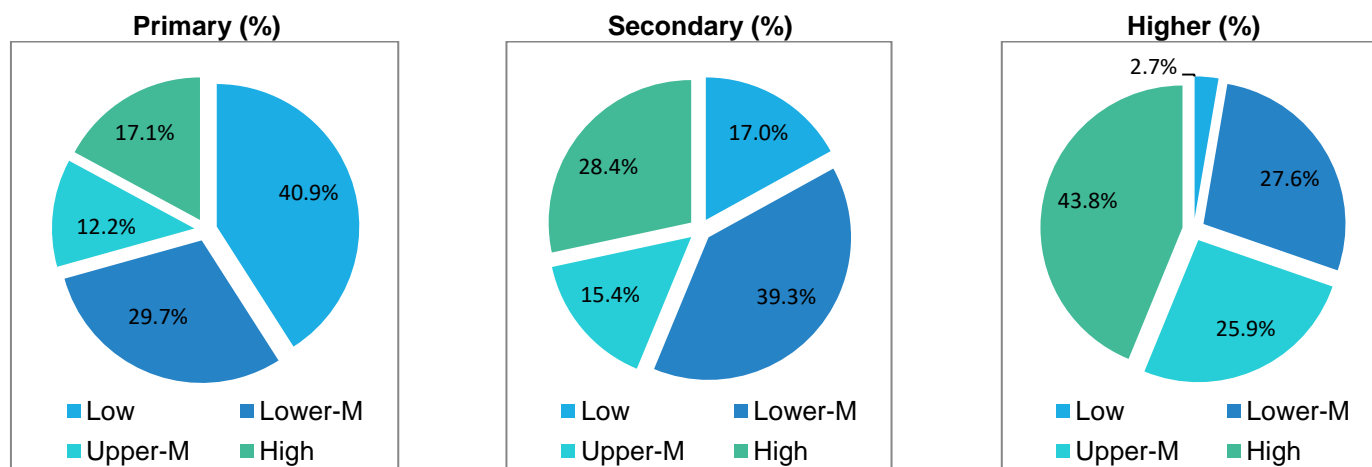
² The income group in which countries are classified may change over time whether because of economic growth or because of changes in methodology or rebasing of a country's National Accounts. For the World Bank's 2021 fiscal year, ten countries moved to a different category than the year before.

Table 1: Enrollment in Catholic Schools and Universities by Region and Income Group, 2018

Regions and Income Groups	Primary schools		Secondary schools		Higher Ed.
	Schools	Students	Schools	Students	Students
Estimates of number of schools and students					
Regions					
East Asia & Pacific	8,814	2,185,191	4,184	2,192,622	965,356
Europe & Central Asia	15,715	3,131,268	9,424	3,662,365	1,186,223
Latin America & Caribbean	15,631	4,371,221	10,333	2,816,819	1,701,331
Middle East & North Africa	725	289,241	460	151,733	56,639
North America	6,723	1,770,710	1,796	864,852	1,310,661
South Asia	10,994	3,997,214	7,605	4,207,249	887,851
Sub-Saharan Africa	44,544	19,267,154	15,739	5,411,658	359,020
Income Groups					
Low Income	34,735	14,335,210	9,919	3,274,435	172,858
Lower-Middle Income	28,894	10,412,295	15,936	7,581,178	1,784,779
Upper-Middle Income	13,574	4,261,212	10,629	2,978,055	1,673,934
High Income	25,943	6,003,282	13,057	5,473,630	2,835,510
World	103,146	35,011,999	49,541	19,307,298	6,467,081
Shares in global number of Catholic schools and students					
Regions					
East Asia & Pacific	8.5%	6.2%	8.4%	11.4%	14.9%
Europe & Central Asia	15.2%	8.9%	19.0%	19.0%	18.3%
Latin America & Caribbean	15.2%	12.5%	20.9%	14.6%	26.3%
Middle East & North Africa	0.7%	0.8%	0.9%	0.8%	0.9%
North America	6.5%	5.1%	3.6%	4.5%	20.3%
South Asia	10.7%	11.4%	15.4%	21.8%	13.7%
Sub-Saharan Africa	43.2%	55.0%	31.8%	28.0%	5.6%
Income Groups					
Low Income	33.7%	40.9%	20.0%	17.0%	2.7%
Lower-Middle Income	28.0%	29.7%	32.2%	39.3%	27.6%
Upper-Middle Income	13.2%	12.2%	21.5%	15.4%	25.9%
High Income	25.2%	17.1%	26.4%	28.4%	43.8%
World	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Author's estimations.

Figure 1: Shares of All Students in Catholic Education by Country Income Groups, 2018



Source: Author's estimations.

Globally primary schools accounted in 2018 for 64.5 percent of total enrollment in primary and secondary Catholic schools, versus 36.5 percent for secondary schools. In sub-Saharan Africa however, primary schools still account for 78.1 percent of the combined enrollment in primary and secondary schools due to limited transition to secondary schools in many countries. Only four in ten students in Africa complete their lower secondary school according to the World Bank's the World Development Indicators. By contrast, in Europe, primary schools account for less than half (46.1 percent) of total enrollment in Catholic schools. In North America, primary school account for more than two thirds (67.2 percent) of total enrollment in primary and secondary schools, possibly because in the absence of meaningful government funding in the United States, the out-of-pocket cost of enrollment is larger at the secondary level.

Higher Education

The footprint of Catholic higher education across countries and regions, and therefore also across income groups, is different from that of primary and secondary education. While the growth rate in enrollment in Catholic higher education is high in Africa, the region including sub-Saharan Africa still accounts for only a very small share of total enrollment in Catholic higher education. In Table 1, the total number of students enrolled in Catholic higher education is reported, combining the three categories in the statistical yearbooks of the Church.

In 2018, sub-Saharan Africa accounted for only 5.6 percent of all students in Catholic higher education globally. By contrast, despite having a small share of the global population, North America account for one fifth of all students enrolled in Catholic higher education, thanks in particular to a large number of Catholic colleges and universities in the United States. The share of students in Catholic higher education is also relatively high in Latin America at 26.3 percent and in Europe and Central Asia, at 18.3 percent.

Sub-Saharan Africa accounts for only 5.6 percent of all students in Catholic higher education globally. Globally, 43.8 percent of students in Catholic higher education are studying in high income countries.

In terms of income groups, only 2.7 percent of all students in Catholic higher education are located in low-income countries. The proportion is higher at 27.5 percent in lower-middle income countries thanks to India, and 25.9 percent in upper-middle income countries thanks to large countries in Central and Latin America.

Still, 43.8 percent of all students in Catholic higher education are studying in high income countries. While a growing share of those students come from low and middle income countries over time, the overwhelming majority of the students were born in these countries. As is the case for higher education in general, Catholic higher education remains highly unequal at the global level.

Estimates of Market Shares

What do these estimates mean for the market share of Catholic schools and universities? In order to compute these market shares, enrollment data from the latest statistical yearbook of the Church are compared with data on total enrollment in primary and secondary schools from the UNESCO Institute of Statistics³. In the case of higher education, the approach involves an additional step and may be less accurate, but is nevertheless instructive.

The resulting market shares for Catholic schools and universities are provided in Table 2 and Figure 2. At the primary level, the market share of Catholic schools is especially high in sub-Saharan Africa at 11.0 percent. At the secondary level, it is at 6.7 percent for the region. In low-income countries, Catholic schools account for one in seven students enrolled in all schools (13.7 percent) and almost one in ten students enrolled at the secondary level (9.0 percent). The market share of Catholic schools is lowest in upper-middle income countries in part because of the absence of Catholic schools in mainland China (by contrast, the schools have a strong footprint in Taiwan).

Estimates of market shares for Catholic higher education are more tentative for two reasons. First, the UNESCO Institute of Statistics does not provide data on the total number of students enrolled in higher education as it does for primary and secondary education. This means that to obtain the denominator for the computation of market shares, we need to multiply the gross enrollment rate at the tertiary level by the population of the appropriate age, which requires a few manipulations. Given the additional variables and calculation involved, this may generate a (probably small) source of error. More importantly, it is not fully clear whether enrollment data available in the statistical yearbooks of the Church for higher education correspond to the definitions of tertiary education used by the UNESCO Institute of Statistics. Still, despite limits in the available data, computing market shares provides a useful order of magnitude of the role played by Catholic higher education globally.

³ Estimates of total enrollment are not available for pre-schools, hence this level is not considered.

The resulting market shares for Catholic schools and universities are also provided in Table 2. Globally, Catholic higher education accounts for 2.8 percent of all students enrolled at that level. In terms of regions, the market share is highest in Latin America and North America, at respectively 6.0 percent and 5.9 percent, and lowest in the Middle East and North Africa, at 0.4 percent. In terms of income groups, the market share is highest in high income countries at 4.8 percent, and lowest in upper-

middle income countries (probably in large part because of China) at 1.6 percent).

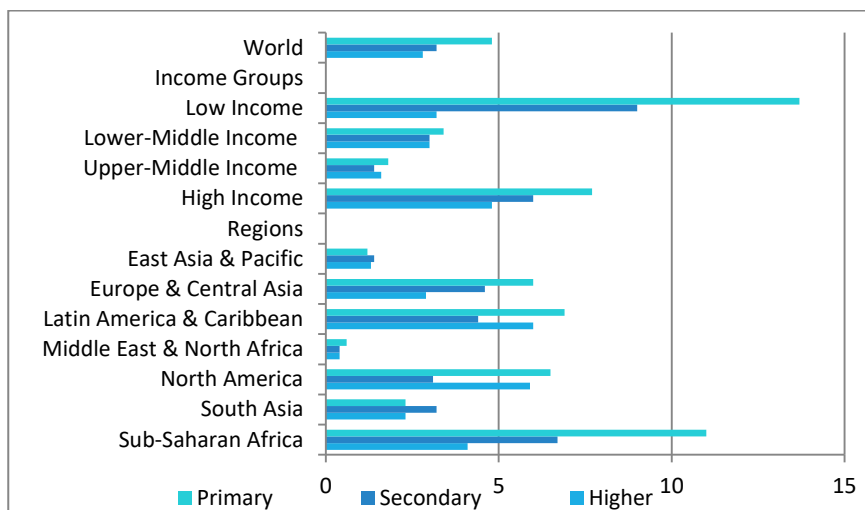
Globally, the market share of Catholic education is estimated at 4.8 percent at the primary level, 3.2 percent at the secondary level, and 2.8 percent at the higher education level. For primary education, it is much higher in sub-Saharan Africa (11.0 percent) and in low income countries (13.7 percent).

Table 2: Market Shares of Catholic Education by Education Level (%), 2018

Regions and Income Groups	Primary schools	Secondary schools	Higher education
Regions			
East Asia & Pacific	1.2	1.4	1.3
Europe & Central Asia	6.0	4.6	2.9
Latin America & Caribbean	6.9	4.4	6.0
Middle East & North Africa	0.6	0.4	0.4
North America	6.5	3.1	5.9
South Asia	2.3	3.2	2.3
Sub-Saharan Africa	11.0	5.7	4.1
Income Groups			
Low Income	13.7	9.0	3.2
Lower-Middle Income	3.4	3.0	3.0
Upper-Middle Income	1.8	1.4	1.6
High Income	7.7	6.0	4.8
World	4.8	3.2	2.8

Source: Author's estimations.

Figure 2: Market Shares of Catholic Education by Level, Regions and Income Groups (%), 2018



Source: Author's estimations.

Are these estimates of the right order of magnitude? As a quick test, consider North America, which is dominated in terms of population size and enrollment in higher education by the United States. According to the website of the Association of Catholic Colleges and Universities and based on data from the National Center for Education Statistics, about 850,000 students were enrolled in Catholic higher education in 2018-19.

The National Center for Education Statistics also reports on its website that total undergraduate enrollment in degree-granting postsecondary institutions in 2018 was at 16.6 million students, while 3.0 million students were enrolled in post-baccalaureate degree programs. This generates a total number of university students of 19.6 million students. Dividing the number of students in Catholic colleges and universities by the total enrollment at the undergraduate and graduate levels for degree granting institutions generates a market share of for Catholic colleges and universities of 4.3 percent. This is slightly below the estimate of 5.9 percent for North America in Table 2.

The likely reason for the difference is that the category of students in 'higher institutes' in the statistical yearbook of the Church may include students who are not considered as enrolled in degree-granting institutions by the National Center for Education Statistics. Differences in enrollment in Catholic institutions in other countries in North America, and especially in Canada, may also play a role in the differences in estimates just mentioned. Still, with those caveats in mind, this simple comparison suggests that estimates in Table 2 do seem to provide an adequate order of magnitude for the market shares of Catholic higher education, although possibly slightly on the high side.

Conclusion

Two main findings stand out from the analysis. First, there is as expected a major difference in terms of where students in Catholic education live by education level. More than 40 percent of all students in Catholic primary schools live in low-income countries, with another 30 percent in lower-middle income countries. By contrast, almost 70 percent of all students in Catholic higher education live in upper-middle and high income countries.

Second, the market share of Catholic education is estimated at 4.8 percent at the primary level, 3.2 percent at the secondary level, and 2.8 percent at the higher education level. For primary education, Catholic schools have an especially large footprint in sub-Saharan Africa (11.0 percent) and in low income countries (13.7 percent). Keeping these orders of magnitude in mind is important when discussing policy at the international level.

References

Secretariat of State of the Vatican. 2020. *Annuario statisticum Ecclesiae 2018 / Statistical yearbook of the Church 2018 / Annuaire statistique de l'Eglise 2018*. Vatican City: Libreria Editrice Vaticana.

Wodon, Q. 2020a. Global and Regional Enrollment Trends in K12 Catholic Schools: 1975-2018. Global Catholic Education Knowledge Note. Washington, DC: Global Catholic Education.

Wodon, Q. 2020b. Global and Regional Enrollment Trends in Catholic Higher Education: 1975-2018. Global Catholic Education Knowledge Note. Washington, DC: Global Catholic Education.

Acknowledgment and disclaimer: The author is a Lead Economist at the World Bank and a pro bono project manager with OIEC (International Office of Catholic Education). The objective of the note is to convey research findings in a rapid and accessible way. The opinions expressed in this note are those of the author only and need not represent the views of OIEC, nor the views of the author's employer.