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## OPPORTUNITY

EduFinance

Closing the $\mathbf{6 6}$ million school seat gap in low- and middle-income countries

## TABLE OF CONTENTS

I. Executive Summary ..... 7
Methods \& Limitations ..... 9
II. The State of Global Education ..... 10
Challenge 1: Access ..... 11
Challenge 2: Quality ..... 12
III. State Education Financing Gaps and Challenges ..... 14
IV. Growth of Non-State Education ..... 20
V. Financing the Non-State School Sector ..... 23
Education Sector Supply \& Demand ..... 23
School Improvement Loans ..... 24
School Fee Loans ..... 25
VI. A Model for Sizing and Forecasting the Affordable Non-State Education Sector ..... 28
Approach, Methods \& Limitations ..... 28
Total Enrollment in Non-State Schools ..... 29
Pupil-Teacher Ratios (PTR) in Non-State Schools ..... 30
Number of Children per Non-State School ..... 31
Number of Non-State Schools ..... 32
Potential Demand for Financing ..... 33
Market Demand ..... 33
Financial Institutions are Recognizing the Opportunity ..... 38
VII. The Future of Education Finance ..... 39
Opportunity EduFinance Results to Date ..... 40
Schools are Growing and Improving ..... 40
VIII. Appendix ..... 42
IX. References ..... 49

## FIGURES

Figure 1. Enrollment Growth Requires Buildup of New School Capacity 66 Million New Seats, Excluding Out-of-School Children

Figure 2. More Schooling Leads to Higher Wages - Especially in Africa and for Girls

Figure 3. Number of Out-of-School Children has Declined 10
Figure 4. Africa has Overtaken South Asia as the Region with the Most Out-of-School Children11

Figure 5. Learning Outcomes by Gender and Poverty Levels 12
Figure 6. Assessed Grade Level vs. Enrolled Grade Level (India) 12
Figure 7. More than 15 Percent of Low- and Middle-Income Government
Expenditure is Already Going to Education
Figure 8. Low- and Middle-Income Countries Top the Table of 'Education Spending as a Percentage of Government Spending'14

Figure 9. Africa Faces the Greatest Proportion of Out-of-School Children 15
Figure 10. Low-Income Countries Increased Spending Some, but are Seeing Rising Out-of-School Children

Figure 11. African and South Asian Governments Collect Least Amount
of Revenue in Proportion to GDP
Figure 12. Low- and Middle-Income Countries in Latin America and South Asia
Spend the Most on Education as a Percentage of GDP
Figure 13. Growth in State Funded Education is Expected to Decline
Significantly due to Covid-19
Figure 14. Low- and Middle-Income Countries Struggle to Spend More
on State Education as a Percentage of GDP
Figure 15. Non-State Schools are Gaining Market Share Worldwide 20
Figure 16. Kenya: More Children in Lower Income than Higher Income Households are Attending Non-State Schools

Figure 17. Uses of School Improvement Loans 24
Figure 18. Children with School Fee Loans Likely to be Less Absent and Have Lower Dropout Rates

Figure 19. Majority of School Fee Loan Borrowers are Above 46 Years of Age 25
Figure 20. School Fee Loan Borrowers are More Likely to Have Some Level of Employment ..... 25
Figure 21. School Fee Loan Borrowers Have Larger Households and More Children Attending School ..... 26
Figure 22. Families with School Fee Loans more Likely to Live Below Poverty Lines ..... 26
Figure 23. Non-State Education Growing much Faster than State Education in Low- and Middle-Income Markets ..... 28
Figure 24. Enrollment Growth Requires Buildup of New School Capacity - 66 Million New Seats, Excluding Out-of-School Children ..... 29
Figure 25. Pupil Teacher Ratios are Highest Throughout Sub-Sarahan Africa ..... 30
Figure 26. The Highest Pupil-Teacher Ratios are Consistently in Lower Income Countries ..... 30
Figure 27. The World's Largest Schools, on Average, are in Africa ..... 31
Figure 28. Sub-Saharan Africa is Growing Faster than any other Region, Tied for Largest School-Aged Population ..... 31
Figure 29. A $\$ 36$ Billion Market for EduFinance Products ..... 32
Figure 30. Additional \$6 Billion Of Demand to Come From Growth Through 2025 ..... 33
Figure 31. Top 25 EduFinance Markets Account for 87 Percent of Total Demand ..... 33
Figure 32. Africa is a Fast-Growing Market with Potential in Many Countries ..... 34
Figure 33. Growth in Africa Markets will Result in Much Greater EduFinance Demand Over the Coming Five Years ..... 35
Figure 34. Asia EduFinance Market Potential Strongest in India, Indonesia, Bangladesh, and Pakistan ..... 35
Figure 35. Asia EduFinance Demand Dominated by India ..... 36
Figure 36. Latin America EduFinance Market Demand Concentrated in Top 5 Markets ..... 36
Figure 37. Latin America Markets by the Numbers ..... 37
Figure 38. Financial Institutions are Recognizing the Opportunity ..... 37
Figure 39. Country Demographics ..... 43
Figure 40. Forecasts and Estimates ..... 45
Figure 41. Non-State Education Penetration by Region ..... 48

## ACRONYMS

| DFI | Development Finance Institution |
| :--- | :--- |
| EPDC | Education Policy Data Center |
| GDP | Gross Domestic Product |
| LMIC | Low- and middle-income countries |
| MFI | Microfinance Institution |
| NGO | Non-Governmental Organization |
| PTR | Pupil-Teacher Ratio |
| SDG | Sustainable Development Goal |
| UIS | UNESCO Institute of Statistics |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |

## LEGEND

## South Asia

## East Asia \& Pacific

## Middle East \& North Africa

## Sub-Saharan Africa

## Latin America \& Caribbean

## Europe \& Central Asia

Note: Countries included in the above regions are classified according to the UNESCO Institute for Statistics (UIS) groupings for Lower or Middle-Income (LMIC). Countries not classified as LMIC are not included in this analysis.

All currency referenced throughout this report are in United States Dollars (\$).

## I. EXECUTIVE SUMMARY

The increase in demand for affordable non-state schools means that there will be an additional 66 million new seats required in the next five years globally.

## EXECUTIVE SUMMARY

Education is essential for the economic and social growth of individuals and society, and its benefits are far-reaching and well-documented. At the individual level, education enhances peoples' ability to achieve higher earnings, live healthier lives, make informed decisions, and exercise their rights. For societies, education enhances social cohesion, fosters innovation, promotes economic growth, and reduces poverty'.

However, for millions of children in low- and middleincome countries, access to quality education remains scarce. Despite global gains in education over recent years, the world entered the COVID-19 pandemic with an estimated 617 million ${ }^{2}$ children worldwide not learning basic numeracy and literacy skills, which included approximately 258 million out-of-school children3. At the peak of the pandemic, 1.6 billion children were not in school, which will cost this generation of children an estimated $\$ 10$ trillion in lifetime earnings ${ }^{4}$.

Children who are the most disadvantaged in society-whether due to location, poverty, gender, ethnicity, or disability-are more likely to be out of school, and if they are in school, are likely to learn the least. Those children who were already disadvantaged before the pandemic have lost even

[^0]more classroom time than their peers due to the inability to learn from home.

Although governments have prioritized education in their agendas and expanded their education budgets, education remains underfunded in many developing regions. The Education Commission, a major global initiative engaging world leaders, policymakers, and researchers, estimates that low- and middle-income countries must increase their education spending by 117 percent for children to complete primary and secondary education with basic levels of learning ${ }^{5}$. Achieving basic education goals, however, requires more than increased national spending. Governments lack the capacity to manage their existing levels of spending, often allocating funds in ways that exclude poor and marginalized children ${ }^{6}$. Amplifying the issue is the population growth rate in many low- and middleincome countries and the resulting increase in the volume of school-age children, which continues to exceed the rate at which states can increase access to schools.

Given the context of the growing, unmet demand for education and capacity-constrained public management, states are being encouraged to recognize the value that non-governmental actors bring to education ${ }^{7}$. Non-state schools can play an important role in aiding overburdened state education systems in low- and middle-income countries by fulfilling unmet demand. In the roles of investors and direct providers, non-state actors can remove supply constraints, particularly for poor and marginalized families. The majority of non-state schools in low- and middle-income countries have adopted an affordable ${ }^{8}$ model, thereby catering to low-income families. Studies have shown that non-state schools can fill in gaps in regions where the nearest state schools are too far away, or when the demand for education outpaces public infrastructure. Moreover, in some regions, nonstate schools can cost less than state schools when accounting for informal fees.

In the last few decades, the number of non-state schools globally has increased significantly. According to official UNESCO Institute of Statistics (UIS) figures, the non-state education market share increased from 23.1 percent to 25.4 percent between 2005 and 2019 across low- and middle-income countries. If current rates hold, the non-state school sector will continue to grow its share of the education market to 27.2 percent by 2025.. Moreover, this may be an underestimation given that a significant portion of non-
state schools are unregistered with the government and therefore unaccounted for in official data.

Despite its important role in education, the non-state school sector remains under-leveraged and its growth has largely been financed organically-by proprietors' savings and/or informal borrowing. Affordable nonstate schools are heavily dependent on tuition from low- and middle-income families, which often means commercial banks and other lending institutions consider these businesses too risky and are unwilling to extend lines of credit. In addition, while affordable non-state schools keep their fees low to attract lower income families in the surrounding communities, these same families do not always have the steady cash flow readily available to pay for school costs.

Recognizing these significant financing gaps, Opportunity International's Education Finance (EduFinance) program has been partnering with institutions across the globe to extend financing to both leaders of non-state schools and families. In addition, EduFinance blends access to capital with trainings and localized support to educators at affordable non-state schools to improve their quality and maintain strong relationships with families. EduFinance, given its unique position in the non-state education market, leveraged its expertise and experience to conduct a sizing analysis of the non-state education market in low- and middle-income countries.

## EduFinance found that there is an estimated \$36 billion market for EduFinance flagship products

 worldwide: $\$ 10.3$ billion for School Improvement Loans and $\$ 25.7$ billion for School Fee Loans. The largest market demand globally by country and region is India ( $\$ 11.4$ billion) and South Asia ( $\$ 15.4$ billion), which is nearly twice the size as the next largest region, East Asia (\$8.0 billion). Third is Sub-Saharan Africa with a $\$ 4.9$ billion market and some of the fastest growing populations in the world. Latin America, just behind sub-Saharan Africa, also has a $\$ 4.9$ billion estimated market size (details discussed further in section VI).To demonstrate the extent of the growing global demand for non-state education, Figure 1 shows how the enrollment growth rate in the non-state sector between 2013 to 2018 has been higher than that of the state education sector. The increase in demand for affordable non-state schools means that there will be an additional 66 million new seats required in the next five years globally, which also indicates the potential for additional funding as explained above.

[^1]
## Enrollment Growth Requires Buildup of New School Capacity 66 Million New Seats, Excluding Out-of-School Children

5 Year Annualized Enrollment Growth


Actual and Forecast Number of Children Enrolled in Non-State Schools (millions)


Source: UIS, EduFinance

## Methods \& Limitations

To develop this sizing model, EduFinance combined field market research with publicly available data from UIS, the World Bank Open Data Initiative, and the Education Policy Data Center (EPDC). EduFinance also analyzed demographic trends, government expenditures, market demand, and other variables to estimate the number of state schools, as well as develop estimations for the demand for capital, specifically for EduFinance's tailored

School Improvement Loan and School Fee Loan products. While several constraints limited the depth of this analysis, including the absence of up-to-date country-specific data, EduFinance utilized triangulation, proprietary data, and the program's experience in the sector to generate the estimations.

# II. THE STATE OF GLOBAL EDUCATION 

## THE STATE OF GLOBAL EDUCATION

A large body of empirical work shows that for every additional year of schooling, a student can expect an additional 10 percent increase in their future wages ${ }^{9}$. Moreover, the returns on schooling have declined only modestly over time despite higher global averages of schooling attainment, suggesting that the demand for skills has increased simultaneously with supply. Finally, as shown in Figure 2 right, the returns are highest in sub-Saharan Africa, and far more for women than men.

The right of every individual to receive a quality education is enshrined in the Universal Declaration of Human Rights (1948) and the Convention on the Rights of the Child (1989). The international community pledged to make ambitious efforts to realize this right in the Millennium Development Goals (MDGs), and in the subsequent Sustainable Development Goal 4 (SDG 4), which aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." To this end, there has been remarkable progress in getting more children into classrooms over the last few decades. Net enrollment in low-income countries has greatly outpaced the historic performance of today's high-income countries.

By 2008, the average low-income country was enrolling students in primary school at almost the same rate as the average highincome country ${ }^{10}$.

While much progress has been made, significant challenges remain that hinder a vast number of children from going to school and learning.

[^2]
## More Schooling Leads to Higher Wages - Especially in Africa and for Girls

Wage Growth Associated with an Additional Year of School


Source: World Development Report (2018)

## FIGURE 3

Number of Out-of-School Children has Declined
Out-Of-School Children, Global


Source: UIS, EduFinance

## CHALLENGE 1: ACCESS

Millions of children around the world remain out of school

As of 2018, approximately 258 million children were out of school, which translates into one in five schoolage children around the world not in school. That amounts to 58.4 million primary school-age children, and 200 million secondary school-age adolescents
and youth that are out of school ${ }^{11}$. The countries with the highest out-of-school rates also tend to be among the poorest in the world and are largely located in sub-Saharan Africa (Figure 4). The gross enrollment ratio for low- and middle-income countries in primary school has almost reached 100 percent ${ }^{12}$. Despite initial enrollments rising, children in low-income countries are not completing primary school. The survival rate in primary education, which is the

[^3]percentage of children who complete that level of education, has remained below 50 percent for lowincome countries and 80 percent for lower middleincome countries ${ }^{13}$. The rate of primary-age out-ofschool children overall is still 18.5 percent in low-income countries as compared to 1.7 percent in high-income countries ${ }^{14}$. At the lower secondary level, the respective rates are 38.5 percent and 2.5 percent, and at the upper secondary level, the rates are 60.8 percent and 7.8 percent. In terms of absolute numbers, sub-Saharan Africa is home to the majority of out-of-school children in the world with 98.7 million. In South Asia, India and Pakistan comprise 51.5 million out of the region's 92.8 million out-of-school children. (Figure 4).

Drivers of school exclusion include poverty, disability, location, ethnicity, religion, and gender. Children from the poorest families are less likely to start school, as are children with disabilities, rural children, children in conflict zones, and those from ethnic and religious minorities. Moreover, children impacted by these factors who do start school are more likely to drop out early.

## CHALLENGE 2: QUALITY

Despite years of schooling, poor quality education means children are facing a learning crisis

Even when children do attend school, hundreds of millions of students are learning very little and lack basic literacy and numeracy skills ${ }^{15}$. UNESCO's Institute of Statistics and the World Bank estimate that 53 percent of children in low- and middle-income countries cannot read well enough to understand a simple story by the end of primary school. In lowincome countries, the level is as high as 80 percent $^{16}$. A 2014 international assessment(PASEC) administered in 10 countries in Francophone West Africa ${ }^{17}$ showed that among grade 6 students, less than 45 percent reached "sufficient" competency levels in reading or mathematics ${ }^{18}$.

The learning deficit is also exacerbating inequality. As shown in Figure 5, children from the poorest African households are greatly overrepresented among low scorers ("not competent"), while most children from the richest quintiles are performing at either "low competency" or "high competency" levels.

## FIGURE 4

## Africa has Overtaken South Asia as the Region with the Most Out-of-School Children

Countries With Most Out-Of-School Children

| Country |  | Number of Out-of-School Children (mn) | \% of School Aged Children | \% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | India | 32.5 | 15.9\% |  |
| 2 | Pakistan | 19.0 | 33.5\% |  |
| 3 | Nigeria | 13.6 | 29.0\% |  |
| 4 | Ethiopia | 10.1 | 45.0\% |  |
| 5 | Bangladesh | 7.9 | 52.5\% |  |
| 6 | Democratic Republic of the Congo | 7.2 | 49.1\% |  |
| 7 | Indonesia | 6.9 | 16.5\% |  |
| 8 | Afghanistan | 3.7 | 39.8\% |  |
| 9 | Niger | 3.7 |  |  |
| 10 | Mali | 3.1 | 64.9\% |  |

Out-of-School Primary and Secondary Children (million)


Source: UIS, EduFinance

[^4]Learning Outcomes by Gender and Poverty Levels
Children from Poor Households in Africa Typically Learn Much Less


Source: World Development Report 2018, Learning to Realize Education's Promise, World Bank Group, using data from World Bank (2016b). Data at http://bit.do/WDR2018-Fig_O-3.

## FIGURE 6

Assessed Grade Level vs. Enrolled Grade Level (India)
Children not Learning at Expected Annual Pace


Source: World Development Report 2018, Learning to Realize Education's Promise, World Bank Group, using data from Muralidharan, Singh, and Ganimian (2016). Data at http://bit.do /WDR2018-Fig_O-4.

Over time, early learning deficits become more magnified. A study in New Delhi (Figure 6) showed that the average grade 6 student was still performing at a grade 3 level in mathematics and a grade 5 level in language. By grade 9, the average student was performing at a grade 4 level in mathematics and grade 6 level in language. Moreover, the gap between the 25th and 75th percentile performers grew significantly. Thus, children who are already
disadvantaged by poverty, gender, disability, and other factors are expected to reach young adulthood without basic skills. These gaps highlight how many countries are unable to provide support to learners who display reading and numeracy difficulties early on in their schooling. Filling gaps in education financing, discussed in the next section, represents one way to begin addressing these challenges.

# III. STATE EDUCATION FINANCING GAPS AND CHALLENGES 

Despite the high rates of spending on education as a proportion of total government spending, there remain high out-of-school rates among school aged children in many of these countries.

## STATE EDUCATION FINANCING

In order to advance commitments to education and to achieve the SDGs, two international benchmarks were set by the 2015 Incheon Declaration: governments should spend 15 to 20 percent of their overall budgets on education and 4 to 6 percent of their Gross Domestic Product (GDP) ${ }^{19}$. In regard to the first benchmark, as shown in Figure 7, aggregation across low- and middle-income countries indicate that government expenditure is within the Incheon Declaration's target range, at approximately 15.7 percent of total expenditure. East Asia and Latin America lead the regional averages, at 19.6 percent and 18.6 percent respectively.

Low- and middle-income countries comprise the top 15 countries in the world that spend the most on education as a proportion of their budget (Figure 8).

Despite the high rates of spending on education as a proportion of total government spending, there remain high out-of-school rates among school aged children in many countries. Individual countries with humanitarian crises have the largest out-of-school children rates as shown in Figure 9. However, when aggregating the data on a regional level, sub-Saharan Africa faces the greatest proportion (29.1 percent) of school aged children out of school.

## More than 15 Percent of Low- and Middle-Income Government Expenditure is Already Going to Education

Government Expenditure on Education, Total (\% of Government Expenditure)


Countries with Highest Proportion of Government Expenditure on Education

| Country | \% Total <br> Spend |
| :--- | :---: |
| 1 Sierra Leone | 32.5 |
| 2 Ethiopia | 27.0 |
| 3 Namibia | 26.2 |
| 4 Costa Rica | 24.9 |
| 5 Eswatini | 23.7 |
| 6 Guatemala | 23.0 |
| 7 Uzbekistan | 22.9 |
| 8 Honduras |  |
| 9 Tunisia | 22.8 |
| 10 Bhutan |  |

Source: UIS, EduFinance

## FIGURE 8

## Low- and Middle-Income Countries Top the Table of 'Education Spending as a Percentage of Government Spending'

Public Education Spend as a Percent of Total Government Spend


Source: UIS, World Bank, World Development Indicators

These data pose the question of whether increased spending has an impact on out-of-school rates. Figure 10 shows that middle-, upper middle- and high-income countries have increased spending and successfully reduced the numbers of out-ofschool children. Even middle- and lower middleincome countries have reduced the number of out-of-school children in absolute terms, despite lower spending. It is low-income countries that struggle
the most. The data indicate low-income countries spend more as a proportion of total budget while still having more children that are out of school. There are many factors behind this, but they are a function of lower tax collection abilities, lower GDP, and rapid population growth. This means even relatively high levels of education spending still do not meet the absolute amounts needed to get more children into school.

While some countries in sub-Saharan Africa are allocating as much as one-third of their budget, others are not allocating enough. For example, India and Pakistan spend 14.1 percent and 14.5 percent of their budgets on education respectively, despite reporting the highest numbers of out-of-school children
globally. Furthermore, studies have shown that even when there is more than sufficient spending, allocations are skewed to favor children from the wealthiest households. In low-income countries, on average, 46 percent of public resources are allocated to the 10 percent of students who are the most educated ${ }^{20}$.

## FIGURE 9

## Africa Faces the Greatest Proportion of Out-of-School Children

Out-of-School Children, Percent of School Aged Population


Largest Proportion of Out-of-School Children

Source: UIS, EduFinance

## FIGURE 10

Low-Income Countries Increased Spending Some, but are Seeing Rising Out-of-School Children

Changes in Spending Compared to Out-of-School Children


Change in Number of Out-of-School Children, \% (2013-18)
Source: UIS, EduFinance

[^5]
# African and South Asian Governments Collect Least Amount of Revenue in Proportion to GDP 

Tax Revenue as a \% of GDP


Source: EduFinance calculations based on World Development Indicators (2018)

While some governments can meet their Incheon Declaration aspirations of spending 15 to 20 percent of their annual budget on education, another matter is whether they are able to meet the aspiration of spending 4 to 6 percent of GDP on education. The ability of some governments to generate the necessary tax revenues is limited. Sub-Saharan African nations, for example, collect just 10.9 percent of GDP in the form of taxes. To spend 5 percent of GDP on education without creating a budget deficit, African governments would have to spend 46 percent of their tax earnings solely on education.

Many African countries have limited abilities to leverage their balance sheets further and pour already scarce financial resources into state education. A 2017 publication suggests that 19 countries' debt-to-GDP
levels meet or exceed the 60 percent threshold set by the African Monetary Co-operation Program ${ }^{21}$. Just two countries out of 18 analyzed by Moody's, a credit rating agency, were classified as "Low or Moderate Credit Risk". The rest were "Substantial", "High", or "Very High" Credit Risk ${ }^{22}$.

Despite these headwinds, sub-Saharan Africa manages to spend 4.2 percent of GDP on education, while Latin America is closer to meeting the higher end of the international benchmark at 5.5 percent. While a few middle-income countries in southern Africa with a history of focused spend on education stand out at the top, including Botswana, Namibia, and Zimbabwe, their smaller economies are outweighed by larger countries that are not able to spend as much.

[^6]
# Low- and Middle-Income Countries in Latin America and South Asia Spend the Most on Education as a Percentage of GDP 

Spend on Education as a \% of GDP


Countries with Highest Spend Relative to GDP on Education

Source: UIS, EduFinance

As for the second benchmark of spending 4 to 6 percent of GDP on education, the average across all low- and middle-income countries is also within target range of the Incheon Declaration, at 4.1 percent of total GDP (Figure 12). While Iow- and lower-middle income countries make up 30 of the top 35 in terms of education spend as a percentage of their overall budgets, fewer than half of them are in the top 35 in terms of GDP spend (Figure 14). Even less encouraging is that cost projections have estimated that such spending, particularly for low-income and lower middle-income countries, will not be enough.

The COVID-19 pandemic is also increasing the headwinds that governments will face in their pursuit of these benchmarks. Real GDP is forecasted to fall by 3.7 percent globally, compared to 3.6 percent growth that was previously expected. The strain on budgets is being felt in all countries and funding for state education could fall by as much as 8.4 percent in low- and middleincome countries ${ }^{23}$. Worse, the World Bank estimates that students may lose $\$ 10$ trillion in lifetime earnings due to lost classroom hours while schools were closed in the early stages of the pandemic, which affected at its peak 1.6 billion children.

UNESCO's Global Monitoring Report suggests that, excluding post-secondary education, low- and lower
middle-income governments will need to increase their spending to 6.3 percent of GDP to meet their SDG education targets ${ }^{24}$. For low-income countries alone, the suggested rate rises to 8 percent, and exceeds 12 percent in some of the poorest countries, including Burundi, Mali, and Niger ${ }^{25}$. In total, the global financing gap in education is estimated to be $\$ 1.8$ trillion to achieve SDG 4 goals. Domestic and international annual expenditure will need to rise from $\$ 1.2$ trillion to $\$ 3.0$ trillion, translating to a 117 percent increase in education spending for children to complete primary and secondary education with basic levels of learning ${ }^{26}$.

Overall, while countries may have committed to universal education in theory and are making real attempts to fund improvements in enrollment, many are struggling to reach this goal in practice and lack the resources to do so on their own. Greater spending as a percentage of government budget and GDP does not always help reach the populations that need it most-higher spending does not always equate to reduced out-of-school populations in lowincome countries. These factors have contributed to growth in non-state education as a means to fill the gap, which is discussed in the next section.

[^7]
## Growth in State Funded Education is Expected to Decline Significantly due to Covid-19

Estimated Growth in State Funded Education Spending


Source: World Bank

## FIGURE 14

Low- and Middle-Income Countries Struggle to Spend More on State Education as a Percentage of GDP

Countries Ranked by Public Education Spend as a \% of GDP


[^8]
# IV. GROWTH OF NON-STATE EDUCATION 

Since 2013, non-state enrollment has increased by 15 percent, compared to 9 percent for state schools. At this rate, the non-state sector can be expected to hold 27.2 percent of the market by 2025.

## GROWTH OF NON-STATE EDUCATION

In the context of increasing demand for education and limited state financial and institutional capacity, the non-state school sector's role in delivering education services has been growing. According to official UIS figures, the non-state education market share increased from 23.1 percent to 25.4 percent between 2005 and 2019 (Figure 15). Since 2013, non-state enrollment has increased by 15 percent, compared to 9 percent for state schools. At this rate, the non-state sector can be expected to hold 27.2 percent of the market by 2025.

Such figures are likely to be an underestimation, especially when accounting for unregistered nonstate schools that are prevalent in low- and middleincome country contexts. Several studies have indicated wide discrepancies between official numbers and realities on the ground. For example, in Tanzania only 4.8 percent of children were enrolled in non-state pre-primary schools according to official figures, but household surveys revealed that number was closer to 25 percent. In one district in Lagos, Nigeria, there were 73 approved non-state schools as compared to 519 unapproved non-state schools as of 201127. A household survey of several impoverished urban areas of India showed that at least 65 percent of enrolled school children were attending non-state, unregistered schools ${ }^{28}$.

[^9]
## Non-State Schools are Gaining Market Share in Low- and MiddleIncome Countries Worldwide

State vs. Non-State School Global (ex-high income)



Source: UIS, EduFinance forecasts

Non-State School Share by Region<br>(ex-high income)


state schools were established precisely because of the rising costs associated with state schools. In addition, non-state schools have also shown to offer concessionary and/or scholarship-based spaces to those unable to afford school fees ${ }^{30}$.

## FIGURE 16

## Kenya: More Children in Lower Income than Higher Income Households are Attending Non-State Schools

Non-State School Enrolment Study in Kenya, according to Wealth Index


[^10]In terms of quality, many poor families, including in Ghana, India, Jamaica, and Kenya, cited their dissatisfaction with state schools, particularly in regard to teaching practices as a key reason to prefer non-state education ${ }^{31} 323334$. Parents noted that non-state schools were able to provide more individualized attention and smaller classes than state schools. Individual studies suggest that teacher presence and pupil-teacher ratios (PTR) do tend to be better in non-state schools. This may be due to inherent accountability mechanisms, most notably that parents can choose to unenroll their children if they are not satisfied ${ }^{35}$. There is also indication that because non-state school teachers are often less qualified and have weaker job security than their state school counterparts, they may have greater incentives to perform better.

It is important to note that while families' perceptions of quality are an important factor in their school
decision-making, the evidence remains mixed as to whether non-state schools outperform state school counterparts. However, non-state schools provide more services to low-income families that goes beyond standardized test scores. In addition to lower PTRs and individualized instruction, families across multiple countries reported having more personal relationships with non-state schools, indicating high levels of mutual support between parents and staff ${ }^{36}$. Non-state schools are also able to provide a flexibility that state schools simply are unable to, such as incorporating cultural or religious values and practices, or having class times that fit with parents' schedules ${ }^{37}$. Thus, when properly regulated, non-state schools can support governments as education partners and play a critical role in extending services to some of the most marginalized groups.

[^11]
# V. FINANCING THE NON-STATE SCHOOL SECTOR 

## EDUCATION SECTOR SUPPLY AND DEMAND

While affordable non-state schools exist alongside the state education system in both substitutive and complementary roles, their full potential has yet to be fully realized. On the school supply side, given that school fees are often the main or only source of revenue, affordable non-state schools operate on limited financial resources, making it difficult to expand by adding more classrooms and increasing the number of available seats for students. Other quality improvements such as running water installations, gender-separated bathrooms, and hiring of more qualified teachers are also challenging. Banks and other formal lending institutions remain reluctant to engage with affordable non-state schools because of their perceived financial risk. Therefore, non-state school proprietors must often either rely on their own savings or resort to borrowing from loan shark institutions at onerous rates to make infrastructure investments ${ }^{38}$.

Regarding the demand side for schools, many families are still unable to cover educational costs when they are due, despite many non-state schools keeping their fees as low as possible to attract lowincome families. This is because they often rely on seasonal or inconsistent income, and do not always have cash readily available to pay for school fees. As a standard practice, schools often send students

[^12]home for unpaid fees, increasing absenteeism and risking permanent student dropout.

Opportunity International EduFinance is working to close these supply and demand gaps in the education ecosystem through financial solutions. EduFinance has partnered with 60 financial institutions across the globe and counting, and has built comprehensive education lending portfolios comprised of School Improvement Loans targeting proprietors of affordable non-state schools, and School Fee Loans targeting low-income families with school-aged children. The following sections offer a description of these two key loan products, which provide the basis for the market sizing exercise.

## SCHOOL IMPROVEMENT LOANS

School Improvement Loans set the stage for sustainable improvements to schools in lowresource environments, helping to ensure more students gain access to a better education, much faster. School Improvement Loan clients are often local entrepreneurial parents or educators who have started affordable non-state schools in underserved communities, and have sustained good enrollment rates for at least two years, which demonstrates schools have earned the support of their local community.

While the Ioan amount varies depending on country and community, schools with School Improvement Loans borrow $\$ 11,000$ on average. School Improvement Loan tenures range from 6-36 months with the average around 24-30 months. Loan repayments are best structured around schools' seasonal revenue, which is mostly generated from school fees, and individual school capacity for managing a suitable repayment schedule.

Investment in school infrastructure has long been linked to child learning outcomes in academic studies. For example, students at schools perform significantly better if the school has at least one functioning toilet ${ }^{39}$. The availability of gender-separated toilets is particularly important for enrollment and educational attainment of girls ${ }^{40}$. Other studies have highlighted investment in libraries, sports facilities, and other infrastructure in connection to positive quality improvements. Extracurricular activities have also been linked to better attendance, behavior, and academic performance ${ }^{41}$.

[^13]
# Analysis from Opportunity EduFinance research suggests that the most common uses for School Improvement Loans include: 

## - Building extra classrooms: This

 allows for the expansion of schools, thereby creating space for additional enrollment to meet the growing demand for non-state education. Furthermore, school expansion means bigger and more conducive spaces for students in which to learn.
## - Building playgrounds and outdoor

 sports facilities: This enables students to engage in healthy extracurriculars and further serve as an incentive for students to attend school.> - Building washroom facilities, especially washrooms for separate genders: In addition to promoting sanitary health, separate washrooms also play a part in increasing female enrollment, attendance, and school completion.
> - Creation and/or purchase of transportation, like buses: Transportation amenities provide the opportunity for students residing further away from school to be able to attend school, reducing the time and cost of traveling to school regularly while increasing the safety of their journeys.

## FIGURE 17

## Uses of School Improvement Loans

## Most Frequently Cited School Improvement

 Loan Use

Source: Opportunity EduFinance School Profile Data

## SCHOOL FEE LOANS

Rural and low-income families often rely on seasonal or irregular income, and cash may not be readily available to cover educational costs at the start of school terms. This lack of cash at the right time can result in a child not enrolling or being sent home until the fees are paid. EduFinance works with financial institutions to offer School Fee Loans to ease the pressure of up-front educational costs, effectively spreading out the costs of their children's education and helping prevent school absenteeism and dropout. Research conducted has shown that School Fee Loans can reduce absenteeism, as demonstrated in Figure 18.

Loan tenures vary according to the two main types of income earners (seasonal or irregular), and range between 3-12 months. The average School Fee Loan is approximately $\$ 100-\$ 250$, which can support school fees for three children on average. Amounts vary from market to market and for different loan tenures. The following section shows the typical socio-economic profile of a school fee loan borrower from market research conducted in Kenya.

## School Fee Loans: Kenya Study

Opportunity EduFinance and Kantar Market Research conducted a study in Kenya to understand the key characteristics of Musoni Microfinance's school fee loan borrowers. Musoni Microfinance is a financial institution partner of Opportunity EduFinance. The research team conducted 176 interviews around Nairobi, Kenya in late 2019 with Musoni borrowers as well as non-borrowers, aiming to capture an in-depth and holistic picture of the impact of school fee loans, which included looking
at the socio-economic profile of borrowers. The subsequent sections explore their characteristics in more detail.

## Absenteeism in School

The report found a comparatively lower rate of absenteeism among School Fee Loan borrowers' children-13 percent versus 22 percent-an indication that the loan product is registering some impact on children and households by mitigating the 'lack of cash for school fees' issue.

The key contributing factor for school absenteeism among non-School Fee Loan borrowers was lack of cash for school fees (70 percent) in comparison to School Fee Loan borrowers (33 percent). Among School Fee Loan borrowers, sickness and death of a family member (60 percent) was seen as the major cause of absenteeism.

## FIGURE 18

## Children with School Fee Loans Likely to be Less Absent and Have Lower Dropout Rates

Percentage of Children Absent in School


Percentage of Dropouts per Household


Source: EduFinance

## Age of School Fee Loan Borrowers

As shown in Figure 19, school fee loan borrowers included in the study tended to be older than the non-borrower population, with 82 percent over the age of 35 , compared to 39 percent of non-borrowers. This highlights a challenge for younger parents to obtain financing, but it is also driven by the fact that older parents will have had more time to demonstrate creditworthiness.

## Occupation of School Fee Loan Borrowers

Nearly three-quarters of Ioan borrowers interviewed in the study were self-employed businesspersons (72 percent) and less likely to be unemployed (4 percent) when compared to non-Ioan borrowers (18 percent). Self-employed persons were more likely to benefit from these loans, given the often-irregular pay that comes with working for oneself or informally. Figure 20 shows the distribution of School Fee Loan and non-School Fee Loan borrowers by occupation.

FIGURE 19
Majority of School Fee Loan Borrowers are Above 46 Years of Age


Source: EduFinance

FIGURE 20

## School Fee Loan Borrowers are More Likely to Have Some Level of Employment

Borrower Occupation (School Fee Loan Borrowers)


## Number of Household Members and Children Attending School

The report found that in comparison to non-School Fee Loan households, School Fee Loan households are likely to have a larger family size. On average, School Fee Loan households have 5.2 members, in comparison to 4.3 members per non-School Fee Loan households. They also have more children attending school than non-School Fee Loan households. School Fee Loan borrowers on average had 2.3 children attending school, while non-School Fee Loan households had 1.8.

## Poverty Probability Index

The Poverty Probability Index (PPI) ${ }^{42}$ is a tool used to quantify households living below the poverty line. The report calculated PPI scores for School Fee Loan households. The average PPI score registered for School Fee Loan households indicated that School Fee Loan households were more likely to fall below the poverty line than non-School Fee Loan households.

## FIGURE 21

## School Fee Loan Borrowers Have Larger Households and More Children Attending School

Number of Members in Household


Number of Children Attending School


Source: EduFinance

## FIGURE 22

## Families with School Fee Loans more Likely to Live Below Poverty Lines

Percentage Likelihood that Surveyed Household is Living in Poverty


Source: EduFinance

[^14]
# VI. A MODEL FOR SIZING AND FORECASTING THE AFFORDABLI NON-STATE EDUCATION SECTOR 

## APPROACH, METHODS \& LIMITATIONS

EduFinance used its partnership network in multiple markets to undertake this analysis to size and forecast the affordable non-state education sector. EduFinance implemented a bottom-up localized approach to modeling by conducting primary data collection in select countries and triangulated the information with publicly available sources, including the United Nations Institute of Statistics (UIS), the World Bank Open Data Initiative, and the Education Policy Data Center.

This analysis is not without limitations. First, while as much detailed information was gleaned from as many reliable databases as possible, the difficulty of obtaining complete or recent country-specific data make calculations challenging. For the sake of practicality, EduFinance has not pursued the latest data for every low- and middle-income country. However, the team was able to utilize the data and knowledge that have been gathered from partnerships with more than 60 financial institutions worldwide and the in-depth market research studies that have already been conducted internally. Additionally, to compensate for missing or inaccurate values, regional estimates were utilized as proxies.

Additionally, education systems around the world are not uniformly designed, thus schooling levels between countries are not always compatible. Drawing on past experiences and knowledge, the team made a best effort to maintain as much consistency as possible. These results are most informative when considered from a high-level view, looking for areas of greatest potential need and impact; not for precise numbers, which can often be found and tailored to the individual market on the websites of the Ministry or Department of Education. Findings from this analysis are as follows:

## TOTAL ENROLLMENT IN NON-STATE SCHOOLS

Data from UNESCO's Institute of Statistics (UIS) were used to disaggregate enrollment figures by level of education and type of institution. Not every country had currently available data and thus figures were adjusted according to national population growth by country.

State school enrollment in low- and middle-income countries rose by 23.8 percent ( 157.2 million) from 2005 to 2019 (Figure 23). Over the same period, nonstate enrollment in low- and middle-income countries rose by 40.0 percent ( 79.6 million). Extrapolating the historical data, state school enrollment is forecast to grow by an additional 12.8 percent through 2025, whereas non-state school enrollment is anticipated to grow by almost twice as much, at 23.7 percent. The differential may be even higher since non-state school enrollment is often underreported in official data.

Breaking down the recent growth trends into annualized rates facilitates forecasts by region. The resulting forecast is that new non-state education demand will be highest in sub-Saharan Africa and South Asia, requiring 50 million new seats in the two regions alone. If out-of-school children were to be incorporated, these figures would be significantly higher.

## Children in Public Education (Low, Middle-Income markets)



# Enrollment Growth Requires Buildup of New School Capacity 66 Million New Seats, Excluding Out-of-School Children 

Actual and Forecast Number of Children Enrolled in Non-State Schools (millions)

5 Year Annualized Enrolment Growth



Source: UIS, EduFinance

## PUPIL-TEACHER RATIOS (PTR) IN NON-STATE SCHOOLS

Teachers' workload and their availability to their students is conventionally measured using PupilTeacher Ratios (PTR). It is well documented in academic literature that the lower the pupil-teacher ratio (to an extent), the greater the availability of teachers' services to their students, and the more academically and socially engaged students become. This has large implications for education quality and student performance. One study in Port Harcourt, Nigeria demonstrated a significant relationship between a student's perception of pupil-teacher ratios and academic achievement in mathematics, showing that when students perceive that they are in a smaller class size and are able to get more attention, their academic achievement also increases ${ }^{43}$. Similarly, other studies have highlighted that maintaining a low pupil-teacher ratio leads to long-term benefits on student achievement, including strong improvement rates for low performing students, individualized student attention, and increasing students' focus ${ }^{44}$. While there is no global consensus on the ideal pupil-
teacher ratio, the analysis in this report utilizes UNESCO's maximum suggestion of 40:1 for primary students and 30:1 for secondary students as proxies for quality ${ }^{45}$.

To determine existing pupil-teacher ratio figures, EduFinance combined available data from EPDC and EduFinance's market research data to determine weighted averages. As shown in Figure 25, subSaharan Africa has the highest average pupilteacher ratio among all regions, with an average of 41.3 students per teacher. Countries like the Central African Republic and Rwanda reported pupilteacher ratios as high as 83:1 and 60:1, respectively (Figure 25).

As shown in Figure 26, pupil-teacher ratios are consistently highest in low- and middle-income countries. Of the top 35 countries with the highest pupil-teacher ratios worldwide, all of them are lowand middle-income, and 30 of which are in subSaharan Africa.

[^15]
## Pupil Teacher Ratios are Highest Throughout Sub-Sarahan Africa

Pupil Teacher Ratio (Primary School)

|  |  | PTR |
| :---: | :--- | :---: |
| 1 | Central African Republic | 83 |
| 2 | Rwanda | 60 |
| 3 | Malawi | 59 |
| 4 | Chad | 57 |
| 5 | Mozambique | 55 |
| 6 | Ethiopia | 55 |
| 7 | Guinea-Bissau | 52 |
| 8 | United Republic of Tanzania | 51 |
| 9 | Afghanistan | 49 |
| 10 | Guinea | 47 |

Pupil Teacher Ratio (Primary School)


Source: UIS, EduFinance

## FIGURE 26

## The Highest Pupil-Teacher Ratios are Consistently in Lower Income Countries

Countries Ranked by Pupil Teacher Ratios (Primary School)


Source: UIS, EduFinance

## NUMBER OF CHILDREN PER NON-STATE SCHOOL

Another necessary variable for any estimate of the market is the average number of children in each school. Given the scope of this work, it is not practical to collect data from all individual Departments or Ministries of Education. Such estimates would also be incomplete in any case. For the purposes of this report, EduFinance has utilized data gathered from EPDC (covering state schools only) alongside proprietary market research to arrive at estimates for the number of children per school. The EPDC data are scattered and only available for a minority of markets (79), so

EduFinance extrapolated the numbers and normalized them by region to compensate for the limited number of reporting countries on this indicator. The result is a regional weighted average for non-state schools, shown in Figure 27. The largest schools are located in sub-Saharan Africa, with an overall average of 320 students per school. These figures vary by primary and secondary school, with secondary schools smaller due in large part to fewer classes and greater levels of student dropout.

## The World's Largest Schools, on Average, are in Africa

Average Number of Children per Non-State School


Source: EPDC, EduFinance

## FIGURE 28

## Sub-Saharan Africa is Growing Faster than any other Region, Tied for Largest School-Aged Population

Non-State Schools Market Dynamics


Source: UIS, EduFinance

Number ('000), Proportion of Non-State Schools


## NUMBER OF NON-STATE SCHOOLS

With the three aforementioned variables-total nonstate school enrollment figures, average pupilteacher ratios (PTR), and the average number of children per school-EduFinance is able to estimate the total size of the non-state education sector in low- and middle-income markets. As shown in Figure 28, South Asia is home to the largest number of non-state schools, with 835,000 schools, comprising more than half of the total non-state school market. While sub-Saharan Africa has 137,000
schools (10 percent of the market), it is outpacing the rest of the world in growth by nearly two percentage points. Nearly 60 percent of anticipated growth in the global population between 2020 and 2050 is expected to occur in Africa, bringing its share of the global population from 17 percent to 26 percent ${ }^{46}$. Africa also has the second highest rate of schoolaged children at 21 percent. Latin America leads the world in school-aged rates, but the population is growing at a much slower pace.

[^16]
## POTENTIAL DEMAND FOR FINANCING

Combining the data that have been collected for this analysis with EduFinance's experience working with 60 financial institutions and 21 country-specific market research reports, EduFinance has created a framework that provides a high-level understanding of which countries and regions will have the greatest demand for education financing. EduFinance's experience with financial institutions has been either as a provider of EduFinance Technical Assistance, or in another funding capacity. The market research studies performed to date include surveys of between 50-150 schools and more than 50 parents in each market to gain deeper insights into the levels of interest in obtaining a School Improvement Loan or School Fee Loan, as well as identification of the key features required by borrowers. These relationships and surveys give EduFinance a good understanding of average loan sizes and client takeup rates to estimate the potential market size.

The expected value of both School Improvement Loans and School Fee Loans varies significantly not just from market to market, but also within markets. For example, a partner in Uganda has many schools borrowing as little as \$2,000, but often lends up to and more than $\$ 30,000$. Differences are driven in part by urban versus peri-urban/rural school locations, Ioan purposes, and sizes of the schools. Globally, the School Improvement Loan average
varies widely between $\$ 6,000$ to $\$ 15,000$ but is approximately $\$ 11,000$ (as discussed previously in Section V).

Similarly, parents spend a range of amounts on education, depending on the selected school and number of school-aged children that they are supporting. For the purposes of this analysis, EduFinance has utilized the data from market research and relationships with financial institutions to develop regional proxies. School Fee Loan amounts vary widely but typically is between $\$ 50$ and $\$ 1,000$, with the average being approximately \$100$\$ 250$, which supports school fees for an average of three children (as discussed previously in Section V).

## MARKET DEMAND

Combining all metrics and data available, EduFinance estimates a \$36 billion market for EduFinance flagship Ioan products in low- and middle-income countries. Globally, the largest regional market is South Asia ( $\$ 15.4$ billion), which is nearly twice as large as the next largest region, East Asia (\$8.0 billion). This is largely impacted by the size of the populations. Sub-Saharan Africa and Latin America are a close tie for third place, with an estimated \$4.9 billion market size in each region.

FIGURE 29
A \$36 Billion Market for EduFinance Products


Source: UIS, World Bank, EduFinance

## Additional \$6 Billion of Demand to Come From Growth Through 2025

EduFinance Markets - Total Demand (\$m, Low-Middle Income Countries)


Source: UIS, World Bank, EduFinance

## FIGURE 31

Top 25 EduFinance Markets Account for 87 Percent of Total Demand
World's Largest EduFinance Markets - (Low-Middle Income Countries)

|  |  | EduFinance Loan Demand (\$m) |  |  |  | million | million | percent | percent | percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Country | Current <br> Demand | New Demand through 2025 | Out-of-School Children Potential | Total Demand | Total <br> Enrollment NonState Schools | Out-of-School Children | Population School Age | Population Growth | Rate of NonState Enrollment (2019) |
| 1 | India | 8,830 | 1,559 | 981 | 11,369 | 128.2 | 32.5 | 15.19\% | 1.04\% | 43.81\% |
| 2 | Indonesia | 4,088 | 956 | 466 | 5,510 | 23.1 | 6.9 | 16.08\% | 1.13\% | 37.87\% |
| 3 | Bangladesh | 1,555 | 361 | 334 | 2,251 | 20.8 | 7.9 | 9.53\% | 1.05\% | 56.48\% |
| 4 | Brazil | 1,568 | 37 | 92 | 1,697 | 7.3 | 2.7 | 20.87\% | 0.78\% | 16.29\% |
| 5 | Pakistan | 774 | 306 | 321 | 1,400 | 16.0 | 19.0 | 25.06\% | 2.06\% | 34.79\% |
| 6 | Mexico | 694 | 82 | 42 | 819 | 4.0 | 2.1 | 25.00\% | 1.13\% | 11.65\% |
| 7 | Nigeria | 487 | 81 | 139 | 706 | 8.0 | 13.6 | 22.63\% | 2.59\% | 16.71\% |
| 8 | Philippines | 536 | 84 | 26 | 646 | 3.5 | 1.3 | 26.37\% | 1.40\% | 13.67\% |
| 9 | Thailand | 565 | 0 | 63 | 628 | 2.3 | 1.5 | 11.15\% | 0.32\% | 17.84\% |
| 10 | Iran, Islamic Rep. | 411 | 175 | 28 | 613 | 2.4 | 1.0 | 11.63\% | 1.39\% | 16.14\% |
| 11. | Turkey | 235 | 310 | 20 | 565 | 1.3 | 1.6 | 19.87\% | 1.49\% | 6.88\% |
| 12 | Argentina | 508 | 44 | 10 | 563 | 3.1 | 0.2 | 22.76\% | 1.02\% | 27.51\% |
| 13 | Colombia | 462 | -7 | 29 | 485 | 2.3 | 0.7 | 16.12\% | 1.52\% | 20.55\% |
| 14 | Myanmar | 98 | 362 | 18 | 478 | 0.5 | 1.8 | 8.93\% | 0.61\% | 5.65\% |
| 15 | Kenya | 256 | 150 | 24 | 430 | 3.1 | 1.5 | 29.55\% | 2.31\% | 18.69\% |
| 16 | Egypt, Arab Rep. | 277 | 123 | 18 | 418 | 2.3 | 1.5 | 22.05\% | 2.03\% | 9.59\% |
| 17 | Zimbabwe | 298 | 26 | 80 | 405 | 3.8 | 1.2 | 17.78\% | 1.41\% | 86.62\% |
| 18 | Morocco | 254 | 129 | 21 | 404 | 1.7 | 0.7 | 15.45\% | 1.25\% | 20.74\% |
| 19 | Peru | 384 | -11 | 11 | 384 | 2.2 | 0.2 | 25.08\% | 1.72\% | 26.87\% |
| 20 | Vietnam | 167 | 142 | 2 | 311 | 0.9 | 0.1 | 14.79\% | 0.99\% | 7.15\% |
| 21 | Malaysia | 229 | 49 | 28 | 306 | 1.1 | 0.8 | 9.47\% | 1.35\% | 16.46\% |
| 22 | Congo, Dem. Rep. | 183 | 41 | 61 | 285 | 3.1 | 7.2 | 16.22\% | 3.28\% | 14.63\% |
| 23 | Ghana | 176 | 61 | 19 | 256 | 2.2 | 1.0 | 25.82\% | 2.19\% | 24.68\% |
| 24 | Guatemala | 173 | 14 | 57 | 244 | 1.2 | 1.4 | 22.98\% | 1.95\% | 27.51\% |
| 25 | Uganda | 153 | 66 | 11 | 230 | 2.5 | 0.7 | 20.25\% | 3.72\% | 24.79\% |

Source: UIS, World Bank, EduFinance

EduFinance breaks down the estimates by loan type, but also in terms of market potential through 2025 and incorporating expected numbers of out-of-school children. Given the current number of children who are attending non-state schools, the existing addressable global market is estimated at $\$ 26.3$ billion. Accounting for new enrollments that can be expected for non-state schools through 2025, an additional $\$ 6.0$ billion in demand can be expected. The three largest regional markets for this growth are South Asia (\$2.4 billion), East Asia and the Pacific ( $\$ 1.7$ billion) and sub-Saharan Africa ( $\$ 1.0$ billion). If out-of-school children were able to enter the non-state sector at the same rate of nonstate provision, an additional $\$ 3.7$ billion would be required.

The largest country markets are India, Indonesia, and Bangladesh, given high rates of non-state school enrollment. These three countries make up more than half of the demand for EduFinance Ioan products globally and include more than 172 million children who are already enrolled in non-state schools. Sub-Saharan Africa's largest country market is Nigeria, which accounts for nearly 15 percent of the regional market.

## African Markets

Africa has enormous growth potential, with \$4.9 billion in potential demand (Figure 31). While Nigeria is the largest country market in sub-Saharan Africa, there are also several other large and fast-growing country markets, including Uganda (5 percent of total) and the Democratic Republic of Congo (6 percent of total).

Figure 33 contains the regional rankings for EduFinance product demand. The growth through 2025 is significant for sub-Saharan Africa. Fast growing populations and an already increasing penetration of the non-state school sector mean that a lot of additional demand can be expected in the coming years. Kenya's $\$ 430$ million market demand consists of $\$ 150$ million in expected growth through 2025. Out-of-school children also represent an area for significant future growth in the continent. Recent estimates of the number of Nigerian children who are, or will be, out of school suggest that there is a $\$ 139$ million potential market, even if just 16.7 percent of those children are incorporated into the non-state sector.

FIGURE 32

# Africa is a Fast-Growing Market with Potential in Many Countries 

Africa Population and EduFinance Demand


Africa EduFinance Demand Breakdown


Source: UIS, World Bank, EduFinance

# Growth in Africa Markets will Result in Much Greater EduFinance Demand Over the Coming Five Years 

Africa Largest EduFinance Markets

|  |  | EduFinance Loan Demand (\$m) |  |  |  | million | million | percent | percent | percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Country | Current Demand | New Demand through 2025 | Out-of-School Children Potential | Total Demand | Total Enrollment NonState Schools | Out-of-School Children | Population School Age | Population Growth | Rate of NonState Enrollment (2019) |
| 1 | Nigeria | 487 | 81 | 139 | 706 | 8.0 | 13.6 | 22.63\% | 2.59\% | 16.71\% |
| 2 | Kenya | 256 | 150 | 24 | 430 | 3.1 | 1.5 | 29.55\% | 2.31\% | 18.69\% |
| 3 | Zimbabwe | 298 | 26 | 80 | 405 | 3.8 | 1.2 | 17.78\% | 1.41\% | 86.62\% |
| 4 | Congo, Dem. Rep. | 183 | 41 | 61 | 285 | 3.1 | 7.2 | 16.22\% | 3.28\% | 14.63\% |
| 5 | Ghana | 176 | 61 | 19 | 256 | 2.2 | 1.0 | 25.82\% | 2.19\% | 24.68\% |
| 6 | Uganda | 153 | 66 | 11 | 230 | 2.5 | 0.7 | 20.25\% | 3.72\% | 24.79\% |
| 7 | Cote d'Ivoire | 115 | 64 | 41 | 220 | 1.7 | 2.3 | 24.52\% | 2.55\% | 26.91\% |
| 8 | Mali | 92 | 42 | 76 | 210 | 1.6 | 3.1 | 23.30\% | 3.01\% | 42.50\% |
| 9 | Madagascar | 139 | 31 | 34 | 203 | 1.9 | 1.8 | 12.87\% | 2.67\% | 25.57\% |
| 10 | Cameroon | 135 | 36 | 31 | 202 | 2.1 | 1.7 | 15.64\% | 2.61\% | 27.22\% |

Source: UIS, World Bank, EduFinance

## FIGURE 34

## Asia EduFinance Market Potential Strongest in India, Indonesia, Bangladesh, and Pakistan



Source: UIS, World Bank, EduFinance

## Asian Markets: South Asia and East Asia (Excluding China)

South Asia and East Asia represent the regional markets with the largest demand for EduFinance loan products. India is the largest, making up 49 percent ( $\$ 11.4$ billion) of the total Asian market (Figure 34). The top four countries in Asia (India, Indonesia, Bangladesh, and Pakistan) account for 88 percent ( $\$ 20.5$ billion) of the region. Overall, demand for EduFinance loans in Asia is highly concentrated to ten country markets, with only 1 percent of the demand coming outside of the top ten.

Figure 35 breaks down the regional market by current demand, growth through 2025, and potential demand from out-of-school children. While the overall demand for Pakistan is well below the top three markets, it has the fastest growing population (2 percent) and the second-largest proportion of school-age children (25.1 percent). The rate of non-state school enrollment is greater than 30 percent in each of the top four markets, illustrating the importance of the sector to each country's education system.

## Asia EduFinance Demand Dominated by India

## Asia Largest EduFinance Markets

|  |  | EduFinance Loan Demand (\$m) |  |  |  | million | million | percent | percent | percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Country | Current Demand | New Demand through 2025 | Out-of-School Children Potential | Total Demand | Total <br> Enrollment NonState Schools | Out-of-School Children | Population School Age | Population Growth | Rate of NonState Enrollment (2019) |
| 1 | India | 8,830 | 1,559 | 981 | 11,369 | 128.2 | 32.5 | 15.19\% | 1.04\% | 43.81\% |
| 2 | Indonesia | 4,088 | 956 | 466 | 5,510 | 23.1 | 6.9 | 16.08\% | 1.13\% | 37.87\% |
| 3 | Bangladesh | 1,555 | 361 | 334 | 2,251 | 20.8 | 7.9 | 9.53\% | 1.05\% | 56.48\% |
| 4 | Pakistan | 774 | 306 | 321 | 1,400 | 16.0 | 19.0 | 25.06\% | 2.06\% | 34.79\% |
| 5 | Philippines | 536 | 84 | 26 | 646 | 3.5 | 1.3 | 26.37\% | 1.40\% | 13.67\% |
| 6 | Thailand | 565 | 0 | 63 | 628 | 2.3 | 1.5 | 11.15\% | 0.32\% | 17.84\% |
| 7 | Myanmar | 98 | 362 | 18 | 478 | 0.5 | 1.8 | 8.93\% | 0.61\% | 5.65\% |
| 8 | Vietnam | 167 | 142 | 2 | 311 | 0.9 | 0.1 | 14.79\% | 0.99\% | 7.15\% |
| 9 | Malaysia | 229 | 49 | 28 | 306 | 1.1 | 0.8 | 9.47\% | 1.35\% | 16.46\% |
| 10 | Nepal | 115 | 13 | 11 | 139 | 1.5 | 0.7 | 15.99\% | 1.65\% | 18.04\% |

Source: UIS, World Bank, EduFinance

## FIGURE 36

## Latin America EduFinance Market Demand Concentrated in Top 5 Markets

## Latin America Population and EduFinance Demand

## Latin America EduFinance Demand Breakdown



Source: UIS, World Bank, EduFinance

## Latin American Markets

Similar to Asia, Latin America is a highly concentrated market, with five markets accounting for 83 percent of total demand. Brazil makes up 35 percent ( $\$ 1.7$ billion) of total Latin American demand. In the region, lower population growth and lower non-state school enrollment rates limit the future growth of markets such as Brazil and Mexico. Central American countries such as Guatemala (\$244 million) and Ecuador (\$68 million) have the fastest population growth in the region (2.0 percent and 1.8 percent respectively).

Non-state school enrollment has been lower in Latin American markets ( 0.5 percent) than the global average of 2.5 percent. Some countries in Latin America have even seen non-state enrollment decline in recent years. Combined with slower population growth, Figure 37 shows that this can result in some markets seeing reduced demand over coming years (Peru demand could reduce by \$11 million through 2025). This is offset in most countries by the fact that there are still many children who are out of school in these markets (albeit at a lower rate than in some other regions).

## Latin America Markets by the Numbers

Latin America Largest EduFinance Markets

|  |  | EduFinance Loan Demand (\$m) |  |  |  | million | million | percent | percent | percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Country | Current Demand | New Demand through 2025 | Out-of-School Children Potential | Total Demand | Total Enrollment NonState Schools | Out-of-School Children | Population School Age | Population Growth | Rate of NonState Enrollment (2019) |
| 1 | Brazil | 1,568 | 37 | 92 | 1,697 | 7.3 | 2.7 | 20.87\% | 0.78\% | 16.29\% |
| 2 | Mexico | 694 | 82 | 42 | 819 | 4.0 | 2.1 | 25.00\% | 1.13\% | 11.65\% |
| 3 | Argentina | 508 | 44 | 10 | 563 | 3.1 | 0.2 | 22.76\% | 1.02\% | 27.51\% |
| 4 | Colombia | 462 | -7 | 29 | 485 | 2.3 | 0.7 | 16.12\% | 1.52\% | 20.55\% |
| 5 | Peru | 384 | -11 | 11 | 384 | 2.2 | 0.2 | 25.08\% | 1.72\% | 26.87\% |
| 6 | Guatemala | 173 | 14 | 57 | 244 | 1.2 | 1.4 | 22.98\% | 1.95\% | 27.51\% |
| 7 | Ecuador | 186 | -21 | 11 | 176 | 1.2 | 0.3 | 27.90\% | 1.77\% | 25.68\% |
| 8 | Dominican Republic | 103 | -6 | 11 | 107 | 0.6 | 0.3 | 28.85\% | 1.08\% | 24.84\% |
| 9 | Paraguay | 60 | 5 | 8 | 73 | 0.4 | 0.2 | 25.43\% | 1.29\% | 21.35\% |
| 10 | Honduras | 52 | -4 | 21 | 68 | 0.3 | 0.8 | 25.82\% | 1.67\% | 15.62\% |

Source: UIS, World Bank, EduFinance

## FIGURE 38

## Financial Institutions are Recognizing the Opportunity

Total Cumulative Loan Portfolio Value (USD)


Source: EduFinance

## FINANCIAL INSTITUTIONS ARE RECOGNIZING THE OPPORTUNITY

Financial institutions are recognizing the opportunity to lend to school proprietors and parents in low- and middle-income markets. On a monthly basis, partner financial institutions report to EduFinance the value and volume of School Improvement and School Fee loans that they have issued as well as several key risk metrics. Through July 2020, EduFinance partners
have cumulatively disbursed 449,157 loans to school proprietors and parents worth $\$ 343.6$ million. As of December 2014, the reporting statistics included an active 13 financial institutions disbursing loans. By July 2020, the number of financial institutions on the platform had reached 53.

## VII. THE FUTURE OF EDUCATION FINANCE

## THE FUTURE OF EDUCATION FINANCE

Expanding access to quality education remains essential if the world is going to incorporate the approximately 258 million school-aged children who remain out of school. Children in all countries deserve the opportunity to receive a quality education. However, despite even high levels of government spending on state schools in many low- and middle-income countries, it is proving inadequate to keep up with education demand. Though on the decline, population growth exceeds 2.6 percent in aggregate across the African continent. This means that in many countries, the requirements to expand infrastructure to absorb the growing school-aged population are almost impossible for the state sector to meet alone. To compound challenges, budgeted education funding is often used inefficiently and not allocated to large proportions of the population with the greatest need.

While not a silver bullet, affordable non-state schools make up a significant piece of the short-to-medium term solutions to close the education gap if non-state actors are given the opportunity to access necessary capital. In line with this identified opportunity to help increase access to quality education, Opportunity International has facilitated the growth of its Education Finance program.

## OPPORTUNITY EDUFINANCE RESULTS TO DATE

Opportunity EduFinance exists to increase access to capital for proprietors of affordable private schools and their customers.

- 14,800 school proprietors are currently borrowing through 43 local financial institutions.
- 135,000 parents are currently borrowing for school fees.
- EduFinance partnerships have spanned 60 financial institutions across 24 countries in Africa, Asia, and Latin America.
- The Education Quality program is currently offered in 8 countries and reaching over 1,700 schools.
- EduFinance is expanding access to financial products through more financial institutions in more countries.


## SCHOOLS ARE GROWING AND IMPROVING

Schools in Uganda served by Opportunity for at least three years have achieved, on average, 24\% enrollment growth, $36 \%$ increase in teaching staff, and an increase in income of 63\%.

- $\mathbf{7 0 \%}$ of schools used loans to construct additional classrooms.
- 9\% invested in WASH facilities-a proven method for keeping girls in school longer, and all students much healthier.
- $8 \%$ invested their loans in school vans, dormitory beds.
- $14 \%$ purchased land, built playground or sports facilities, or added new technology, such as computers.
- Schools that took a loan in Uganda have statistically outperformed their peers on national examination results ${ }^{47}$.

In Ghana, schools that received loans from Opportunity experienced, on average, 19\% enrollment growth and 20\% more teachers.

- The schools also achieved 23\% higher marks on the government-advised Chana Education System quality indicators.
- $\mathbf{9 7 \%}$ of EduFinance loans are repaid to financial institutions supported by Opportunity EduFinance.

[^17]

## Students are Learning More, Especially Girls

Opportunity conducted an independent evaluation to measure the impact of its services on schools in Uganda.

- Students at schools that benefited from a School Improvement Loan increased literacy by 17 words per minute over a control group.
- The enrollment of girls in secondary school increased by $17 \%$ against control schools.


## More Teachers and Jobs are Added in Communities

Through a survey of 94 Opportunity-supported schools in Uganda, new jobs were created by School Improvement Loans in 80\% of all schools surveyed, averaging 3.9 new full-time positions per school.

- Schools hired more teachers (averaging two new teachers per loan), as well as other support staff, including cleaners, food workers, nurses, and administrative staff.
- Additionally, 95\% of the schools hired construction workers to complete improvements in their schools.
- School owners reported having hired an average of 7.4 construction workers with their most recent loan, with the construction jobs lasting an average of 2.3 months.



## Children are Staying in School Longer, Increasing their Lifetime Expected Earnings

- School Fee Loans and Tertiary Tuition Loans disbursed by EduFinance partners have provided an additional 617,000 years' worth of education to 1.8 million pupils, translating to $\$ 56$ million of additional annual lifetime income ${ }^{48}$.
- Households utilizing School Fees Loans in Kenya reported a lower rate of student absenteeism (22\%) over the prior term than non-borrowing households $(33 \%)^{49}$.

[^18]
## VIII. APPENDIX



## Country Demographics

| Country |  | Region | Population (m) | Population Growth | Fertility Rate | School Aged Children (m) | Population <br> School Age | Out-ofSchool Primary | Out-of- <br> School Secondary | \% Out-ofSchool |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Afghanistan | AFG | South Asia | 36.3 | 2.4\% | 4.5 | 9.3 | 26\% | 3.7 |  | 40\% |
| Albania | ALB | Europe | 2.9 | 0.0\% | 1.6 | 0.3 | 11\% | 0.0 | 0.0 | 9\% |
| Algeria | DZA | MENA | 41.4 | 2.0\% | 3.0 | 7.2 | 17\% | 0.0 |  | 0\% |
| American Samoa | ASM | East Asia | 0.1 | 0.1\% |  | 0.0 | 13\% |  |  |  |
| Angola | AGO | Africa | 29.8 | 3.3\% | 5.5 | 5.7 | 19\% | 1.0 |  | 17\% |
| Armenia | ARM | Europe | 2.9 | 0.2\% | 1.8 | 0.4 | 15\% | 0.0 |  | 3\% |
| Aruba | ABW | Latin America | 0.1 | 0.5\% | 1.9 | 0.0 | 17\% | 0.0 |  | 0\% |
| Azerbaijan | AZE | Europe | 9.9 | 0.9\% | 1.7 | 1.4 | 15\% | 0.0 | 0.0 | 2\% |
| Bangladesh | BGD | South Asia | 159.7 | 1.1\% | 2.0 | 15.0 | 9\% | 1.6 | 6.3 | 53\% |
| Belarus | BLR | Europe | 9.5 | 0.2\% | 1.4 | 0.9 | 9\% | 0.0 | 0.0 | 1\% |
| Belize | BLZ | Latin America | 0.4 | 1.9\% | 2.3 | 0.1 | 17\% | 0.0 | 0.0 | 15\% |
| Benin | BEN | Africa | 11.2 | 2.7\% | 4.8 | 1.9 | 17\% | 0.1 | 0.7 | 39\% |
| Bhutan | BTN | South Asia | 0.7 | 1.2\% | 2.0 | 0.1 | 16\% | 0.0 | 0.0 | 17\% |
| Bolivia | BOL | Latin America | 11.2 | 1.4\% | 2.7 | 3.3 | 29\% | 0.1 | 0.3 | 11\% |
| Bosnia and Herzegovina | BIH | Europe | 3.4 | 0.0\% | 1.3 | 0.9 | 27\% |  |  |  |
| Botswana | BWA | Africa | 2.2 | 2.2\% | 2.9 | 0.5 | 21\% | 0.0 |  | 8\% |
| Brazil | BRA | Latin America | 207.8 | 0.8\% | 1.7 | 42.8 | 21\% | 0.0 | 2.6 | 6\% |
| Bulgaria | BGR | Europe | 7.1 | 0.0\% | 1.6 | 0.8 | 11\% | 0.0 | 0.0 | 12\% |
| Burkina Faso | BFA | Africa | 19.2 | 2.9\% | 5.2 | 5.4 | 28\% | 0.7 | 1.7 | 43\% |
| Burundi | BDI | Africa | 10.8 | 3.2\% | 5.4 | 2.2 | 21\% | 0.1 | 0.6 | 34\% |
| Cabo Verde | CPV | Africa | 0.5 | 1.2\% | 2.3 | 0.1 | 19\% | 0.0 | 0.0 | 14\% |
| Cambodia | KHM | East Asia | 16.0 | 1.5\% | 2.5 | 2.1 | 13\% | 0.2 |  | 10\% |
| Cameroon | CMR | Africa | 24.6 | 2.6\% | 4.6 | 4.2 | 17\% | 0.3 | 1.4 | 41\% |
| Central African Republic | CAF | Africa | 4.6 | 1.5\% | 4.7 | 1.3 | 29\% | 0.2 | 0.5 | 54\% |
| Chad | TCD | Africa | 15.0 | 3.0\% | 5.7 | 4.3 | 29\% | 0.5 |  | 11\% |
| Colombia | COL | Latin America | 48.9 | 1.5\% | 1.8 | 9.6 | 20\% | 0.1 | 0.6 | 7\% |
| comoros | COM | Africa | 0.8 | 2.2\% | 4.2 | 0.1 | 16\% | 0.0 | 0.0 | 49\% |
| Congo, Dem. Rep. | COD | Africa | 81.4 | 3.3\% | 5.9 | 14.7 | 18\% | 3.6 | 3.6 | 49\% |
| Congo, Rep. | coG | Africa | 5.1 | 2.6\% | 4.4 | 1.3 | 26\% | 0.1 |  | 7\% |
| Costa Rica | CRI | Latin America | 4.9 | 1.0\% | 1.8 | 0.9 | 19\% | 0.0 | 0.0 | 2\% |
| Cote d'Ivoire | CIV | Africa | 24.4 | 2.6\% | 4.6 | 6.4 | 26\% | 0.2 | 2.1 | 35\% |
| Cuba | CUB | Latin America | 11.3 | 0.0\% | 1.6 | 1.1 | 10\% | 0.0 | 0.1 | 12\% |
| Djibouti | DII | MENA | 0.9 | 1.6\% | 2.7 | 0.2 | 19\% | 0.0 | 0.1 | 63\% |
| Dominica | DMA | Latin America | 0.1 | 0.2\% | 1.9 | 0.0 | 16\% | 0.0 | 0.0 | 3\% |
| Dominican Republic | DOM | Latin America | 10.5 | 1.1\% | 2.3 | 2.9 | 28\% | 0.1 | 0.2 | 9\% |
| Ecuador | ECU | Latin America | 16.8 | 1.8\% | 2.4 | 4.7 | 28\% | 0.0 | 0.2 | 6\% |
| Egypt, Arab Rep. | EGY | MENA | 96.4 | 2.0\% | 3.3 | 22.7 | 24\% | 0.1 | 1.5 | 7\% |
| El Salvador | SLV | Latin America | 6.4 | 0.5\% | 2.0 | 1.7 | 27\% | 0.1 | 0.2 | 18\% |
| Equatorial Guinea | GNQ | Africa | 1.3 | 3.7\% | 4.5 | 0.2 | 14\% | 0.1 |  | 49\% |
| Eritrea | ERI | Africa | 4.5 | 1.9\% | 4.1 | 0.8 | 18\% | 0.2 | 0.2 | 55\% |
| Ethiopia | ETH | Africa | 106.4 | 2.6\% | 4.2 | 22.4 | 21\% | 2.2 | 7.9 | 45\% |
| Fiji | FJI | East Asia | 0.9 | 0.7\% | 2.8 | 0.1 | 13\% | 0.0 | 0.0 | 14\% |
| Gabon | GAB | Africa | 2.1 | 2.6\% | 4.0 | 0.5 | 22\% |  | 0.2 | 39\% |
| Gambia, The | GMB | Africa | 2.2 | 2.9\% | 5.2 | 0.5 | 24\% | 0.1 |  | 12\% |
| Georgia | GEO | Europe | 3.7 | 0.0\% | 2.1 | 0.4 | 12\% | 0.0 | 0.0 | 2\% |
| Ghana | GHA | Africa | 29.1 | 2.2\% | 3.9 | 7.9 | 27\% | 0.1 | 0.8 | 12\% |
| Grenada | GRD | Latin America | 0.1 | 0.5\% | 2.1 | 0.0 | 18\% | 0.0 | 0.0 | 3\% |
| Guatemala | GTM | Latin America | 16.9 | 1.9\% | 2.9 | 4.1 | 24\% | 0.2 | 1.2 | 34\% |
| Guinea | GIN | Africa | 12.1 | 2.8\% | 4.7 | 2.1 | 17\% | 0.4 | 1.0 | 66\% |
| Guinea-Bissau | GNB | Africa | 1.8 | 2.5\% | 4.5 | 0.4 | 24\% |  |  |  |
| Guyana | GUY | Latin America | 0.8 | 0.5\% | 2.5 | 0.1 | 11\% | 0.0 | 0.0 | 21\% |
| Haiti | HTI | Latin America | 11.0 | 1.3\% | 2.9 | 1.5 | 14\% | 0.2 |  | 13\% |
| Honduras | HND | Latin America | 9.4 | 1.7\% | 2.5 | 2.5 | 27\% | 0.2 | 0.6 | 33\% |
| India | IND | South Asia | 1,338.7 | 1.0\% | 2.2 | 204.3 | 15\% | 5.9 | 26.7 | 16\% |
| Indonesia | IDN | East Asia | 264.6 | 1.1\% | 2.3 | 42.2 | 16\% | 1.5 | 5.5 | 16\% |
| Iran, Islamic Rep. | IRN | MENA | 80.7 | 1.4\% | 2.1 | 11.1 | 14\% | 0.0 | 1.0 | 9\% |
| Iraq | IRQ | MENA | 37.6 | 2.3\% | 3.7 | 5.7 | 15\% |  |  |  |
| Jamaica | JAM | Latin America | 2.9 | 0.5\% | 2.0 | 0.3 | 9\% | 0.0 | 0.0 | 33\% |
| Jordan | JOR | MENA | 9.8 | 1.8\% | 2.8 | 2.3 | 23\% | 0.0 | 0.5 | 23\% |
| Kazakhstan | KAZ | Europe | 18.0 | 1.3\% | 2.8 | 2.7 | 15\% | 0.0 | 0.0 | 1\% |
| Kenya | KEN | Africa | 50.2 | 2.3\% | 3.5 | 15.9 | 32\% | 1.2 | 0.3 | 10\% |
| Kiribati | KIR | East Asia | 0.1 | 1.5\% | 3.6 | 0.0 | 21\% | 0.0 |  | 3\% |
| Kosovo | XKX | Europe | 1.8 | 0.8\% | 2.0 | 0.5 | 27\% |  |  |  |
| Kyrgyz Republic | KGZ | Europe | 6.2 | 2.0\% | 3.3 | 1.2 | 19\% | 0.0 | 0.1 | 6\% |
| Lao PDR | LAO | East Asia | 7.0 | 1.5\% | 2.7 | 1.4 | 20\% | 0.1 | 0.3 | 28\% |
| Lebanon | LBN | MENA | 6.8 | 0.5\% | 2.1 | 1.0 | 14\% | 0.1 | 0.2 | 25\% |
| Lesotho | LSO | Africa | 2.1 | 0.8\% | 3.1 | 0.3 | 15\% | 0.0 | 0.1 | 28\% |
| Liberia | LBR | Africa | 4.7 | 2.5\% | 4.3 | 0.8 | 17\% | 0.2 | 0.2 | 43\% |
| Libya | LBY | MENA | 6.6 | 1.5\% | 2.2 | 1.1 | 17\% |  |  |  |

Source: UIS, World Bank, EduFinance

## Country Demographics

| Country |  | Region | Population (m) | Population Growth | Fertility Rate | School Aged Children (m) | Population <br> School Age | Out-of- <br> School <br> Primary | Out-of- <br> School <br> Secondary | \% Out-ofSchool |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Macedonia, FYR | MKD | Europe | 2.1 | 0.0\% | 1.5 | 0.3 | 15\% | 0.0 |  | 0\% |
| Madagascar | MDG | Africa | 25.6 | 2.7\% | 4.1 | 3.5 | 14\% | 0.1 | 1.8 | 52\% |
| Malawi | MWI | Africa | 17.7 | 2.6\% | 4.2 | 4.1 | 23\% | 0.3 | 0.8 | 27\% |
| Malaysia | MYS | East Asia | 31.1 | 1.4\% | 2.0 | 3.0 | 10\% | 0.0 | 0.8 | 28\% |
| Maldives | MDV | South Asia | 0.5 | 3.8\% | 1.9 | 0.1 | 16\% | 0.0 |  | 2\% |
| Mali | MLI | Africa | 18.5 | 3.0\% | 5.9 | 4.8 | 26\% | 1.4 | 1.7 | 65\% |
| Marshall Islands | MHL | East Asia | 0.1 | 0.6\% | 4.1 | 0.0 | 34\% | 0.0 | 0.0 | 20\% |
| Mauritania | MRT | Africa | 4.3 | 2.8\% | 4.6 | 1.0 | 23\% | 0.1 | 0.3 | 44\% |
| Mauritius | MUS | Africa | 1.3 | 0.1\% | 1.4 | 0.2 | 14\% | 0.0 | 0.0 | 10\% |
| Mexico | MEX | Latin America | 124.8 | 1.1\% | 2.1 | 31.7 | 25\% | 0.1 | 2.0 | 6\% |
| Micronesia, Fed. Sets. | FSM | East Asia | 0.1 | 1.1\% | 3.1 | 0.0 | 13\% | 0.0 |  | 15\% |
| Moldova | MDA | Europe | 2.8 | 0.0\% | 1.3 | 0.4 | 15\% | 0.0 | 0.1 | 16\% |
| Mongolia | MNG | East Asia | 3.1 | 1.8\% | 2.9 | 0.6 | 20\% | 0.0 | 0.0 | 2\% |
| Montenegro | MNE | Europe | 0.6 | 0.0\% | 1.7 | 0.1 | 11\% | 0.0 | 0.0 | 10\% |
| Morocco | MAR | MENA | 35.6 | 1.3\% | 2.4 | 5.7 | 16\% | 0.0 | 0.7 | 12\% |
| Mozambique | MOZ | Africa | 28.6 | 2.9\% | 4.9 | 5.9 | 21\% | 0.3 | 1.8 | 36\% |
| Myanmar | MMR | East Asia | 53.4 | 0.6\% | 2.2 | 4.7 | 9\% | 0.1 | 1.7 | 38\% |
| Namibia | NAM | Africa | 2.4 | 1.9\% | 3.4 | 0.4 | 17\% | 0.0 |  | 1\% |
| Nepal | NPL | South Asia | 27.6 | 1.7\% | 1.9 | 5.1 | 19\% | 0.1 | 0.6 | 15\% |
| Nicaragua | NIC | Latin America | 6.4 | 1.3\% | 2.4 | 0.9 | 15\% | 0.5 |  | 54\% |
| Niger | NER | Africa | 21.6 | 3.8\% | 6.9 | 4.5 | 21\% | 1.2 | 2.5 | 83\% |
| Nigeria | NGA | Africa | 190.9 | 2.6\% | 5.4 | 46.8 | 25\% | 6.8 | 6.8 | 29\% |
| Pakistan | PAK | South Asia | 207.9 | 2.1\% | 3.5 | 56.8 | 27\% | 6.0 | 13.0 | 34\% |
| Papua New Guinea | PNG | East Asia | 8.4 | 2.0\% | 3.6 | 1.1 | 13\% | 0.2 |  | 16\% |
| Paraguay | PRY | Latin America | 6.9 | 1.3\% | 2.4 | 1.8 | 26\% | 0.1 | 0.2 | 14\% |
| Peru | PER | Latin America | 31.4 | 1.7\% | 2.3 | 7.7 | 24\% | 0.0 | 0.2 | 3\% |
| Philippines | PHL | East Asia | 105.2 | 1.4\% | 2.6 | 24.2 | 23\% | 0.4 | 0.8 | 5\% |
| Romania | ROU | Europe | 19.6 | 0.0\% | 1.8 | 2.1 | 11\% | 0.1 | 0.2 | 18\% |
| Russian Federation | RUS | Europe | 144.5 | 0.1\% | 1.6 | 16.5 | 11\% | 0.0 | 0.1 | 1\% |
| Rwanda | RWA | Africa | 12.0 | 2.6\% | 4.0 | 1.9 | 16\% | 0.1 | 0.4 | 25\% |
| Samoa | WSM | East Asia | 0.2 | 0.4\% | 3.9 | 0.0 | 20\% | 0.0 | 0.0 | 12\% |
| Sao Tome and Principe | STP | Africa | 0.2 | 1.9\% | 4.3 | 0.0 | 17\% | 0.0 | 0.0 | 15\% |
| Senegal | SEN | Africa | 15.4 | 2.8\% | 4.6 | 4.6 | 30\% | 0.6 | 1.3 | 40\% |
| Serbia | SRB | Europe | 7.0 | 0.0\% | 1.5 | 0.5 | 8\% | 0.0 | 0.0 | 8\% |
| Sierra Leone | SLE | Africa | 7.5 | 2.1\% | 4.3 | 1.8 | 24\% | 0.0 | 0.7 | 40\% |
| Solomon Islands | SLB | East Asia | 0.6 | 2.6\% | 4.4 | 0.1 | 13\% | 0.0 |  | 4\% |
| Somalia | SOM | Africa | 14.6 | 2.8\% | 6.1 | 3.0 | 21\% | 3.0 |  | 100\% |
| South Africa | ZAF | Africa | 57.0 | 1.4\% | 2.4 | 9.8 | 17\% | 0.6 | 0.9 | 15\% |
| South Sudan | SSD | Africa | 10.9 | 0.6\% | 4.7 | 2.3 | 21\% | 1.3 | 1.1 | 105\% |
| Sri Lanka | LKA | South Asia | 21.4 | 1.0\% | 2.2 | 3.8 | 18\% | 0.0 | 0.2 | 5\% |
| St. Lucia | LCA | Latin America | 0.2 | 0.5\% | 1.4 | 0.0 | 13\% | 0.0 | 0.0 | 9\% |
| St. Vincent and the Grenadin | VCT | Latin America | 0.1 | 0.3\% | 1.9 | 0.0 | 19\% | 0.0 | 0.0 | 3\% |
| Sudan | SDN | Africa | 40.8 | 2.4\% | 4.4 | 8.7 | 21\% | 2.4 |  | 28\% |
| Suriname | SUR | Latin America | 0.6 | 1.0\% | 2.4 | 0.1 | 11\% |  |  |  |
| Eswatini | SWZ | Africa | 1.1 | 1.0\% | 3.0 | 0.2 | 19\% | 0.0 | 0.0 | 30\% |
| Tajikistan | TJK | Europe | 8.9 | 2.5\% | 3.6 | 1.7 | 19\% | 0.0 | 0.2 | 12\% |
| Tanzania | TZA | Africa | 54.7 | 3.0\% | 4.9 | 11.1 | 20\% | 1.9 |  | 17\% |
| Thailand | THA | East Asia | 69.2 | 0.3\% | 1.5 | 7.5 | 11\% | 0.5 | 0.9 | 19\% |
| Timor-Leste | TLS | East Asia | 1.2 | 2.0\% | 4.0 | 0.3 | 23\% | 0.0 | 0.0 | 14\% |
| Togo | TGO | Africa | 7.7 | 2.4\% | 4.3 | 2.0 | 26\% | 0.1 | 0.4 | 24\% |
| Tonga | TON | East Asia | 0.1 | 1.2\% | 3.6 | 0.0 | 35\% | 0.0 | 0.0 | 9\% |
| Tunisia | TUN | MENA | 11.4 | 1.1\% | 2.2 | 1.5 | 13\% | 0.0 |  | 0\% |
| Turkey | TUR | Europe | 81.1 | 1.5\% | 2.1 | 16.4 | 20\% | 0.3 | 1.3 | 10\% |
| Turkmenistan | TKM | Europe | 5.8 | 1.6\% | 2.8 | 1.2 | 22\% |  |  |  |
| Tuvalu | TUV | East Asia | 0.0 | 1.2\% |  | 0.0 | 18\% | 0.0 | 0.0 | 27\% |
| Uganda | UGA | Africa | 41.2 | 3.7\% | 5.0 | 9.2 | 22\% | 0.7 |  | 8\% |
| Ukraine | UKR | Europe | 44.8 | 0.0\% | 1.3 | 4.5 | 10\% | 0.1 | 0.1 | 5\% |
| Uzbekistan | UZB | Europe | 32.4 | 1.7\% | 2.4 | 6.7 | 21\% | 0.0 | 0.3 | 5\% |
| Vanuatu | VUT | East Asia | 0.3 | 2.5\% | 3.8 | 0.0 | 13\% | 0.0 | 0.0 | 32\% |
| Vietnam | VNM | East Asia | 94.6 | 1.0\% | 2.0 | 14.2 | 15\% | 0.1 |  | 1\% |
| West Bank and Gaza | PSE | MENA | 4.5 | 2.5\% | 3.6 | 1.2 | 26\% | 0.0 | 0.1 | 9\% |
| Yemen, Rep. | YEM | MENA | 27.8 | 2.4\% | 3.8 | 6.4 | 23\% | 0.7 | 1.6 | 36\% |
| Zambia | ZMB | Africa | 16.9 | 2.9\% | 4.6 | 3.5 | 21\% | 0.5 |  | 15\% |
| Zimbabwe | ZWE | Africa | 14.2 | 1.4\% | 3.6 | 2.8 | 20\% | 0.4 | 0.8 | 42\% |
| South Asia |  |  | 1,792.8 | 1.2\% | 2.5 | 294.4 | 16\% | 17.2 | 46.9 | 22\% |
| East Asia \& Pacific |  |  | 904.2 | 1.1\% | 2.2 | 124.8 | 13\% | 3.3 | 10.4 | 11\% |
| Middle East \& North Africa |  |  | 441.3 | 1.8\% | 2.6 | 78.6 | 20\% | 1.8 | 7.7 | 12\% |
| Sub-Saharan Africa |  |  | 1,051.2 | 2.6\% | 4.4 | 232.1 | 21\% | 32.9 | 42.7 | 33\% |
| Latin America \& Caribbean |  |  | 635.4 | 1.1\% | 1.9 | 142.1 | 26\% | 2.3 | 9.5 | 8\% |
| Europe \& Central Asia |  |  | 914.6 | 0.0\% | 1.7 | 118.8 | 27\% | 1.0 | 3.9 | 4\% |
| Total |  |  | 5,739.5 | 1.6\% | 2.8 | 990.8 | 17\% | 58.7 | 121.0 | 18\% |

Source: UIS, World Bank, EduFinance

## Forecasts and Estimates





Source: UIS, World Bank, EduFinance

Forecasts and Estimates


Source: UIS, World Bank, EduFinance

Forecasts and Estimates


Source: UIS, World Bank, EduFinance

## Non-State Education Penetration by Region

South Asia (ex-high income)


Middle East \& North Africa (ex-high income)


Latin America and Caribbean (ex-high income)


East Asia (ex-high income)


Sub-Saharan Africa (ex-high income)


State vs. Non-State School Global (ex-high income)


[^19]
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