UNHCR
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THE WORLD BANK

The Global Cost of Inclusive Refugee Education

January 2021

A joint World Bank-UNHCR report

1818 H Street NW, Washington, DC 20433
Telephone: 202-473-1000; Internet: www.worldbank.org

Cover photo: Pakistan. Afghan refugee students at UNHCR funded school. © UNHCR / Asif Shahzad

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Foreword

More than half of the seven million school-age refugees living in displacement across the world in 2019 were not in school. Education provides essential knowledge and skills, and a sense of normalcy and predictability for displaced children and youth. It contributes to human capital development and provides opportunities for individual earnings, employment and covering essential needs such as health and food. For families, it provides a sense of hope for the next generation and improves social cohesion with host communities. It is also essential for durable solutions. Quality education is an important public good driving economic growth, innovation, civic engagement and reduced poverty. During displacement, the medium-term benefits of education for refugees include the knowledge and skills that can contribute to stability, reconstruction and peacebuilding in their home countries.

Over half of all school-age refugees are hosted by low and lower-middle income countries that themselves face challenges in delivering education services to host populations. It is becoming increasingly evident that including refugees in national systems is the only sustainable solution to addressing both the educational needs of refugees and the amplified needs of their host communities.

This paper presents a joint effort by the World Bank and UNHCR to estimate the cost of educating refugee children through host country inclusive systems. This is critical, now more than ever, with refugees staying much longer in asylum countries, without solutions. The COVID-19 pandemic has exposed the deep vulnerabilities of the most marginalized populations, including refugee children. But beyond that, it has shown us that a solution cannot be effective if it does not reach everyone. We need to extend this sense of interconnectedness and solidarity to how we respond to the refugee education crisis and strive towards leaving no child or youth behind.

This report is set against a policy environment that promotes the development of inclusive national education systems. In 2018, the international community came together and adopted the Global Compact on Refugees (GCR). The GCR aims to operationalize the principles of burden and responsibility sharing to better protect and assist refugees and to support host countries and communities. It also sets out a vision to expand the quality and inclusiveness of national systems to facilitate access by refugee and host community children and youth to primary, secondary and tertiary education. It is this vision of comprehensive responses that underpins and has motivated this piece of work.

The report is a crucial step towards understanding the needs of refugees and host countries, developing an adequate framework for response, and catalysing renewed discussions around responsibility-sharing. It gives a message of hope: the global estimate of **US$4.85 billion per year** as "what it would take" is not out of reach. It will require the collective effort of the international community and host governments, but it is doable.

We are committed to playing our part and to scaling up and coordinating our support for refugee education in collaboration with other international and local partners. By committing to supporting education for all children and youth, we stand in solidarity not only with refugee populations but also with the host country governments and communities that have so generously opened their borders to the most vulnerable and are hosting them.

Raouf Mazou
Assistant High Commissioner for Operations

Mamta Murthi
Vice President for Human Development

Contents

Acknowledgements

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Abbreviations

AEP	Accelerated Education Programme
ECD	Early Childhood Development
ECE	Early Childhood Education
ECW	Education Cannot Wait
EFA	Education for All
ERP	Education Response Plan
EU	European Union
FCV	Fragility, Conflict and Violence
GCR	Global Compact on Refugees
GDP	Gross Domestic Product
GEM	Global Education Monitoring
GPE	Global Partnership for Education
IDA	International Development Association
IFFEd	International Financing Facility for Education
IGAD	Intergovernmental Authority for Development
LIC	Low income country
LMIC	Lower-middle income country
MHPSS	Mental Health and Psycho-Social Support
MIC	Middle income country
NGO	Non-governmental organization
ODI	Overseas Development Institute
PPP	Purchasing Power Parity
RSW	Regional Sub-Window for Refugees and Host Communities
SDG	Sustainable Development Goal
TEC	Temporary Education Center
UIS	UNESCO Institute for Statistics
UMIC	Upper-middle income country
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNRWA	United Nations Relief and Works Agency for Palestine Refugees
VDA	Venezuelans Displaced Abroad
WHR	Window for Host Communities and Refugees

Executive Summary

This report estimates the cost of educating refugee[1] children in the countries in which they currently reside. The cohort-average annual cost of providing education to all refugee students in low, lower-middle and upper-middle income host countries is ***US$4.85 billion***.[2] A sensitivity analysis, relaxing model assumptions, suggests the estimate lies in the range of ***US$4.44 billion*** and ***US$5.11 billion***. The total financing envelope required to provide K-12 years of education over a 13-year period to 2032 is US$63 billion. As data on the impact of COVID-19's impact on education costs and public expenditure is still evolving, this paper provides a pre-COVID-19 baseline for the estimated costs of educating all refugee children.

The Global Compact on Refugees (GCR) has placed enhanced responsibility-sharing at the center of the international refugee protection agenda. It commits stakeholders to specific measures to achieve that goal, including a proposal to measure their contributions.[3] This requires a standardized and transparent methodology, developed through a participatory process, that can be used across all host countries; and provides the motivation for this work.

This report is set against a policy environment that promotes the development of inclusive national education systems. It gives a message of hope: while providing education to all refugee children presents a considerable endeavor, the global estimate on "what it would take" is not out of reach of the collective efforts of the international community and host governments.

The report is cognizant of the fact that education in emergencies is not only a humanitarian crisis but also a development crisis with large numbers of refugee children spending their whole education life cycle in displaced settings. These environments are often already stretched to deliver quality education services. Eighty-five percent of the world's displaced persons are hosted in low and lower middle-income countries. Where refugees are concentrated in border or rural regions, inclusive education systems can direct resources to previously underserved areas in host countries. Inclusive national education systems promote a streamlined response to the large influx of refugees by building resilient systems with benefits for refugees and host communities alike. It creates a framework for the international community to harmonize efforts and share the collective burden and responsibility of refugee education.

1 In this analysis, the term 'refugees' refers to asylum seekers, refugees and Venezuelans displaced abroad who are registered with the UNHCR, unless specified otherwise.

2 An additional US$443 million is the estimated annual cost of delivering education to Palestinian refugee children under the mandate of the United Nations Relief and Works Agency for Palestinian refugees (UNRWA).

3 Global Compact on Refugees – paragraph 48.

85% of the world's displaced people are hosted in low and lower middle-income countries.

The costing methodology developed in this report is based on the key premise that refugee education is embedded in the host country education system, facing the same cost drivers and efficiency and quality constraints. This implies that refugee students receive an education that is "no better, no worse" than host country students in terms of teacher quality, school infrastructure, access to learning materials and other inputs. It starts with the public unit cost of education in each country for each level of education.[4] Refugee education coefficients[5] are then added to the unit costs to provide education services essential to the integration of refugees into national systems. These services include accelerated learning programmes, psychosocial support, support in the language of instruction, teacher training in refugee inclusiveness and so on. In addition, given the historical levels of low investment in early childhood education (ECE), this paper adds an ECE coefficient to primary public unit costs to estimate pre-primary costs for each country. While this paper uses uniform coefficients across all countries, these are likely to vary based on the local context.

Enrollment figures are based on estimates from UNHCR data on refugees, asylum seekers and Venezuelans displaced abroad. The methodology accounts for cohort structure by developing estimates for annual enrollment at each level of education. These enrollment figures are then multiplied with the estimated unit costs of refugee education and summed over the K-12 years of schooling to derive the country-specific financing envelope required to educate the existing population of refugee children in the host country. These figures are aggregated across all host countries to derive the total envelope required. The analysis assumes that there are no additional influxes of refugees beyond UNHCR figures as of June 2020 and that these populations do not leave their present host countries. While the model assumes targets of universal access to pre-primary, primary and secondary education, the report recognizes that this may not hold true in all host countries.

4 The public unit costs are calculated based on data obtained from the UNESCO Institute of Statistics (UIS) database on initial public expenditure by level of education divided by total public enrollment at that level of education. Public expenditure includes both current and capital costs, as well as spending at all levels of government. Where UIS data is not available, the unit cost is estimated using public expenditure on education as a percentage of GDP per capita. In the context of a larger exercise on estimating the overall impact of refugees on host countries, the World Bank and UNHCR are working with host countries on utilizing countries' fiscal and education sector data to derive unit costs as well as the costs of programmes addressing refugee student needs.

5 These coefficients have been adopted from the coefficients for the inclusion of marginalized children at pre-primary, primary and secondary education in the 2015 EFA Global Education Monitoring Report on global education costing.

While this report provides global as well as country-specific financing requirements, it does not attempt to substitute for national planning with inclusive education strategies and costed implementation plans, nor is it meant for cross-country comparisons.

Iran. Afghan refugee sisters in Isfahan go to school for the first time
© UNHCR/Mohammad Hossein Dehghanian

The average unit cost for refugee education is US$1,051. There are large variations by country income categorization: the average unit cost for refugee education in low, lower-middle and upper-middle income countries is US$171, US$663 and US$2,085 respectively. This report is accompanied by a dashboard where host countries can review summaries of country-specific refugee numbers, unit costs, cohort average annual costs, and average and total costs by level of education. These figures are also provided in the annex of the report.

Any methodology that is adopted will rest on a set of assumptions and agreed approaches, is likely to use proxies, omit some aspects, and rely on incomplete data sets. The cost of refugee-specific education programmes will differ by country and might not match the global average coefficients assumed in this report. These programmes will have to be differentiated by areas and years of intervention, geographical scope, technical capacity requirements, and so on. This report calls for improved data collection and reporting on refugee education, especially regarding demographics, the cost of refugee education programmes and how these evolve over time as the initial emergency response becomes a protracted situation, and the unit cost of public education in host countries. This will lead to improvements in the process of measuring the impact and contributions of host countries and make for more the accurate refugee education financing estimates.

While this report provides global as well as country-specific financing requirements, it does not attempt to substitute for national planning with inclusive education strategies and costed implementation plans, nor is it meant for cross-country comparisons. It aims to provide an aggregate dollar estimate of "what it would take" to educate all refugees in their current host countries. The estimates presented in this report do not reflect international commitments or obligations, nor current domestic expenditure on refugee education. This report commends the momentum gained in the development of national inclusive education systems and aims to support countries by providing guiding principles for costing refugee education.

Further, the provision of financial resources is a necessary but not sufficient condition for universal access and completion of education. This paper recognizes that barriers to access and completion persist even in countries that invests heavily in education. Improvements in quality and learning outcomes are also not directly correlated with greater education expenditure. While estimating the cost of access to *quality* education for refugees and host communities constitutes a larger exercise, and is an area for future work, this paper acknowledges the importance of focusing on the learning agenda alongside the access problem. Another area for future work is to estimate a mark-up for the cost of education interventions in response to the COVID-19 pandemic. This might include the costs of delivering remote education services, teacher training, curriculum reviews, devices to close the digital divide, and removing demand-side barriers as vulnerable children become even more susceptible to dropping or staying out of school.

Given that this is the first step towards measuring the cost of including refugees in national systems, the approach and methodology will be iterated, reviewed and improved over time. Furthermore, the standardized, transparent and participatory approach can be adopted for other sectors in the future including health and water amongst others. While each sector will have a nuanced costing methodology, the importance of undertaking the costing exercise both for host countries and for the international community cannot be overemphasized. It is a crucial step towards understanding the needs of refugees and host countries, developing an adequate response framework, and catalyzing renewed discussions around responsibility-sharing.

Background

The number of forcibly displaced people reached a record high in 2019, with substantial proportions in protracted refugee situations. Over the last decade, the number of people facing forced displacement due to conflict, violence, persecution or human rights violations nearly doubled from 41.1 million in 2010 to 79.5 million people by the end of 2019. Of these, 26 million are refugees, half of whom are below the age of 18.[6] An additional 3.6 million Venezuelans have been displaced abroad. About 77 percent of refugees are in protracted refugee situations[7], and 5.8 million refugees are in a situation lasting 20 years or more. This implies that substantial proportions of refugee children are in refugee situations for the entirety of their schooling years.

Beyond being a basic human right, access to quality education for refugees is critical for safety, social-cohesion, peace-building and stability. It helps them cope with and overcome the trauma they may have experienced as a result of displacement and violence. Further, it is critical to skills development, future employment and self-sufficiency. Refugees need accelerated and simplified pathways to integrate into new societies and education plays a key role in this process. Highly educated refugees can also contribute to the sustainable development and reconstruction of their home and host countries.

Access to education for refugee children remains far lower than for those not forced into displacement. It is estimated that 77 percent of refugee children attend primary school, only 31 percent of refugee youth accesses secondary education, and a mere 3 percent accesses tertiary opportunities.[8] This is substantially lower than the global access to education figures of 91 percent, 84 percent and 37 percent for primary, secondary and tertiary levels, respectively. Further, an estimated 48 percent of school-age refugee children are out of school.[9] Access to education is affected by financial and legal barriers to entry, limited availability of additional spaces and trained teachers to absorb the influx of refugee students, traditionally inadequate investment in refugee education, as well as a host of social, cultural and economic constraints faced by individual families. Even after entering school, refugee students are far more likely to drop out. Once students drop out of school, it becomes difficult for them to reenter and catch up. Globally, only 34 percent of out-of-school children are likely to re-enroll in education.[10] Challenges to accessing education are further exacerbated as a result of the COVID-19 pandemic and the looming economic crisis.[11] Where

6 UNHCR. 2020. *Global Trends: Forced Displacement in 2019.*

7 UNHCR defines a protracted refugee situation as one in which 25,000 or more refugees of the same nationality have been in exile for five or more consecutive years in a given host country.

8 UNHCR. 2020. *Coming Together for Refugee Education.*

9 UNHCR. 2020. *Coming Together for Refugee Education.*

10 Save the Children. 2018. *Hear it from the teachers – Getting refugee children back to learning.*

11 Rogers, H. and Sabarwal, S. 2020. *The COVID-19 pandemic: Shocks to education and policy responses.* World Bank: Washington D.C.

education has shifted to online or remote delivery, limited access to the internet and reliable electricity keep children from learning. In sub-Saharan Africa, where a quarter of the world's refugees reside, 89 percent of learners do not have access to a computer and 82 percent lack internet access.[12]

Educating displaced children and youth poses unique challenges. The United Nations High Commissioner for Refugees (UNHCR) estimates that refugee children miss out on an average of three to four years of schooling due to forced displacement.[13] As a result, refugee children are likely to be older than their peers and suffer discrimination and stigmatization by both teachers and peers. Where they are enrolled according to their age, they will face academic difficulties given the interruption in their schooling. They are likely to have suffered psychological trauma as a result of violence and conflict, which may inhibit their ability to participate and learn in a classroom. They might have physical disabilities, either from birth or as a result of violence. They often have only one, or no adult caretaker at home and are often forced to work and engage in income-generating activity. This means that the opportunity cost of their education is very high. Their learning is further affected if the host country's language of instruction is different from that of their country of origin. In addition to these challenges, they also face several constraints to entering and remaining in school. These include high costs associated with education (like transportation and materials), extended interruptions to their learning, schools refusing to enroll refugee children, risk of gender-based violence while traveling to school, poverty and pressure to work (prevalent among older children, especially boys), lack of awareness of available education programmes or the complexity in registering for them.

Furthermore, refugee populations are concentrated in developing countries where education services are already stretched to meet the needs of citizens and learning poverty is high. Almost nine out of ten of the world's displaced people are hosted in low income countries (LICs) and lower middle-income countries (LMICs).[14] New data shows that 53 percent of all children in LICs and middle-income countries (MICs) suffer from learning poverty which means being unable to read and understand a simple text by age 10.[15] The education systems of these host countries are not adequately equipped to improve the learning outcomes of children or to respond to the large influx of refugee children or their specific needs. There are often additional challenges at sub-national levels as refugees are often settled in poor and vulnerable communities where education services are relatively sub-standard. In 2015, the number of UNHCR registered refugees aged 3-18 years in Lebanon was almost double the number of Lebanese children enrolled in all public schools grades K-12[16], a ratio that is impacted by the fact that only 30 percent of children are enrolled in public schools in Lebanon.[17] In Jordan, class time was reduced from 45 to 30

12 You, D., Lindt, N., Allen, R., Hansen, C., Beise, J. and Blume, S. 2020. *Migrant and displaced children in the age of COVID-19: How the pandemic is impacting them and what we can do to help.* Migration Policy Practice. 10:2.

13 UNHCR. 2016. *Left Behind: Refugee Education in Crisis.*

14 UNHCR. 2020. *Global Trends: Forced Displacement in 2019.*

15 World Bank. 2019. *Ending Learning Poverty: What will it take?*

16 World Bank. 2016. Reaching All Children with Education (RACE2) Project Appraisal Document.

17 World Bank. 2017. *Lebanon Education Public Expenditure Review.*

minutes as a result of the introduction of double shifts in the immediate response to the Syrian crisis in 2012. Since then, with the hiring of new teachers and an additional day of learning for Syrian refugees, class time has increased to 40 minutes.[18] In Turkey, the 2014 Temporary Protection Regulation gave Syrian refugees access to public health and education services, yet many refugees were unable to register due to lack of adequate school infrastructure.[19] In 2017, despite commendable efforts by the government, over 380,000 Syrian children in Turkey were not attending school.[20] Coordinated efforts by the Bangladeshi government and United Nations Children's Fund (UNICEF) have led to the enrollment of about 472,000 Rohingya refugees; however, there is little enrollment in formal education, and over 60,000 refugee children of primary school age remain out of school and 97 percent of children aged 15-17 are not enrolled in any form of education or training.[21] In Dadaab refugee camp in Kenya, 72 percent of refugee teachers have only secondary school qualifications, and are not adequately supported with training and materials.[22]

Refugee education has historically been addressed through separate or parallel systems as a temporary response to refugee emergencies. This includes setting up temporary learning centers or schools within refugee camps, introducing parallel systems with the home country curriculum and language of instruction, parallel afternoon classes, and remedial or accelerated learning programmes primarily set up through non-governmental organizations (NGOs) and donors. While these parallel systems worked as a stop-gap in the immediate response to emergencies, they often did not provide a clear pathway to formal education, especially for undocumented or unregistered refugees. In Bangladesh, refugee children placed in refugee camps are not allowed to attend public schools in the local communities and follow a coherent recognized curriculum covering a sequence of grades and school levels. In Turkey, Temporary Education Centers (TEC) were set up inside and outside camps, and offered the Syrian curriculum taught in Arabic. Differences in curriculum and language of instruction made it difficult to integrate students into regular public schools. In Myanmar, because refugees were unable to enroll in school without documentation, Migrant Learning Centers were started by refugee teachers to cater to the influx of refugees from western Thailand; however, as informal learning centers they were resource constrained and lacked accreditation,[23] again creating challenges for smooth integration into the formal education system.

18 Bataineh and Montalbano. 2018. *The impact of the Syrian crisis on the quality of education in Jordan: a quantitative and qualitative assessment.*

19 Crul, Maurice, Frans Lelie, Ozge Biner, Nihad Bunar, Elif Keskiner, Ifigenia Kokkali, Jens Schneider and Maha Shuayb. 2019. *How the different policies and school systems affect the inclusion of Syrian refugee children in Sweden, Germany, Greece, Lebanon and Turkey.* Comparative Migration Studies. 7:10.

20 Crul, Maurice, Frans Lelie, Ozge Biner, Nihad Bunar, Elif Keskiner, Ifigenia Kokkali, Jens Schneider and Maha Shuayb. 2019. *How the different policies and school systems affect the inclusion of Syrian refugee children in Sweden, Germany, Greece, Lebanon and Turkey.* Comparative Migration Studies. 7:10.

21 UNICEF. 2019. *Beyond survival: Rohingya refugee children in Bangladesh want to learn.*

22 Duale, Mohamed, Ochan Leomoi, Abdullahi Aden, Okello Oyat, Arte Dagane and Abdikadir Abikar. 2019. *Teachers in displacement: Learning from Dadaab.* Forced Migration Review. 60: 56-58.

23 Purkey, Mary, and Megan Irving. 2019. *The importance of access and accreditation: learning from the Thailand-Myanmar border.* Forced Migration Review. 60: 68-71.

While Syrian refugee children make up approximately 40 percent of all school-age children in Lebanon, the majority of them attend second-shift schools. These afternoon classes are held between 14:00 and 18:30 and are made up almost exclusively of Syrian children.[24] There are concerns about the quality of education and accreditation provided. Research shows that some Syrian parents who were unable to enroll their children in the morning shifts chose not to enroll them in the afternoon shifts.[25] In Greece, refugee students living in urban areas are integrated into public schools with the support of morning reception classes, while those living in refugee centers attend afternoon classes in nearby public schools. Simopoulos and Alexandridis (2019) finds that refugee students who were segregated through afternoon classes had poorer learning outcomes, faced more stigmatization and had poorer development of language skills as a result of less interaction with Greek students.[26]

Provision of public education can be supported by non-formal and informal education programmes. Non-formal education programmes take place both within and outside educational institutions and may, but do not always lead to certification. They include vocational and technical programmes as well as skills training for the labor market. Informal education refers to education activities that include literacy, numeracy, life skills and recreational activities, but are not certifiable by a Ministry of Education and are not bound to an age or target group.[27] Refugee-specific programmes are primarily operated by NGOs and international organizations, and can support the provision of public education, for example through language support, basic numeracy and literacy and community-based education. They can also support public education through Accelerated Education Programmes (AEPs), which are often accredited and have links to the formal system. They can help support out-of-school children, provide a substitute for formal education where spaces are limited or costs areprohibitive, and provide essential support to help refugee students cope with trauma. However, the limitation of informal programmes is that they are not regulated or accredited, and do not provide a clear pathway to formal education. The World Bank recognizes the importance of non-formal education in reaching all students with quality education and for lifelong learning, but calls for these programmes to be upgraded, certified and licensed.[28] UNHCR strongly discourages investment in informal education where it acts as a substitute for formal education and does not lead to further accredited learning.[29] Lack of educational certification and documentation are key barriers to refugee participation in secondary and higher education.

24 Crul, Maurice, Frans Lelie, Ozge Biner, Nihad Bunar, Elif Keskiner, Ifigenia Kokkali, Jens Schneider and Maha Shuayb. 2019. *How the different policies and school systems affect the inclusion of Syrian refugee children in Sweden, Germany, Greece, Lebanon and Turkey.* Comparative Migration Studies. 7:10.

25 Crul, Maurice, Frans Lelie, Ozge Biner, Nihad Bunar, Elif Keskiner, Ifigenia Kokkali, Jens Schneider and Maha Shuayb. 2019. *How the different policies and school systems affect the inclusion of Syrian refugee children in Sweden, Germany, Greece, Lebanon and Turkey.* Comparative Migration Studies. 7:10.

26 Simopoulos, Giorgos, and Antonios Alexandridis. 2019. *Refugee education in Greece: integration or segregation?* Forced Migration Review. 60: 27-29.

27 UNHCR. 2015. *Out-of-school children in refugee settings*. Education: Issue Brief 2. Geneva: UNHCR.

28 World Bank. 2011. *World Bank Group Education Strategy 2020 – Learning for all: Investing in people's knowledge and skills to promote development.* Washington, D.C: World Bank.

29 UNHCR. 2019. *Refugee Education 2030: A Strategy for Refugee Inclusion.*

Building National Inclusive Education Systems

With the help of the international community, governments are moving towards inclusive, integrated education systems. The degree to which refugees are integrated into national education systems varies widely by country. In 2016, the Rwandan government committed to integrating 50 percent of refugees at primary school level and all refugees at secondary school level into national systems within a year. In 2018, it reported having met 83.4 percent of its original target.[30] In Jordan, 95 percent of Syrian refugees are enrolled in public schools, 4 percent in private schools and 1 percent in schools operated by the United Nations Relief and Works Agency for Palestine Refugees (UNRWA).[31] Of the refugee students attending schools outside the camps, 71 percent are enrolled in double shift schools, with two-thirds of them attending the afternoon shift. The Turkish government is working towards an integrated education system with the goal of moving all Syrian children into Turkish-medium schools by 2020.[32] To this end, refugee children enrolling in the first, fifth or ninth grade (entry into primary, lower secondary and secondary) are enrolled directly in regular Turkish public schools. TECs established in the early response to the Syrian crisis, are now being converted to official Turkish public schools where education is either free or subsidized. The Turkish government also introduced a Turkish language programme in TECs that has enabled the transition of students into regular public schools. In 2006, the Myanmar government extended access to public schools for all children, irrespective of their legal status.[33] Lebanese regulations stipulate that its national curriculum be taught to Syrian children exactly as it is to Lebanese. UNRWA schools have used host country curricula for many years to ensure that refugee students can transition into national secondary schools and universities and sit national examinations.[34] In 2018, the Chad government declared 108 schools in refugee camps to be public schools, which can now be accessed by refugees and local students.[35] Ecuador passed legislation to improve school participation for Venezuelan refugee children who do not have the required documentation.[36] All of these examples point towards increased momentum in the development of inclusive education systems in host countries.

30 UNHCR. 2018. *Two year progress assessment of the CRRF approach: September 2016 – September 2018.* Geneva: UNHCR.

31 Tiltnes, Åge A., Huafeng Zhang and Jon Pedersen. 2019. *The living conditions of Syrian refugees in Jordan: Results from the 2017-2018 survey of Syrian refugees inside and outside camps*. Fafo-report 2019:04.

32 Hauber-Özer, Melissa. *Schooling gaps for Syrian refugees in Turkey.* Forced Migration Review. 60: 50-52.

33 Purkey, Mary, and Megan Irving. 2019. *The importance of access and accreditation: learning from the Thailand-Myanmar border.* Forced Migration Review. 60: 68-71.

34 Save the Children, UNHCR and Pearson. 2019. *Promising practices in refugee education – synthesis report.*

35 UNHCR. 2018. *Two year progress assessment of the CRRF approach: September 2016 – September 2018.* Geneva: UNHCR.

36 UNHCR. 2019. *Stepping Up: Refugee Education in Crisis.*

There is a growing consensus that integrating refugees into national education systems is the only way to ensure sustainability and to give refugees proper accreditation for their efforts in education. The large numbers of school-age children in refugee populations who are facing protracted displacement need refugee-inclusive education systems that are cost effective and sustainable in the long-term. Investments in refugee education are often segmented and 'projectized' resulting in inadequate resources that are then inefficiently allocated, where as integrated systems facilitate the identification of refugee education requirements and long-term planning. It further ensures that refugees receive quality educational and that their education qualifications are recognized for transition into post-secondary education and eventually, into the labor market.

Furthermore, integration can lead to service development for underserved local communities in host countries. Over 50 percent of refugees live in urban areas, integrated in the communities hosting them. These are often the poorest and most deprived parts of the host country.[37] Investments in education for refugees can therefore improve the underlying quality of education service delivery in these host communities. For instance, Pakistan's Refugee Affected and Hosting Areas initiative directed funds to underserved host communities and of the 800,000 beneficiaries, 16 percent were Afghan refugee children while the rest were local Pakistanis.[38] Moreover, integrated schools are more likely to receive government support in terms of inputs – parallel school systems are often less frequently monitored for quality, if at all; and receive less support in the form of teacher training and learning materials. Integrated schools are also key to reducing tension between refugee and host communities and developing of social cohesion between local and refugee students over time.

Integration means refugee students receiving education that is "no better, no worse" than host country students. Refugee-inclusive education systems allow governments to cost education investments in the same way for refugees and native students, meaning that improvements in access, in the quality and quantity of teachers, teaching and learning materials and learning environments, are spread across all students. Furthermore, the financial constraints faced by host country systems are applied to local and refugee students uniformly, so that governments, that are already stretched are not expected to commit more resources to refugees than to local systems beyond the initial integration phase. This implies an education financing funding formula based on equal per capita unit costs for local and refugee students. This principle is supported by one of the key result areas in the UNHCR Refugee Education Strategy 2030 to ensure that children and youth have access to all levels of formal and non-formal education within national education systems, under the same conditions as nationals.[39]

Per student costs should be supplemented by refugee education coefficients for specialized education programmes supporting integration into host country systems. In order to ensure that refugee children are prepared to learn and succeed in national education systems, the UNHCR Refugee Education Strategy 2030 outlines that

37 Save the Children, UNHCR and Pearson. 2019. *Promising practices in refugee education – synthesis report.*

38 UNHCR. 2019. *Stepping Up: Refugee Education in Crisis.*

39 UNHCR. 2019. *Refugee Education 2030: A Strategy for Refugee Inclusion.*

children should: be supported to make up for missed schooling in preparation for entering formal education at age-appropriate levels; be provided with adequate language training where necessary; and be provided with conditions that foster social and emotional learning and, where needed, receive mental health and psychosocial support; receive any support required to enable theie access to the education system; and be taught by teachers who have been adequately trained to respond to children with diverse learning requirements.[40]

A. Accelerated education programmes (AEPs): an AEP is a flexible, age-appropriate programme, run in an accelerated timeframe, which aims to provide access to education for disadvantaged, over-age, out-of-school children and youth. This may include those who missed out on or had their education interrupted due to poverty, marginalization, conflict and crisis. The goal of AEPs is to provide learners with equivalent, certified competencies for basic education using effective teaching and learning approaches that match their level of cognitive maturity.[41] UNHCR operates such programmes based on national accelerated education systems in several countries including Ethiopia, Lebanon, Kenya, Syria, South Sudan and Sudan. In Uganda, 23,000 over-age learners who were previously out of school have now transitioned into primary schools through accelerated learning programmes.[42] In Jordan, where students are not allowed to enroll in a grade if they are more than three years older than the cohort age,[43] accelerated learning programmes can help children catch-up and re-enroll.

B. Psychosocial support: many displaced children are likely to have been separated from their families or to have witnessed experiences of danger, violence, significant loss and life-threatening events.[44] Their ability to participate and learn in school may be inhibited by these experiences, but their ability to cope can be improved through regular, specialized psychosocial support. An evaluation of the Better Learning Programme (funded by the Norwegian Refugee Council), which integrates psychosocial support with classroom instruction found a reduction in nightmares, distressing emotions and physical illness, an increase in interest in attending school and completing homework, and an increased sense of safety.[45] These results hold true in Afghanistan and Palestine.[46]

C. Language support: where language courses are offered, it is usually in refugee camps or through introduction/submersion classes rather than in the framework

40 UNHCR. 2019. *Refugee Education 2030: A Strategy for Refugee Inclusion.*

41 UNHCR. 2017. *Guide to the Acceleration Education Principles.*

42 UNHCR. 2019. *Stepping Up: Refugee Education in Crisis.*

43 Tiltnes, Åge A., Huafeng Zhang and Jon Pedersen. 2019. *The living conditions of Syrian refugees in Jordan: Results from the 2017-2018 survey of Syrian refugees inside and outside camps*. Fafo-report 2019:04.

44 INEE. 2016. *Psychosocial support and social and emotional learning for children and youth in emergency settings.*

45 McEvoy, Bethan. 2019. *Feeling safe enough to learn in a conflict zone.* Forced Migration Review. 60: 5-7.

46 Shah, Ritesh. 2017. *Improving children's wellbeing: an evaluation of NRC's Better Learning Programme in Palestine.*

of formal education. This generally falls within the remit of NGOs and international organizations. Even in Lebanon, where the primary language of instruction is Arabic, core subjects like Mathematics and Science are taught in either English or French. In Uganda, the refugee population is largely from South Sudan, Burundi, DRC and Rwanda. Apart from those refugees from South Sudan, these refugee students are francophone and struggle to integrate into the host country's systems. The Uganda Refugee Response Plan 2019-2020 recognizes the essential need to support mother-tongue literacy, language-bridging courses, community involvement in schools and the engagement of bi-lingual teaching assistants in classrooms in order to deliver education in these multi-linguistic settings.[47] The Turkish government has implemented a Turkish-language programme to prepare refugee children for the transition from unofficial TECs to public schools.

D. Conditional cash transfers: refugee children are more likely to be out of school as a result of pressures to work and contribute to family incomes. UNHCR and Save the Children found that in 2013 almost half of all refugee children in Jordan were working.[48] Further, the cost of transportation, school materials and uniforms can be prohibitive for many families. While these demand-side constraints are not particular to refugee children, they are exacerbated in communities where refugees are not allowed to enter formal employment and poverty levels are high. In such settings, cash transfers to families that are conditional on school attendance can help lessen the high opportunity cost of education. In Turkey, the Conditional Cash Transfer for Education programme showed increased school attendance of Syrian and other refugee children.

E. Teacher training for refugee inclusiveness: teachers in host communities face unprecedented challenges in delivering of quality education, being faced with overcrowded classrooms, overage children and refugee children suffering from psychological trauma or physical disability, a situation that is exacerbated by limited teaching resources, monitoring and leadership. It is crucial that they be able to foster a safe and inclusive environment that is conducive to learning. Moreover, they have to be trained on sensitizing local students to the needs of refugee students to prevent stigmatization and bullying and improve social cohesion. These skills have to be developed through continuous professional support. Furthermore, teachers within refugee communities can be upskilled, certified and integrated into formal education to overcome the shortage of teachers in many host countries. The Teachers in Crisis Contexts Group is working towards the development of continuous teacher support models and the provision of inter-agency, open source solutions. The summary report on Promising Practices in Refugee Education summarizes existing projects that support teachers to help ensure quality education service delivery.[49]

47 UNHCR. 2019. *Uganda Country Refugee Response Plan 2019 – 2020*. Nairobi: UNHCR.

48 Save the Children. 2018. *Time to act: a costed plan to deliver quality education to every last refugee child.*

49 Save the Children, UNHCR and Pearson. 2019. *Promising practices in refugee education – synthesis report.*

Existing Efforts to Estimate the Cost of Refugee Education

While few countries explicitly include refugee coefficients in unit cost funding formulas, several countries include an equity markup based on characteristics that apply to refugee student populations. In Lithuania, schools receive an additional 20 percent for each national minority student and an additional 30 percent for each immigrant student in their first year.[50] In Zurich, schools are eligible to receive an additional CHF40,000 (a little over US$40,000) each year for language support, parental engagement in pre-school and writing skills at all levels. In the UK, approximately 18 percent of total school funding is based on deprivation (measured by the proportion of students whose parents receive tax credits), the proportion of students with low attainment in national assessments and the proportion of students for whom English is a second language.[51]

Methodologies and resulting estimates for refugee education funding requirements vary, and existing analysis fails to provide country-specific estimates. The Education for All (EFA) Global Education Monitoring (GEM) Report 2015 estimates the annual cost of achieving universal pre-primary, primary and secondary education in 82 LICs and LMICs by 2030 is US$340 billion. The annual funding gap after domestic financing is estimated at US$39 billion. The EFA-GEM analysis provides estimates of unit costs by level of education where pre-primary, primary, lower secondary and upper secondary unit costs are US$854, US$403, US$536 and US$675, respectively.[52] The methodology accounts for enrollment projections and includes coefficients for quality (pupil-teacher ratios, teacher salaries and non-salary recurrent expenditure, etc.) and equity (for marginalized children living on less than US$2/day). The markup on per students costs to include marginalized children was assumed to be 20 percent, 30 percent and 40 percent for pre-primary/primary, lower secondary and upper secondary, respectively.[53] While the EFA-GEM report does not specifically estimate costs for refugee education, it provides estimates for LICs and LMICs with large concentrations of refugee children.

50 Global Education Monitoring Report. 2019. *Migration, displacement and education: building bridges, not walls.* Paris: UNESCO.

51 Global Education Monitoring Report. 2019. *Migration, displacement and education: building bridges, not walls.* Paris: UNESCO.

52 Education for All Global Monitoring Report. 2015. *Pricing the right to education: the cost of reaching new targets by 2030.* Policy paper 18. Paris: UNESCO.

53 Wils, Annababette. 2015. *Reaching education targets in low and lower middle income countries: cost and finance gaps to 2030.*

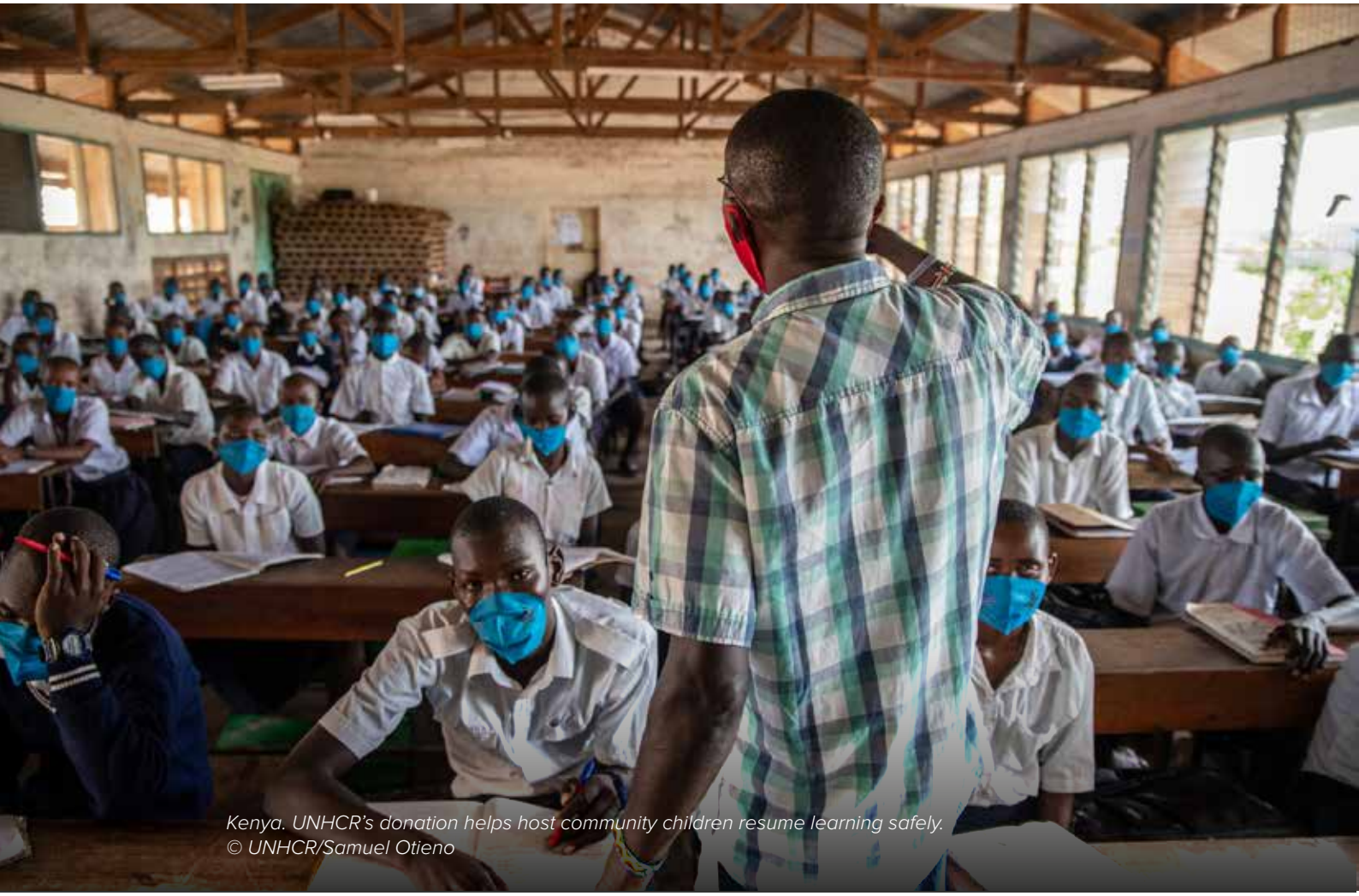
In an analysis of the costs of education in emergencies, the Overseas Development Institute (ODI) estimated the annual funding required to educate children in 35 conflict-affected and fragile countries. The ODI report finds that the annual funding requirement to support 75 million children aged 3-18 years was US$11.6 billion, of which US$8.5 billion represented the funding gap after any host country expenditure. The average unit cost per year was estimated at US$156, of which US$113 represents the financing gap.[54] Based on this paper, the Education Cannot Wait (ECW) resource mobilization targets assume an annual unit cost of US$202.[55] Annual unit costs at primary, lower secondary and upper secondary are estimated at US$150, US$162.5 and US$175, respectively, far lower than those in the EFA-GEM 2015 report. While the ODI report adopts crises coefficients from the EFA-GEM 2015 analysis, the unit costs are not country-specific but are estimated for three geographical contexts (Asia, Africa and Latin America) and are uniform for all countries within each region. Unit costs are determined by four main cost drivers: learning space (estimated as the cost of temporary shelter construction, assumed to be the same for all countries); teacher stipends (estimated as 50 percent of the average teacher salaries, differentiated at the regional level); teacher training (estimated as 50 percent of reported costs, uniformly applied to all countries); and classroom supplies (uniform per student cost applied for all countries). The unit costs thus estimated are the same for children of all ages and at all levels of education before the crisis premiums are added. While this methodology allows for future efforts to vary cost drivers, it does not take in to consideration existing large variations in unit cost across countries and levels of education, nor do its results provide sufficient granularity in unit costs by country. Furthermore, the ODI report acknowledges that the variability of costs in different crisis-affected countries results in a range for the total annual funding estimate of between US$4 billion and US$14 billion. These large error margins reduce the effectiveness of these estimates.

A recent report by Save the Children estimates that the total cost of delivering education to 7.5 million refugee children over the next five years is US$21.5 billion, of which US$11.9 billion will need to be financed externally.[56] This implies an annual cost of US$4.3 billion and an annual funding gap of US$2.4 billion. The average unit cost per child is estimated at US$575, of which US$320 is to be contributed by the international community. Primary and secondary education annual unit costs for low income countries are adopted from the ODI analysis, with the same underlying limitations of uniformity across countries and levels of education as described above. To these unit costs, a crisis premium of 20 percent was added for pre-primary, for all five years based on the coefficient in the EFA-GEM 2015 report. An additional 20 percent was added to the pre-primary unit cost only in the first year to support education provision that was previously lacking. Given that the ODI estimates already include crisis coefficients, this methodology results in an overestimate of unit costs. For MICs, unit costs from the UNESCO Institute of Statistics (UIS) database were used. Where data was unavailable, average unit costs for LMICs and upper-middle income countries (UMICs) were used. Unit costs in the UIS

54 ODI. 2016. *A common platform for education in emergencies and protracted crises – evidence paper.*

55 Global Education Monitoring Report. 2019. *Migration, displacement and education: building bridges, not walls.* Paris: UNESCO.

56 Save the Children. 2018. *Time to act: a costed plan to deliver quality education to every last refugee child.*



Kenya. UNHCR's donation helps host community children resume learning safely.
© UNHCR/Samuel Otieno

database were computed as total public expenditure divided by total enrollment – as a result, these costs underestimate the unit cost of public education delivery where private school enrollment is high. Crisis premiums of 20 percent and 35 percent[57] were added for all five years for primary and secondary unit costs. Additional out-of-school premiums of the same values were added for the first year only to reach marginalized children. The costing methodology takes into account all refugee children in LICs, LMICs and UMICs. However, it cautions against disaggregating figures by host country, suggesting that estimating costs for each country would require accurate data on the number of school-age refugees in each country, number of out-of-school refugees, the cost of delivering quality education in each country and the host governments' commitments to provide domestic financing.

57 Since UNHCR combines demographic data for lower and upper secondary, the average of the equity coefficients from the EFA GMR 2015 report was used for each level (30 and 40 per cent respectively).

TABLE 1:
Summary of existing global education costing estimates

	EFA Global Education Monitoring Report 2015	ODI Evidence Paper 2016	Save the Children Report 2018
Scope	82 low and lower-middle income countries	35 countries affected by crisis (75 million children)	All countries with school-age refugees (7.5 million children)
Annual cost	US$340 billion	US$11.6 billion	US$4.3 billion
Annual funding gap	US$39 billion	US$8.5 billion	US$2.4 billion
Average annual unit cost		US$156	US$575
Annual unit costs			
Pre-primary	US$854		US$232 (LICs) US$571 (LMICs)
Primary	US$403	US$150	US$575
Lower secondary	US$536	US$162.50	
Upper secondary	US$675	US$175	
	Coefficient for inclusion of marginalized children	*Coefficients adopted from EFA GMR 2015*	*Coefficients adopted from EFA GMR 2015*
Equity costing	Pre-primary/Primary – 20% Lower secondary – 30% Upper secondary – 40%	Pre-primary/Primary – 20% Lower secondary – 30% Upper secondary – 40%	*Crisis premiums* Pre-primary/Primary – 20% Secondary – 35% *Support to ECE previously lacking – first year only* Pre-primary – 20% *Out-of-school premiums – first year only* Pre-primary/Primary – 20% Secondary – 35%

Current Costing Methodology

This paper estimates the cost of education for refugees aged 5-17 years in their current host country, with specific focus on LICs, LMICs and UMICs with 7000 or more refugees.[58] The key premise is that refugee education is embedded into the host country education system, facing the same cost drivers, and efficiency and quality constraints. The costing is thus based on the existing unit costs of education in the host country computed as public expenditure on education divided by public enrollment, with additional coefficients for specialized refugee education programmes.

The formula begins with the annual unit cost for a student at a particular level of education (or per student or average fiscal cost). The unit costs are calculated based on data obtained from the UIS database on initial public expenditure by level of education divided by total public enrollment at that level of education. Public expenditure includes both current and capital costs, as well as spending at all levels of government.[59] This per student data applies to students in national systems and the estimates incorporate spending at all levels of government (local, regional, and central) as well as across all types of spending (current and capital); in other words, the per student amount is comprehensive. Unit costs are then inflation-adjusted for each year.

The costing formula is also cognizant of the importance of early childhood education (ECE) for long-term education outcomes and the historically inadequate levels of public expenditure in the area. As such, the model includes one year of ECE and the unit costs for kindergarten are not based on existing public expenditure but on primary-level unit costs, with a 30 percent increase for specialized ECE requirements. This ECE coefficient is based on the difference between global average annual public expenditure per pupil at the pre-primary and primary levels.[60]

Given that refugees have special educational requirements including psychosocial support, support in the language of instruction, introduction/bridging courses and so on, a percentage increase or refugee coefficient is added to the unit cost of education. These coefficients are based on the estimates

58 In this analysis, unless specified otherwise, 'refugees' refers to asylum seekers, refugees and Venezuelans displaced abroad, who are registered with the UNHCR.

59 For host countries where public unit cost data was not reported (marked ± in Annex 2), unit cost has been estimated based on government expenditure by level of education as a percentage of GDP per capita. This data is obtained from the UNESCO UIS database or, if unavailable, from the World Bank Development Indicators database.

60 Wils (2015) reports annual public expenditure per pupil (weighted average) for all countries as US$258 at preschool and US$195 for primary education in 2012.

used in the EFA-GEM 2015 report to include marginalized students, which are 20 percent for pre-primary and primary education, 30 percent for lower secondary education and 40 percent for upper secondary education. This report uses an average of 35 percent as the refugee coefficient for secondary education, since demographic data on refugees is not divided into lower and upper secondary age groups. Thus, the unit cost for refugee education each year is (1 + refugee coefficient) x unit cost of education at a particular level in a particular host country. Analysis of unit cost differences between local and refugee students in Uganda[61] provides confidence in these estimates. While refugee education coefficients result in a higher per student cost for refugees than for local students, this is seen not as an additional investment in refugees over native students, but rather as a means of redressing the initial gap between refugees and local students and 'leveling the playing field' as they enter national education systems.

This methodology takes into account the flow of students through thirteen years of education, including one year of pre-primary education, six years of primary education and six years of secondary education. Given that the number of primary school-age refugee children is greater than secondary school-age refugee children in almost two-thirds of LICs and LMICs, existing methodologies that do not take into consideration projected increases in secondary school enrollment will underestimate the financing envelope required.

Taking into account the cohort structure of the refugee school-age population means that for a child aged five years the model accounts for thirteen years of the full education cycle compared to a child aged 17 years for whom the model accounts for one year of secondary education. While the ODI and Save the Children reports also estimate costs for the existing population of children, this methodology goes further by modeling how these children transition from primary to secondary and then out of secondary. The model makes no assumptions regarding the influx of new refugee students or the level of access to education for refugee children, but instead costs only the education requirements for the existing population of refugee children in each host country.

Based on student flows, the model then calculates the number of students in each year at each level of education and multiplies this by the unit cost of refugee education. It then calculates the total over thirteen years of education until the youngest cohort of refugee students would transition out of secondary education. This figure is then aggregated across all host countries to derive the total envelope required. This allows us to estimate the annual funding required to provide K-12 years of education for the existing cohort of refugee children in the years leading up to 2030, when the Sustainable Development Goal (SDG) 4 target of universal primary and secondary completion is to be achieved.

61 Ministry of Education and Sports. 2018. *Education Response Plan for Refugees and Host Communities in Uganda.*

Box 1: Summary of refugee education costing methodology

Unit costs by country

- Unit costs for primary and secondary education are calculated as total government expenditure (including current and capital costs) at each level of education divided by the total public enrollment at that level of education. These data are obtained from the UIS database. The data used is publicly available to ensure the transparency of estimates.
- Unit costs for pre-primary education is calculated as *(1 + ECE coefficient) x unit cost for primary education*. The ECE coefficient is assumed to be 30 percent in this analysis.
- Unit cost for refugee education each year is *(1 + refugee coefficient) x unit cost of education* by level of education. The refugee coefficients are assumed to be 20 percent at pre-primary and primary education and 35 percent at secondary education.
- Unit costs are then inflation-adjusted to estimate costs over the K-12 education cycle.

Refugee numbers

- Refugee numbers include refugees, asylum seekers and Venezuelans displaced abroad, who are registered with UNHCR.
- Refugee children aged 5-11 years are assumed to be uniformly distributed across one year of pre-primary education and six years of primary education. Those aged 12-17 years are assumed to be uniformly distributed across six years of secondary education.
- Annual enrollment at each level of education accounts for student flows from one grade to the next with a share of secondary school-aged refugee children transitioning out each year.

Estimating annual and total financing envelope

- Annual costs are estimated as *unit cost of refugee education x annual enrollment* by level of education.
- Annual costs are summed over the K-12 years of education to derive the total financing envelope for the existing cohort of refugee students.
- The cohort-average annual cost is calculated as the total financing envelope divided by thirteen covering the K-12 years of education.

Caveats and limitations

- Where data on total government expenditure and public enrollment are not reported in the UIS database, they are estimated as government expenditure by level of education as a share of gross domestic product (GDP) per capita multiplied by GDP per capita. Where this additional data is unavailable, regional averages or data from Public Expenditure Reviews are used.

- Estimates are based on nominal US dollar exchange rates rather than purchasing power parity (PPP) exchange rates and as such are not intended for cross-country comparisons. The same financing envelope might not equate to the same education investments in different countries for various reasons including relative exchange rates, policies, and institutions.
- Refugee coefficients may differ by country based on the specific needs and costs of refugee education programmes. These should be estimated based on costing for national inclusive education.
- Refugee numbers are based on those registered with UNHCR and might differ from host country estimates.
- The model assumes targets of universal access to pre-primary, primary and secondary for refugee children, but this may not hold true for host populations.
- Estimates provide a snapshot of the cost for the existing population of refugee children and assume no births, new influx or resettlement.

The funding formula builds on existing methodologies that use per student costing as the base value for estimating financing requirements for refugee education, as in Wils (2015), ODI (2016) and Save the Children (2018). It uses existing data on public expenditure to estimate unit costs, accounting for large variations across countries and levels of education. It further adopts the coefficients for inclusion of marginalized children from the EFA-GEM 2015 report as the coefficients for refugee education and adjusts unit costs for inflation. Like existing costing work, it estimates the cost for the current stock of refugee children; but goes a step further to calculate annual enrollment accounting for student flows. This paper adds to the existing evidence on refugee education financing by not only providing a global estimate but also estimating the cost for each host country at pre-primary, primary and secondary education level. In the absence of national inclusive education planning in all host countries that could promote consistent and adequate funding, this disaggregation is particularly useful for host countries and education partners in long term planning and public financial management. It also provides estimates of the unit cost of refugee education at each level for each country, allowing host country governments to quickly estimate financing gaps for new refugee influx. This can lead to improvements in the responsiveness of planning for inclusive education systems. This report is accompanied by a dashboard where host countries can review summaries of country-specific refugee numbers, unit costs, cohort-average annual costs and total costs by level of education.

This report uses a per capita costing approach that has the advantage of providing a simplified, transparent approximation of global and national funding requirements for refugee education. It is based on the delivery costs of national systems and uses existing data (and in some cases, proxy information) in the absence of complete datasets. Improved reporting on public expenditure and enrollment by host countries would increase the accuracy of these estimates. The model further uses uniform refugee coefficients for all countries. Over time, these areas can be strengthened based on national inclusive education planning and using a detailed cost approach for better approximations of refugee coefficients in each country. Finally, average unit costs can mask regional disparities and the need for regional responses within each host country, because refugee populations are often concentrated in certain areas. This increases the need to develop country-specific refugee education response plans, with clear targeting and prioritization of activities.

Cost estimates are likely to increase with the addition of a COVID-19 coefficient or cost mark-up. The pandemic has led to mass school closures around the globe with (unequal) adoption of remote education delivery. The cost of digitized remote education provision may be marginal in some countries and substantial in others, especially in low-income countries and fragile and conflict settings that do not have digital infrastructure in place. Teachers have to be trained to facilitate remote learning, deliver remedial education when schools reopen, and provide mental health and psychosocial support (MHPSS). More teachers may have to be recruited or existing teachers compensated for increased class time. Investments may be required to adjust the scope of curricula to focus on core learning and critical areas of learning loss. School sanitation facilities will have to be upgraded so all students have at least minimum access to water and handwashing facilities when they return to school. More children will be at risk of dropping out and demand-side constraints for poor children may have to be addressed through cash or in-kind transfers. It is estimated that the financing gap to meet SDG4 will increase by up to a third as a result of the pandemic.[62] On the other hand, shrinking fiscal space, reduced allocations to the education sector (in absolute terms and/or education's share of public expenditure), and the risk of reduced official development assistance, may lead to education expenditure remaining constant or even falling. The 2020 GEM Report shows that education expenditure as a share of budget or GDP remained fairly constant in the years following the 2008 financial crisis, but the absolute levels of GDP fell resulting in lower education expenditure.[63] Now more than ever, investments in education have to be safeguarded, and additional resources mobilized to finance the interventions required to prevent the erosion of gains made in access to schooling and learning and the further marginalization of vulnerable groups, including refugee children. Support to governments should include capacity building in education sector planning to reduce inefficiencies in public expenditure so limited funding can be stretched as far as possible. There is limited data available on how education expenditure is being reallocated in response to the pandemic, and as such this report provides a pre-COVID-19 baseline of the cost of educating all refugee children. Future iterations of this

62 UN. 2020. Policy Brief: Education during COVID-19 and beyond.

63 World Education Blog. 2020. What are the financial implications of the coronavirus for education? Available at: https://gemreportunesco.wordpress.com/2020/03/24/what-are-the-financial-implications-of-the-coronavirus-for-education/. Accessed on September 30, 2020.

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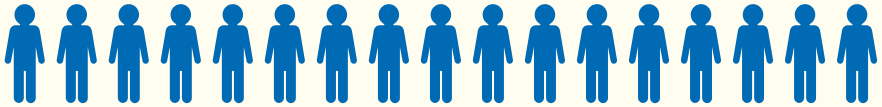
work could include an additional mark-up to respond to COVID-19 education interventions once more data are available on the associated costs.

While this report focuses on estimating the cost of access to education for refugee children, the importance of improving the quality of education cannot be ignored. Even though many countries have significantly raised educational investments, the world is facing a learning crisis.[64] There are large variations by countries – in low-income countries, the share of learning-poor children is 78 percent of children are in learning poverty compared to 11 percent in high-income countries. Learning gains made in the last few years are at risk of being eroded due to the intermittent school closures since the onset of the COVID-19 pandemic. Without, remedial action and a larger focus on foundational learning, the goal of reducing learning poverty by at least half by 2030 is unlikely to be met. This report acknowledges that improving learning outcomes goes beyond the provision of financial resources, and improving access is not sufficient to improve learning. Learning poverty needs to be eliminated in host country populations and refugee children alike, but that process is part of a larger exercise beyond the scope of this analysis.

64 World Bank. 2019. *A learning revolution to eradicate learning poverty.*

Box 2: Spotlight on Uganda's Education Response Plan for Refugees and Host Communities



With over 1.4 million refugees at the end of 2019, Uganda is the fourth largest host country for refugees worldwide. It is also the only low-income country among the five countries hosting the largest refugee populations.

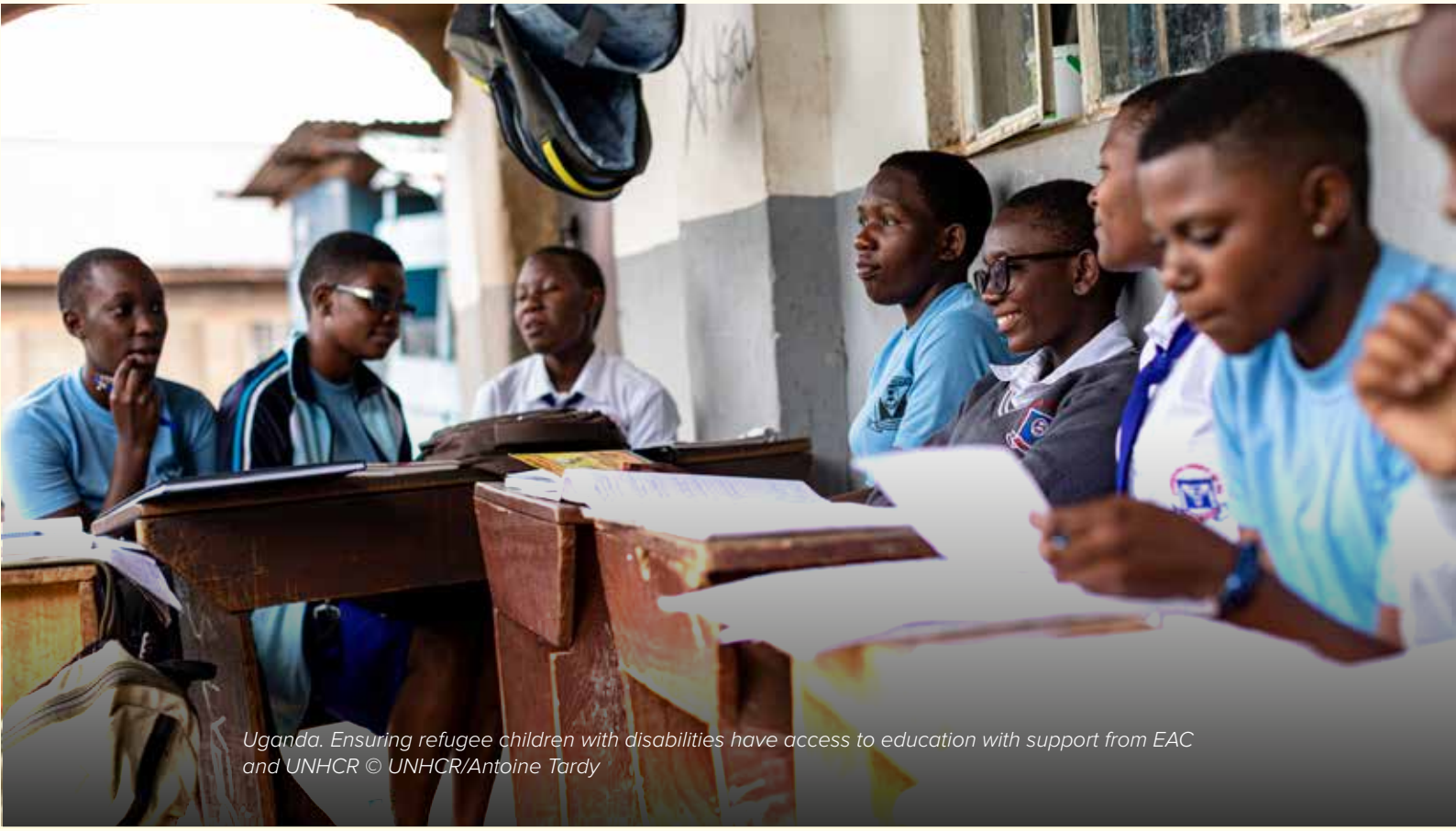
Of these refugees, over half a million are of primary and secondary school age. This influx has put considerable strain on the delivery of education services in communities that are already severely under-resourced. Despite these challenges, Uganda is serving as a model example in the international community by developing inclusive national education systems supported by a rich policy environment. The Comprehensive Refugee Response Framework for Uganda was launched in May 2017 against the background of the Refugee Act 2006 and the Refugee Regulations 2010 which give refugees access to the same public services as nationals. The Education Response Plan for Refugees and Host Communities (ERP) provides the framework for the delivery of improved education services in response to the humanitarian and developmental crisis in Uganda.

The Plan targets 34 refugee hosting sub-counties; refugeeing which the school-age population is over 25 percent larger than the school-age host community population. Education outcomes for these sub-counties are already low with gross enrollment ratios of 19 percent, 121 percent and 18 percent at the Early Childhood Development (ECD), primary and secondary education levels; for refugees in these sub-counties, these figures are 38 percent, 58 percent and 11 percent respectively. Pupil classroom ratios exceed 150 on average across all education levels in host communities. In several public primary schools neighboring settlements, refugee children outnumber those from the host communities. This calls for an integrated approach to improve education services for refugee and host community children alike.

Uganda's response is impeded by inconsistent and inadequate funding, which does not allow for long-term planning and funds only 40 percent of identified needs. The ERP mitigates these hurdles by providing a framework that covers a 3½ year period with identified target populations, priority interventions and costed implementation plans. It targets an average of 676,000 refugee and host community learners per year at an estimated cost of US$395 million. It encompasses all education programmes including ECD, primary, secondary, accelerated education, life skills training and vocational skills training. The costing model is based on targets for each intervention and its associated unit costs. The key interventions include infrastructure development, materials development and procurement, teacher salaries and training, child training, and systems strengthening at the community, district and national levels.

The estimated cost of reaching an average of 641,000 students annually in ECD, primary and secondary education with improved education services over 3½ years in the ERP is US$287 million. This implies an imputed annual unit cost per student of US$128. While the costing methodologies and target populations differ between Uganda's ERP and this analysis, the estimated unit cost per refugee student in this paper is US$121 which is only 5 percent less than the ERP estimate.

Source: Ministry of Education and Sports. 2018. *Education Response Plan for Refugees and Host Communities in Uganda.*



Uganda. Ensuring refugee children with disabilities have access to education with support from EAC and UNHCR © UNHCR/Antoine Tardy

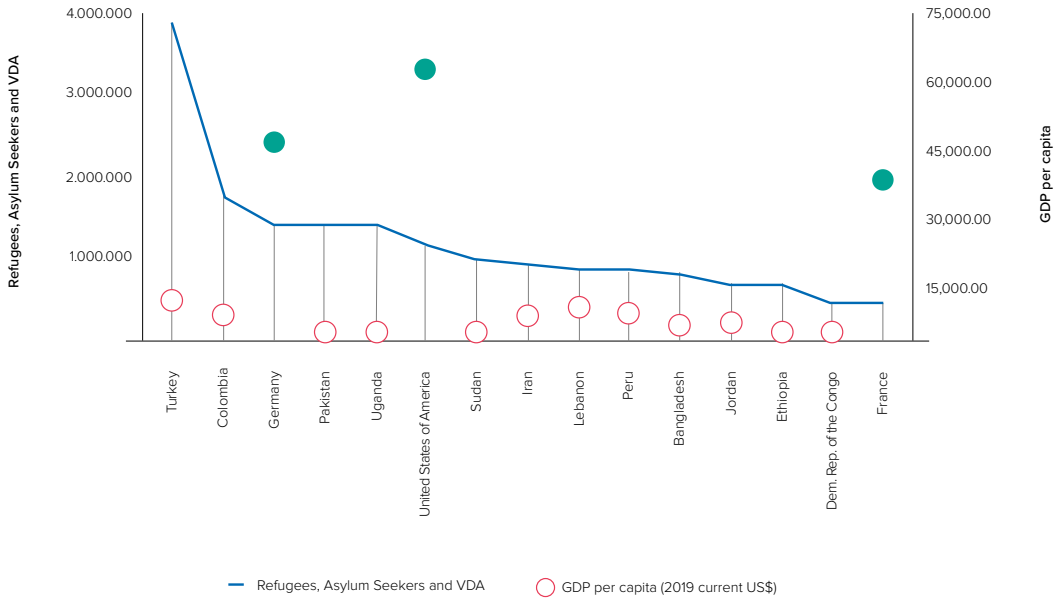
Uganda's commendable efforts to develop an inclusive national education system marks a paradigm shift from a humanitarian to a developmental approach to tackling the education crisis. It ensures that the education needs of refugees are captured in national systems, can be planned for in a sustainable and cost-effective manner, and supported through a joint approach by government and education partners alike.

Summary of Findings

At the end of 2019, there were about 26 million refugees worldwide, with 20.4 million refugees under the UNHCR mandate and 5.6 million Palestinian refugees under UNRWA's mandate. There are an additional 3.6 million Venezuelans displaced abroad (VDA). This paper estimates the cost of refugee education in all LICs, LMICs and UMICs that have 7,000 or more refugees registered with UNHCR.[65] Given that the refugee population is concentrated in a few countries, or the distribution is highly positively skewed, this methodology accounts for almost 80 percent of all refugees and nearly 100 percent of refugees in LICs, LMICs and UMICs. The scope of this study includes 65 countries with a total 17 million refugees, 2 million asylum seekers and 3 million VDA, of whom over 7 million or 32 percent are of primary or secondary-school age.

Developing countries feature disproportionately in the top 15 refugee host countries. The top 15 developing host countries account for 65 percent of all refugees, asylum seekers and VDA worldwide. Amongst the developing countries, Turkey is the largest host country, with 3.9 million refugees and asylum seekers, followed by Colombia and Pakistan. These countries are in close proximity to countries facing emergencies and protracted crises including Syria, Venezuela and Afghanistan, respectively.

FIGURE 1. Refugee population by GDP per capita for top 15 refugee hosting countries



65 The median number of refugees, asylum seekers and Venezuelans displaced abroad in all host countries is a little over 9,000 people.

TABLE 2:
Sensitivity analysis of the model

No.	Base model assumption	Scenario assumption	Average annual cost (US$ billions)
1.	Unit cost of education remains fixed over time	Unit cost of education for LICs increases based on historical trends[66]	4.90
2.		Unit cost of education for LICs and LMICs increases based on historical trends	5.11
3.	Refugee coefficient: Pre-primary/ primary – 0.2 Secondary – 0.35	Lower bound refugee coefficient for all levels of education: 0.2	4.44
4.		Upper bound refugee coefficient for all levels of education: 0.35	4.99

TABLE 3:
Total cost for refugee children to complete K-12 education cycle by country income category

Income Category	Number of school-age refugees	Total base cost (US$ billions)	Total refugee mark-up (US$ billions)	Total cost (US$ billions)	Share of school-age refugees	Share of total cost
Low income	1,861,337	1.71	0.55	2.26	26	3.6
Lower-middle income	1,887,390	7.94	2.65	10.59	27	16.8
Upper-middle income	3,288,842	38.51	11.68	50.19	47	79.6
Total	7,037,568	48.16	14.89	63.05	100	100

66 Where historical trends are not available or the annual growth rate is zero or negative, the average annual growth rate of the income group is used.

The cohort-average annual cost of providing K-12 years of education to all refugee students in LICs, LMICs and UMICs that host refugees lies between US$4.44 billion and US$5.11 billion. The base model estimates the total financing envelope at US$63 billion in order for the current population of refugee children to complete the K-12 cycle, at an average annual cost of US$4.85 billion. An additional US$443 million is the estimated annual cost for delivering education to refugee children under the UNRWA mandate.[67] Table 2 shows variations in the estimate based on changes in the assumptions of the model. In the first two scenarios, the unit costs increase annually based on historical trends. This fixed unit cost assumption is relaxed for LICs and LMICs as unit costs are far lower than UMICs. Allowing unit costs to increase takes into consideration countries' need to increase investment in education in order to make progress in reducing learning poverty. In scenario 3, the lower bound for the refugee education coefficient is assumed for all levels of education; in scenario 4, the upper bound is assumed for all levels of education.

Prioritization of investments in LICs and LMICs will ensure that over half of all school-age refugee children are reached. While LICs and LMICs account for half of school-age refugees, their share of the financing envelope is only 20 percent (see Table 3). This is also reflective of global education expenditure trends where 65 percent of global education expenditure is spent in high income countries compared to only 0.5 percent in LICs even though they have roughly the same number of children.[68] Given the higher unit cost of education in UMICs, the share of financing required in these countries is also higher.

The average unit cost for refugee education varies by income-categorization and level of education. The average unit cost for refugee education is US$1,051. In LICs, LMICs and UMICs, this figure is US$171, US$663 and US$2,085 respectively. The unit cost for refugee students in UMICs is almost 12 times higher on average than that for LICs and 3 times higher than that for LMICs. There are also large variations by level of education: average refugee unit costs globally are US$1,156, US$925 and US$1,171 for pre-primary, primary and secondary education, respectively. Table 4 provides the unit costs of education for local and refugee students by level of education.

67 UNRWA schools enroll approximately 526,000 students annually at an average unit cost of US$841.50. A case study on the education of Palestinian refugees in UNRWA schools is presented in Annex 7.

68 Global Education Monitoring Report. 2019. *Migration, displacement and education: building bridges, not walls.* Paris: UNESCO.

TABLE 4: Average annual unit cost for native and refugee students

	Average annual unit costs for local students (2020 US$)			Average annual unit costs for refugee students (2020 US$)		
	Pre-primary	Primary	Secondary	Pre-primary	Primary	Secondary
Low income	123	95	181	142	114	244
Lower-middle income	535	412	666	618	494	900
Upper-middle income	2,095	1,612	1,596	2,417	1,934	2,155
Low and middle income	1,002	771	867	1,156	925	1,171

TABLE 5: Cohort-average annual cost for refugee education by income-category (US$ millions)

	Pre-primary	Primary	Secondary	Total
Low income	1	25	148	174
Lower-middle income	3	74	738	815
Upper-middle income	46	1,045	2,770	3,861
Total	50	1,144	3,656	4,850

As a result of higher unit costs required to deliver secondary education, greater investment is required in the subsector to allow for completion of the K-12 education cycle. The cost of secondary education for refugee students accounts for 75 percent of the total annual financing required for refugee education. The cost of secondary education in UMICs accounts for over 57 percent of the annual financing envelope. Prioritization of investments in primary education alone will therefore create bottlenecks for the transition into and completion of secondary education.

Box 3: A Case for Investing in Secondary Education for Refugee Children

The gap between access to secondary education for refugees and children worldwide is strikingly large. Only 31 percent of refugees access secondary education compared to 84 percent of children globally. However, this global average masks large variations, especially in LICs and LMICs. In Sub-Saharan Africa, where most out-of-school children reside, the gross secondary enrollment rate is only 47 percent on average. Due to the sheer lack of secondary school spaces, host countries struggle to provide access for local students, let alone refugees.

Secondary education is the gateway to higher education and improved employment opportunities, while providing an incentive for improved retention and completion in primary education. There is also abundant evidence of the impacts of secondary education on social outcomes, including delayed pregnancy, prevention of child marriage, reduction in child labor and exploitation, improved health outcomes and behaviors, and reduced crime and violence.[69] However, secondary education comes at an age where children, and especially refugee children, come under even more pressure to support their families through employment or domestic work. Increased investments in the subsector could reduce these barriers.

The share of total aid to education committed to secondary education was 19 percent in 2015, compared to 43 percent for basic education. This paper shows that secondary education is simply far more expensive than primary education. The annual average cost for secondary education for refugee students is estimated at US$3.65 billion for LICs and MICs, compared to US$1.2 billion for pre-primary and primary education. Host country governments are unlikely to be able to afford this without sufficient external financing.

Investing in secondary education builds durable, sustainable resources that will benefit host countries and refugees alike. In Mozambique, the construction of a secondary school near a refugee camp means that both the host community and refugees will have access to secondary education for the first time. Where secondary education systems are smaller than primary education systems and host community participation is low, expanding secondary

69 For a comprehensive literature review, see: World Bank. 2005. *Expanding Opportunities and Building Competencies for Young People – A New Agenda for Secondary Education.* Washington, D.C: World Bank.

education can lead to economies of scale, efficiency gains and a reduction in the unit cost of secondary education delivery for the host country. Building schools, training teachers, developing innovative remedial and catch-up programmes – these solutions will have a lasting impact on host communities long after the refugees have returned to their countries of origin or become integrated.

UNHCR is in the process of setting up a new initiative, the Secondary Youth Education Programme, dedicated to improving secondary education prospects for refugees and host communities. Since 2017, it has been piloted in Kenya, Rwanda, Uganda and Pakistan and will be expanded substantially in the coming years. Interventions include placing advisors with education ministries, increasing the number of female teachers, building and refurbishing infrastructure and providing direct cash transfers to households.

The cohort-average annual refugee education cost as a percentage of public expenditure on primary and secondary education in host countries is 3.8 percent on average. It averages 4.7 percent, 2.1 percent and 4.3 percent in LICs, LMICs and UMICs, respectively. However, these averages mask large variations between countries as refugee populations are concentrated in a handful of countries. Table 6 shows the ten countries with the highest ratio of annual refugee education costs to public primary and secondary education expenditure. South Sudan and Lebanon would require almost a 60 percent increase in their annual expenditures to finance refugee education, signaling not only the large number of refugees that the countries host but also the current limited public expenditure on education. In comparison, 36 out of the 65 countries studied would require less than a 1 percent increase in their annual primary and secondary education expenditure in order to finance refugee education.

Figures 2A – 2C show the distribution of the cohort-average annual cost for refugee education as a percentage of public primary and secondary education expenditure by country and income group. Given that private expenditure towards education might be limited for refugee populations, host countries' public expenditure on education will have to expand to absorb refugee populations. In countries where the share of private enrollment is high and so public expenditure on education is relatively low, the required expansion for refugees represents a higher share of current public spending. For instance, in Lebanon where the share of private enrollment is 72 percent and there are an estimated 379,000 school-age refugee children, the required expansion for refugee students represents over 58 percent of current public spending. While this holds true for a handful of countries, for many others the additional financing requirements are not substantial.

TABLE 6: Refugee education cost as a percentage of public education expenditure

Country	Region	Income Group	Avg. annual costs for refugees (% of public primary and secondary education expenditure)
Peru	Latin America & Caribbean	Upper Middle Income	5.2
Sudan	Sub-Saharan Africa	Lower Middle Income	5.3
Djibouti	Middle East & North Africa	Lower Middle Income	5.9
Turkey	Europe & Central Asia	Upper Middle Income	6.3
Chad	Sub-Saharan Africa	Low Income	10.8
Bangladesh	South Asia	Lower Middle Income	11.0
Uganda	Sub-Saharan Africa	Low Income	11.1
Jordan	Middle East & North Africa	Upper Middle Income	16.1
Lebanon	Middle East & North Africa	Upper Middle Income	58.2
South Sudan	Sub-Saharan Africa	Low Income	61.2

FIGURE 2A. Average annual cost for refugee education as percentage of public expenditure on primary and secondary education – Low income countries

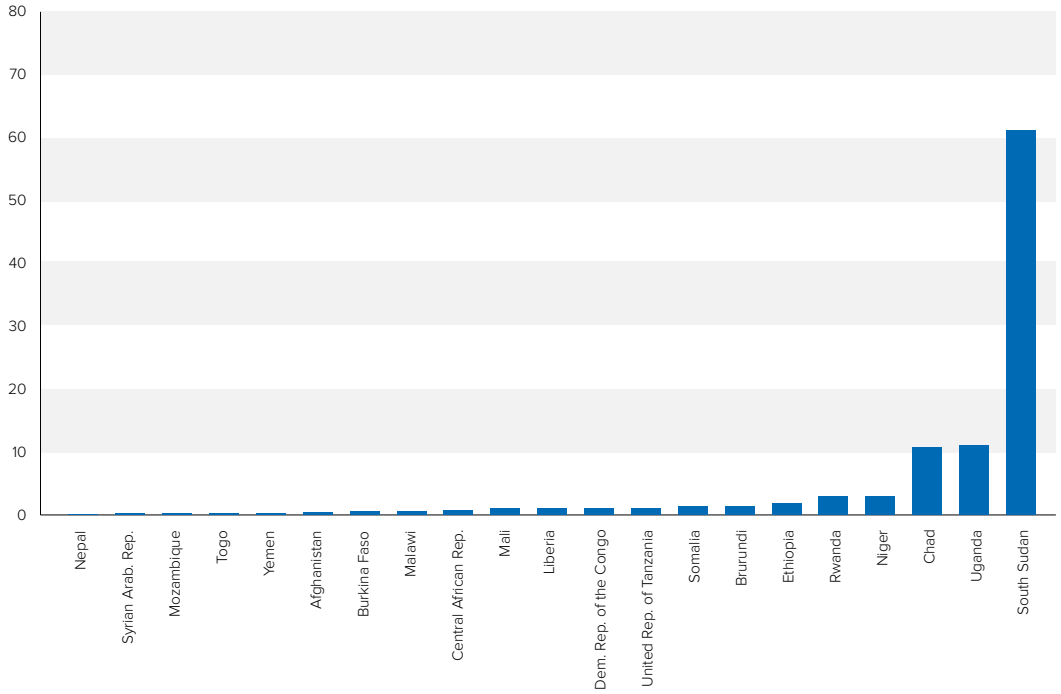


FIGURE 2B. Average annual cost for refugee education as percentage of public expenditure on primary and secondary education – Lower middle-income countries

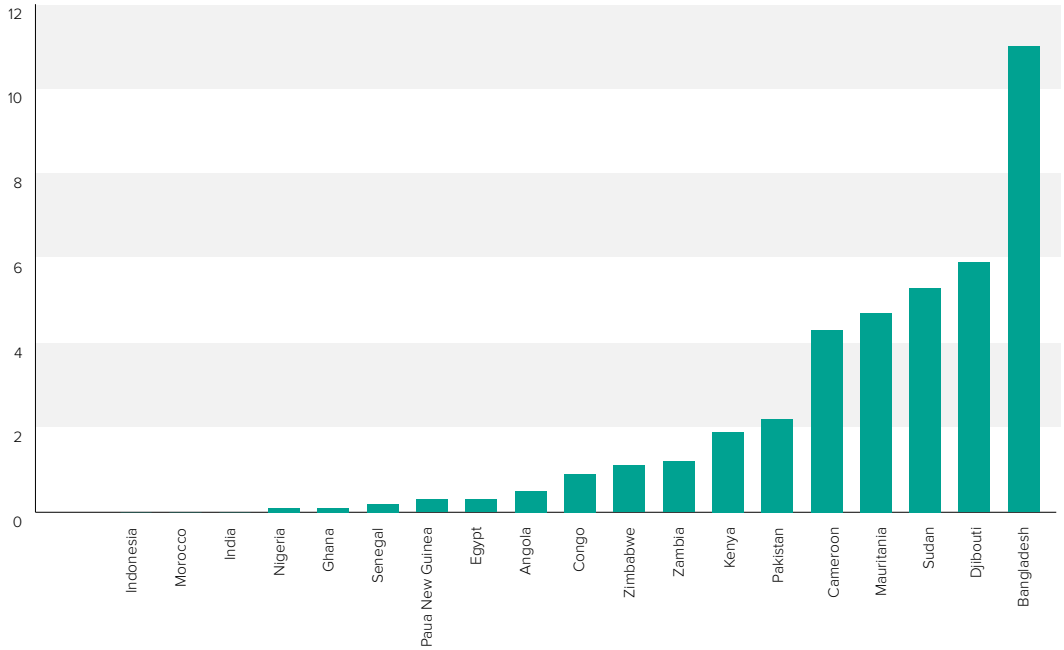
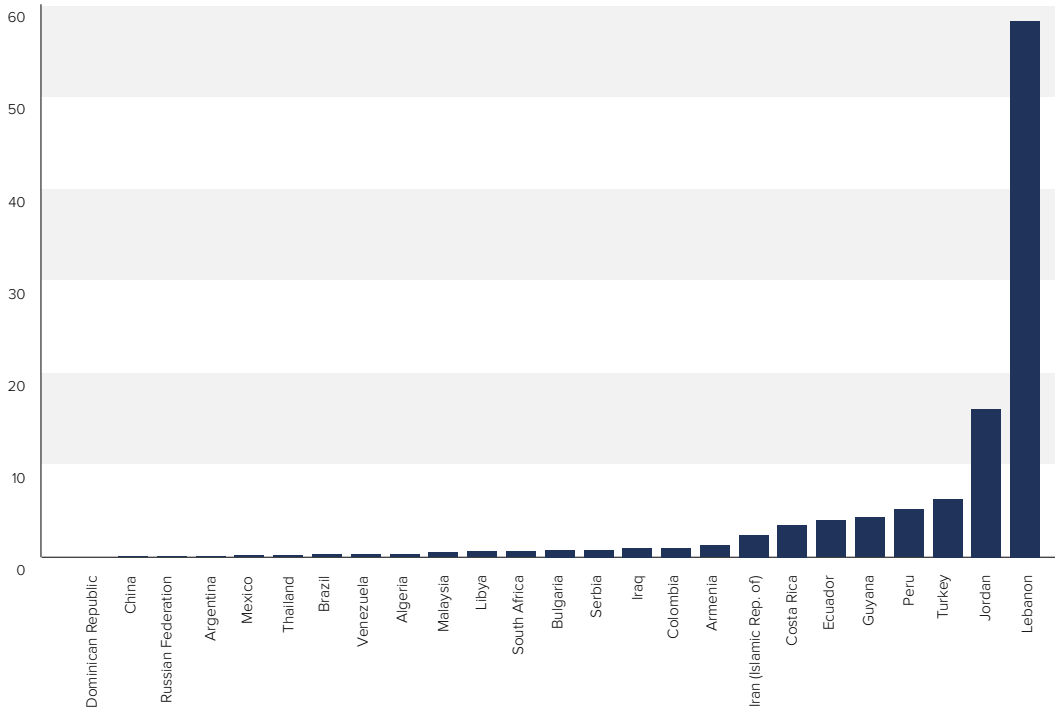


FIGURE 2C. Average annual cost for refugee education as percentage of public expenditure on primary and secondary education – Upper middle-income countries



Box 4: Estimating the Cost of Inclusive Education for Syrian Refugees

The Syrian conflict has displaced millions of people:of the 26 million refugees and asylum seekers documented worldwide, more than a quarter are of Syrian origin. Over 40 percent of these refugees are below 18 years of age.[70] Three countries – Turkey, Lebanon and Jordan – host 80 percent of Syrian refugees. This has created substantial pressure on the education systems of these countries. In Lebanon, Syrian refugee children account for a third of all children enrolled in formal education. While a significant majority of refugee children access primary education in Jordan, there is a sharp observable drop in enrollment for children aged 10 years and over. Despite strong political will and domestic and international financial commitments, over 800,000 Syrian refugee children remain out of school.[71]

70 UNHCR database on refugees – June 2020.

71 No Lost Generation Partners. 2019. *Investing in the Future: Protection and Learning for all Syrian Children and Youth.*

This report estimates the annual financing envelope required to provide inclusive education for refugees in Turkey, Lebanon and Jordan at US$2.13 billion, which accounts for 44 percent of the total annual financing envelope. Over 70 percent of this amount is required to provide secondary education to refugee children, while the remaining 30 percent covers pre-primary and primary education. This clearly indicates the importance of investing in secondary education to promote completion of the full K-12 education cycle.

	Estimated school-age refugees	Average unit cost of refugee education (US$)	Cohort-average annual cost (US$ millions)			
			Pre-primary	Primary	Secondary	Total
Turkey	1,148,341	2,158	22	492	1,027	1,541
Lebanon	378,698	1,161	2	48	338	388
Jordan	261,171	1,160	2	53	143	198
Total	261,171		26	593	1,508	2,127

The Syrian crisis response is primarily coordinated through the *Supporting the future of Syria and the Region* conferences, conducted annually since 2016. At the first conference, donors pledged US$1.4 billion for education, of which a little over 70 percent was received. In 2017, this fell to 52 percent of the funds required.[72] Financing towards education remains inadequate, with 8.9 percent of grants and 14 percent of loans, amounting to a total of US$619 million, being directed to the sector in 2019.[73] This accounts for less than 30 percent of the annual financing envelope required to educate all refugee children in Turkey, Jordan and Lebanon as estimated in this report.

Beyond addressing supply side barriers through increased financing, several demand side barriers to education persist for Syrian refugees. Poverty rates for Syrians are estimated at between 51 and 61 percent in Jordan and between 37 and 50 percent in Lebanon.[74] Poor autonomy due to lack of financial stability is caused by restrictions imposed on employment in the formal sector. Apart from the opportunity cost of education, indirect costs can also be prohibitive. In a survey of Syrian households in Lebanon, the most common reasons for not attending school included the inability to afford the cost of transportation to school and educational materials.[75] In its tenth year, the conflict in Syria continues to disrupt the lives of millions of children – providing a future through quality education presents a daunting challenge, but is nothing less than a moral imperative.

72 Save the Children. 2018. *Time to act: a costed plan to deliver quality education to every last refugee child.*

73 Supporting the Future of Syria and the Region. 2019. *Post-Brussels conference financial tracking.* Report Eight.

74 No Lost Generation Partners. 2019. *Investing in the Future: Protection and Learning for all Syrian Children and Youth.*

75 UNHCR, UNICEF and WFP. 2018. *Vulnerability Assessment of Syrian Refugees in Lebanon.*

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Investing in Refugee Education

Challenges remain in funding refugee education adequately and in a coordinated manner. Refugee education financing has historically followed donor financing patterns, which are inadequate, largely inflexible and unpredictable – all of which hinders the effective long-term allocation of resources that are already limited. In 2016, only 2.7 percent of total humanitarian aid was directed towards education, far below the target of 4 percent. This amounted to US$303 million, which while reaching a historic high, only met 48 percent of the funding requested.[76] While combined humanitarian and development support to refugee education amounted to US$800 million in 2016,[77] this would have to increase more than six times to meet the cohort average annual cost of refugee education of US$4.85 billion estimated in this paper. The share of the total cost of refugee education that will be absorbed by host governments depends on their income level, the number of refugees residing in the country and the political environment. Save the Children (2018) estimates that approximately 56 percent of the funding for refugee education would have to be externally financed. This means that US$2.72 billion of the total financing envelope of US$4.85 billion would have to be financed through a joint humanitarian and development response. This still amounts to more than three times the 2016 levels of external financing for education in emergencies.

Increased investments in refugee education should be complemented by clear financing targets, resource mobilization plans and costed refugee and host community education response plans. While an increasing number of countries are including refugees in their national education systems, refugee education needs are largely invisible in host country budgets due to inadequate domestic financing as well as insufficient data on refugee numbers, the cost of scaling up refugee education programmes and effective coordination and planning. This paper contributes to the policy agenda by providing unit costs of refugee education for each host country by level of education, thereby catalyzing renewed discourse on responsibility-sharing, resource mobilization and emergency and developmental response plans for education.

While historical levels, mechanisms and coordination of refugee education financing were lacking, recent international commitments and innovations have been gaining momentum. The 2016 World Humanitarian Summit agreed to the Grand Bargain and the New Way of Working aimed at bringing together humanitarian and

76 Education for All Global Education Monitoring Report. 2017. *Aid to education is stagnating and not going to countries most in need.* Policy paper 31. Paris: UNESCO.

77 Global Education Monitoring Report. 2019. *Migration, displacement and education: building bridges, not walls.* Paris: UNESCO.

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development assistance. This led to the launch of ECW, the first fund dedicated to education in emergencies. The ECW is largely underfunded and needs to be strengthened in order to play a more central, coordinating role in the humanitarian-development nexus. In 2018, the Global Partnership for Education (GPE) launched its Funding and Financing Framework that gives additional weighting for countries affected by conflict and violence in its needs-based allocation formula for grants. Further, the European Union (EU) committed to increasing its education in emergencies budget to 8 percent of its annual humanitarian budget in 2018, and to 10 percent in 2019. Moreover, the partnership between UNHCR and Educate A Child has funded the enrollment of over 1.2 million out-of-school refugee and internally displaced children since 2012.

The World Bank allocated US$2 billion to the International Development Association (IDA) Regional Sub-Window for Refugees and Host Communities (RSW) during fiscal years 2018-2020, half of which was grants. This will allow for multi-year, predictable financing, particularly for protracted crises situations. As of May 2020, US$1.8 billion of the RSW has been allocated to refugee-response programmes complemented by US$3.4 billion in IDA funding. Several of these programmes focus specifically on education – the Cameroon Education Reform Support Project (IDA – US$130 million, RSW – US$30 million), the Djibouti Expanding Opportunities for Learning Project (IDA – US$15 million, RSW – US$5 million), the Niger Learning Improvement for Results in Education Project (IDA – US$140 million, RSW – US$40 million) and the Bangladesh Additional Financing for Reaching Out of School Children II (IDA – US$25 million, RSW – US$20.84 million). Annex 8 shows the list of approved projects and associated funding allocated under the RSW. The World Bank also has a portfolio of over US$1.11 billion IDA in education projects operational in fragile states. Further, under the IDA-19 replenishment, the Window for Host Communities and Refugees (WHR) will finance up to US$2.2 billion in operations, including a dedicated sub-window of US$1 billion to respond to the impact of COVID-19 on refugees.[78]

Additional funding for special thematic areas has also been pledged. The 2018 Charlevoix Declaration on Quality Education for Girls, Adolescent Girls and Women in Developing Countries, committed US$3.8 billion for education for women and girls in conflict and crisis. Further, the Supporting Syria and the Region Conference 2018 pledged grant support amounting to US$4.4 billion for 2018 and US$3.4 billion 2018-2019. Of this amount, almost 15 percent or US$497 million was allocated to the education sector in 2018. International financial institutions and governments pledged US$21.2 billion in loans for 2018-2020, although the amount invested in the education sector is unclear.

Greater efforts are being made to direct external financing through budgetary support. This is backed by the 2016 New York Declaration on Migrants and Refugees, which agreed upon the core elements of a Comprehensive Refugee Response Framework and the development of a global compact on refugees and a global compact for safe, orderly and regular migration. The 2016 Declaration committed to ensuring that all refugee children have access to education within a few months of arrival in the host country and that host country governments should be supported in facilitating this through budgetary provision. The 2017 Djibouti Declaration on Refugee Education saw Intergovernmental Authority for Development (IGAD) member states[79] commit to delivering quality education to refugees through the development of inclusive national education sector plans by 2020.

Analysis by the Education Commission showed that even after bilateral, domestic and multilateral financing goals were met, there would still be an education financing gap of US$10 billion by 2020 and US$25 billion by 2030. This has led to suggestions for new types of financing. One of these is to establish the

78 IDA. 2020. Window for Host Communities and Refugees. Available at: https://ida.worldbank.org/replenishments/ida19-replenishment/windows-host-communities-refugees. [Accessed on: 27 July 2020].

79 The Intergovernmental Authority on Development (IGAD) member states are Djibouti, Ethiopia, Eritrea, Kenya, Somalia, Sudan, South Sudan and Uganda.


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International Financing Facility for Education (IFFEd) which would allow multilateral banks to mobilize funds from international markets and provide subsidized loans to beneficiary countries. In the first round of funding, donor countries would provide the IFFEd with US$2 billion in guarantees, which would help mobilize an additional US$8 billion and provide a new source of financing for education. Currently, the UK government has committed £300 million to the financing facility.[80] Innovations like these can increase the total amount of financing available for education by tapping into sources that were previously unavailable. While low-income countries might struggle to take on loans to support refugee education, such financing instruments could help close the gap for middle income countries.

External financing should be a function of the resource level of the country and the proportion of school-age refugees to existing children. This costing methodology is built on the principle of inclusive education systems where refugee children receive a quality of education "no better, no worse" than that of host countries. As such, for most countries, it does not represent substantial levels of investment, but rather modest increments to what host countries have already committed. Finally, support for refugee education should be part of an overall effort to improve the learning outcomes of all children and reduce learning poverty in the host countries.

80 United Nations Sustainable Development Goals. 2018. https://sustainabledevelopment.un.org/partnership/?p=33981

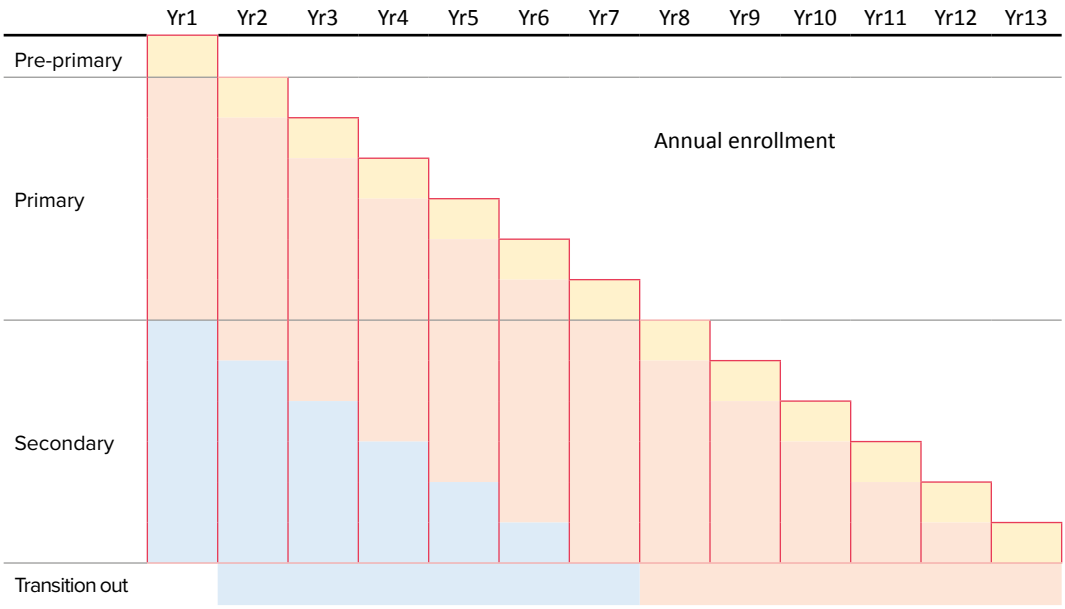
Annex 1: Costing Methodology

The costing formula begins by estimating the annual unit cost for a refugee student at a particular level of education (or per student cost), agglomerates for all refugee students in a particular year in a particular host country, sums over K-12 years of education, and then aggregating across all host countries to derive the total envelope required. The total cost of refugee education is given by the formula

$$\sum_{c}^{n}\sum_{y=2020}^{2032}\sum_{l}^{pre-prm,\ prm,\ sec} number\ of\ refugees_{l,y,c} x\ unit\ cost\ for\ refugee\ education_{l,y,c}$$

where c denotes the host country, y denotes the year and l denotes the level of education.

Estimating annual enrollment and cohort movements. The model takes into account the cohort structure of the school-age refugee population meaning pre-primary school-age children transition in to primary, a share of primary school-age children transitions in to secondary, and a share of secondary school-age children completes secondary education each year. This implies that for a child aged 5 years the model accounts for thirteen years of the full education cycle compared to a child aged 17 years for whom the model accounts for one year of secondary education. The figure below illustrates these cohort flows.



Estimating the unit cost for refugee education. Unit costs for refugee students are based on unit costs for local students which are estimated as *public expenditure on education* $_{l,y,c}$ / *public enrolment* $_{l,y,c}$. The unit cost for pre-primary education is calculated as (1 + ECE coefficient) x unit cost for primary education. The ECE coefficient is assumed to be 30 percent in this analysis. Unit cost for refugee education each year is (1 + refugee coefficient) x unit cost of education by level of education. Refugee coefficients are assumed to be 20 percent at pre-primary and primary education and 35 percent at secondary education. Unit costs are then inflation adjusted to estimate costs over the K-12 education cycle.

A. The costing model adopted in this paper makes the following assumptions:

Right age of enrollment. The model assumes that refugee students aged 5-11 years and 12-17 years are enrolled in primary and secondary education respectively. UNHCR estimates that refugee students lose 3 to 4 years of schooling as a result of conflict.[81] This assumption will overestimate or underestimate the total cost of education depending on the age distribution of the specific refugee population.

Uniform age distribution of refugee students. UNHCR collects demographic data on refugees, dividing populations into the age groups of 0-4 years, 5-11 years, 12-17 years, 18-59 years and greater than 60. The model assumes that school age children within the brackets 5-11 years and 12-17 years are equally distributed across each grade of primary and secondary respectively. Since there is insufficient demographic data on asylum seekers and Venezuelans displaced abroad, it further assumes that the age distribution for these groups is the same as that for refugees.

Pre-primary education is costed as a percentage increase on primary education costs. The UNHCR demographic divisions account for 7 years of primary and 6 years of secondary education. The model assumes that the first year of primary education corresponds to pre-primary education, or that children aged 5 years are enrolled in pre-primary education. Given the specific requirements of ECE, an ECE coefficient is added to the unit costs for primary education in each host country for children aged 5 years. The EFA-GEM 2015 report estimates that the unit costs for pre-primary education in LICs and LMICs was a little over 130 percent of primary education unit costs in 2012. The costing model used here assumes an ECE coefficient of 30 percent.

Grade-wise transition of 100 percent. The model assumes that repetition and dropout rates amongst refugee students are zero. This assumption is unlikely to hold for refugee student populations due to poor education outcomes resulting from conflict-related trauma, language of instruction mismatch, high opportunity costs of education and lost years of schooling due to conflict. Furthermore, this assumption implies that the internal efficiency of refugee student education is higher than that of host country systems. This will lead to an underestimation of the costs of refugee education. However, the costing model is cautious about unduly favoring host countries with high repetition and dropout rates.

81 UNHCR. 2016. *Missing out: Refugee education in crisis.*

Unit cost of education remains constant over thirteen years. This assumption will lead to an underestimation of the total cost of refugee education as unit costs are likely to rise as governments make investments to improve education quality. The unit cost of education for each level in each host country will be computed as the average of the unit cost over the last 5 years or more where data for recent years is unavailable. This ensures that the model captures trends in unit costs, since a constant figure is used across the thirteen years. While the base unit cost remains constant, it is inflation adjusted for each year. The model assumes that the US dollar inflation rate remains constant at the 2018 rate of 2.4 percent.[82] This assumption is relaxed in the sensitivity analysis.

B. Caveats to the costing model: (a) the number of refugees in each country is likely to be underestimated as not all school-age children are registered with UNHCR; (b) the model only estimates the cost of education for the existing population of refugee students and makes no assumptions about new influxes or repatriations of refugees; (c) the model does not explicitly cost improvements in education quality; and (d) the model uses current US dollars and not PPP-converted dollars and as such these estimates should not be used for cross-country comparisons.

C. The paper uses the following terms to report unit costs and average annual costs:

Unit cost of education: This refers to the unit cost of education at pre-primary, primary or secondary level for a particular country.

Average unit cost of education by country: This refers to the average unit cost by level of education for a particular country. It is calculated as the weighted average of unit costs by level of education where the weighting is are enrollment by level of education divided by total enrollment in the base year.

Cohort-average annual cost: This refers to the total cost of education as estimated using the cohort approach described above divided by thirteen years from 2020 to 2032. It does not refer to the average unit cost of education by country times the number of refugees.

82 OECD. 2019. *Main economic indicators.* 19:8. Paris: OECD Publishing.

Annex 2: Number of refugees and unit costs by host country

	Number of Refugees	School-age refugees	Host Country Unit Cost (US$)[83]				Host Country Unit Cost (2020 US$)[84]	
			Primary	Year of reporting	Secondary	Year of reporting	Primary	Secondary
LOW INCOME								
MIDDLE EAST & NORTH AFRICA								
SYRIAN ARAB REPUBLIC	28,282	9,096	343.51±	2007	288.63±	2007	467.56	392.86
YEMEN	279,193	46,235	173.77±	2018	113.33±	2018	182.21	118.83
SOUTH ASIA								
AFGHANISTAN	72,479	26,249	57.99	2017	63.08	2017	62.27	67.73
NEPAL	19,634	1,753	119.61	2015	113.73±	2018	134.67	119.25

83 Host country unit cost data represented here is calculated as total public expenditure divided by total public enrollment at each level of education based on the latest available data reported on UNESCO Institute for Statistics (UIS). For countries where this data was not reported (marked with ±), it has been estimated based on data on public expenditure per student at each level of education as a share of GDP per capita.

84 Unit cost data adjusted for inflation using constant inflation rate of 2.4 percent.

	Number of Refugees	School-age refugees	Host Country Unit Cost (US$)[83]				Host Country Unit Cost (2020 US$)[84]	
			Primary	Year of reporting	Secondary	Year of reporting	Primary	Secondary
SUB-SAHARAN AFRICA								
BURKINA FASO	25,902	11,496	96.95	2015	159.87	2016	109.16	175.78
BURUNDI	87,476	34,891	38.06	2013	76.29	2013	44.94	90.07
CENTRAL AFRICAN REPUBLIC	7,486	2,553	21.41±	2018	77.54±	2018	22.45	81.31
CHAD	446,431	176,739	49.14	2012	152.65	2013	59.41	180.22
DEM. REP. OF THE CONGO	526,931	229,735	33.26	2013	25.64	2013	39.27	30.28
ETHIOPIA	734,812	307,189	49.34	2015	106.87	2015	55.55	120.33
LIBERIA	8,254	3,079	106.85	2018	468.48	2018	112.05	491.23
MALAWI	44,385	16,627	30.61	2016	93.13	2016	33.66	102.40
MALI	27,678	12,121	115.39	2016	275.67	2016	126.87	303.10
MOZAMBIQUE	25,691	8,226	45.82	2013	173.85	2013	54.10	205.24
NIGER	217,925	94,202	50.45	2017	73.53	2017	54.17	78.95
RWANDA	145,552	48,084	34.47	2018	192.24	2018	36.14	201.58

	Number of Refugees	School-age refugees	Host Country Unit Cost (US$)[83]				Host Country Unit Cost (2020 US$)[84]	
			Primary	Year of reporting	Secondary	Year of reporting	Primary	Secondary
SOMALIA	35,672	10,708	50.05±	2018	421.82±	2017	52.48	452.93
SOUTH SUDAN	301,995	133,926	57.10±	2015	147.80±	2015	64.29	166.41
TOGO	12,664	4,874	132.93	2016	66.99	2016	146.15	73.65
UGANDA	1,381,122	586,860	45.92	2014	130.87±	2014	52.94	150.89
UNITED REPUBLIC OF TANZANIA	271,729	96,694	71.59	2014	164.28	2014	82.54	189.40
LOWER MIDDLE INCOME								
EAST ASIA & PACIFIC								
INDONESIA	13,657	2,141	596.65	2015	595.92	2015	671.77	670.95
PAPUA NEW GUINEA	9,840	3,149	340.03±	2018	1,682.39±	2018	356.54	1,764.11
MIDDLE EAST & NORTH AFRICA								
DJIBOUTI	30,794	9,632	1,168.27±	2018	21.58±	2018	1,225.02	22.63
EGYPT	324,736	71,524	383.44	2017	538.03	2017	411.72	577.70

	Number of Refugees	School-age refugees	Host Country Unit Cost (US$)[83]				Host Country Unit Cost (2020 US$)[84]	
			Primary	Year of reporting	Secondary	Year of reporting	Primary	Secondary
MOROCCO	9,756	2,233	608.15	2013	1,002.84	2013	717.97	1,183.94
SOUTH ASIA								
BANGLADESH	854,820	297,481	112.42	2012	2,341.01	2016	135.91	2,573.96
INDIA	207,334	66,347	200.57	2013	414.37	2013	236.79	489.20
PAKISTAN	1,428,147	529,186	142.37	2015	281.92	2015	160.30	317.41
SUB-SAHARAN AFRICA								
ANGOLA	55,994	21,047	95.71±	2006	390.36±	2006	133.40	544.08
CAMEROON	416,208	166,707	76.59	2013	236.69	2012	90.42	286.14
CONGO	40,086	13,837	257.74±	2018	365.13±	2018	270.26	382.86
GHANA	13,463	3,761	159.73	2014	385.02	2014	184.16	443.90
KENYA	489,747	204,241	169.23	2015	364.34±	2018	190.53	382.03
MAURITANIA	86,458	34,652	126.13	2016	180.57	2016	138.68	198.54
NIGERIA	55,199	19,249	203.57±	2018	504.14±	2018	213.46	528.63
SENEGAL	16,273	6,817	171.06	2016	190.97	2016	188.08	209.98

	Number of Refugees	School-age refugees	Host Country Unit Cost (US$)[83]				Host Country Unit Cost (2020 US$)[84]	
			Primary	Year of reporting	Secondary	Year of reporting	Primary	Secondary
SUDAN	1,071,034	405,774	112.85±	2009	137.47±	2018	146.49	144.15
ZAMBIA	62,596	22,276	75.46±	2018	98.65±	2005	79.12	140.79
ZIMBABWE	20,492	7,336	1,973.93	2014	1,561.66	2014	2,275.79	1,800.47
UPPER MIDDLE INCOME								
EAST ASIA & PACIFIC								
CHINA	304,041	97,293	3,115.42±	2018	1,368.21±	2018	3,266.75	1,434.67
MALAYSIA	179,744	26,148	1,849.32	2017	2,653.51	2017	1,985.69	2,849.18
THAILAND	98,418	30,866	1,655.27	2013	830.84	2013	1,954.19	980.88
EUROPE & CENTRAL ASIA								
ARMENIA	18,158	5,811	396.48	2017	627.34	2017	425.72	673.60
BULGARIA	21,521	6,887	1,506.53	2013	1,622.72	2013	1,778.60	1,915.77
RUSSIAN FEDERATION	43,895	14,046	2,257.69±	2018	1,766.48±	2012	2,367.36	2,135.55
SERBIA	26,715	8,549	2,563.63	2015	650.06	2015	2,886.39	731.90

	Number of Refugees	School-age refugees	Host Country Unit Cost (US$)[83]				Host Country Unit Cost (2020 US$)[84]	
			Primary	Year of reporting	Secondary	Year of reporting	Primary	Secondary
TURKEY	3,907,788	1,148,341	1,603.01[±]	2015	1,323.21[±]	2015	1,804.83	1,489.80
LATIN AMERICA & CARIBBEAN								
ARGENTINA	185,268	11,720	2,668.15	2017	3,682.72	2017	2,864.90	3,954.29
BRAZIL	363,676	116,376	2,242.32	2015	2,405.36	2015	2,524.63	2,708.20
COLOMBIA	1,781,002	99,102	1,311.84	2017	1,257.65	2017	1,408.58	1,350.39
COSTA RICA	114,235	36,555	2,867.94	2017	3,184.28	2017	3,079.42	3,419.09
DOMINICAN REPUBLIC	34,549	1,053	1,362.42	2017	1,638.37	2017	1,462.88	1,759.19
ECUADOR	503,644	161,166	762.51	2016	439.26	2016	838.39	482.97
GUYANA	22,079	7,065	364.49	2012	496.29	2012	440.64	599.98
MEXICO	150,985	48,315	1,334.61	2016	1,430.20	2016	1,467.42	1,572.52
PERU	867,821	277,703	970.36	2017	1,283.19	2017	1,041.92	1,377.82

	Number of Refugees	School-age refugees	Host Country Unit Cost (US$)[83]				Host Country Unit Cost (2020 US$)[84]	
			Primary	Year of reporting	Secondary	Year of reporting	Primary	Secondary
VENEZUELA (BOLIVARIAN REP. OF)	67,804	30,443	2,873.76±	2014	2,376.07±	2014	3,313.21	2,739.42
MIDDLE EAST & NORTH AFRICA								
ALGERIA	100,270	32,086	473.19±	2018	736.53±	2018	496.18	772.31
IRAN (ISLAMIC REPUBLIC OF)	979,468	313,430	823.75	2018	1,249.94	2018	863.77	1,310.65
IRAQ	286,930	77,128	220.00±	2010	638.29±	2007	278.88	868.80
JORDAN	744,989	261,171	825.27	2017	862.93	2017	886.12	926.56
LEBANON	928,279	378,698	452.78±	2013	1,261.93	2013	534.55	1,489.82
LIBYA	45,458	10,062	873.64±	2006	819.94±	2010	1,217.68	1,039.40
SUB-SAHARAN AFRICA								
SOUTH AFRICA	277,581	88,826	1,051.83	2018	1,267.24	2018	1,102.92	1,328.80

Annex 3: Refugee Education Financing – Pre-primary

	Pre-primary level refugees	Pre-primary unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local Student	Refugee Mark-up	Refugee Student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
LOW INCOME										
MIDDLE EAST & NORTH AFRICA										
SYRIAN ARAB REPUBLIC	704	607.83	93.51	701.34	0.033	0.005	0.038	0.428	0.066	0.493
YEMEN	3,251	236.87	36.44	273.32	0.059	0.009	0.068	0.770	0.118	0.889
SOUTH ASIA										
AFGHANISTAN	2,429	80.95	12.45	93.40	0.015	0.002	0.017	0.197	0.030	0.227
NEPAL	134	175.07	26.93	202.01	0.002	0.000	0.002	0.023	0.004	0.027

	Pre-primary level refugees	Pre-primary unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local Student	Refugee Mark-up	Refugee Student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
SUB-SAHARAN AFRICA										
BURKINA FASO	998	141.91	21.83	163.74	0.011	0.002	0.013	0.142	0.022	0.163
BURUNDI	2,870	58.42	8.99	67.41	0.013	0.002	0.015	0.168	0.026	0.193
CENTRAL AFRICAN REPUBLIC	233	29.18	4.49	33.67	0.001	0.000	0.001	0.007	0.001	0.008
CHAD	15,102	77.23	11.88	89.12	0.090	0.014	0.104	1.166	0.179	1.346
DEM. REP. OF THE CONGO	20,836	51.05	7.85	58.91	0.082	0.013	0.094	1.064	0.164	1.227
ETHIOPIA	25,178	72.21	11.11	83.32	0.140	0.022	0.161	1.818	0.280	2.098
LIBERIA	228	145.66	22.41	168.07	0.003	0.000	0.003	0.033	0.005	0.038
MALAWI	1,355	43.76	6.73	50.49	0.005	0.001	0.005	0.059	0.009	0.068
MALI	1,093	164.93	25.37	190.31	0.014	0.002	0.016	0.180	0.028	0.208
MOZAMBIQUE	675	70.32	10.82	81.14	0.004	0.001	0.004	0.047	0.007	0.055
NIGER	8,826	70.42	10.83	81.25	0.048	0.007	0.055	0.621	0.096	0.717
RWANDA	3,854	46.99	7.23	54.22	0.014	0.002	0.016	0.181	0.028	0.209

	Pre-primary level refugees	Pre-primary unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local Student	Refugee Mark-up	Refugee Student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
SOMALIA	890	68.23	10.50	78.72	0.005	0.001	0.005	0.061	0.009	0.070
SOUTH SUDAN	11,833	83.58	12.86	96.44	0.076	0.012	0.088	0.989	0.152	1.141
TOGO	493	190.00	29.23	219.23	0.007	0.001	0.008	0.094	0.014	0.108
UGANDA	50,077	68.83	10.59	79.42	0.265	0.041	0.306	3.447	0.530	3.977
UNITED REPUBLIC OF TANZANIA	8,074	107.30	16.51	123.80	0.067	0.010	0.077	0.866	0.133	1.000
LOWER MIDDLE INCOME										
EAST ASIA & PACIFIC										
INDONESIA	178	873.31	134.35	1,007.66	0.012	0.002	0.014	0.156	0.024	0.180
PAPUA NEW GUINEA	267	463.51	71.31	534.81	0.010	0.001	0.011	0.124	0.019	0.143
MIDDLE EAST & NORTH AFRICA										
DJIBOUTI	769	1,592.52	245.00	1,837.53	0.094	0.014	0.109	1.224	0.188	1.412
EGYPT	5,863	535.23	82.34	617.57	0.241	0.037	0.279	3.138	0.483	3.621

	Pre-primary level refugees	Pre-primary unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local Student	Refugee Mark-up	Refugee Student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
MOROCCO	188	933.37	143.59	1,076.96	0.013	0.002	0.016	0.175	0.027	0.202
SOUTH ASIA										
BANGLADESH	25,649	176.68	27.18	203.86	0.349	0.054	0.402	4.532	0.697	5.229
INDIA	5,628	307.83	47.36	355.19	0.133	0.021	0.154	1.732	0.267	1.999
PAKISTAN	44,491	208.39	32.06	240.45	0.713	0.110	0.823	9.272	1.426	10.698
SUB-SAHARAN AFRICA										
ANGOLA	1,937	173.42	26.68	200.10	0.026	0.004	0.030	0.336	0.052	0.388
CAMEROON	15,224	117.54	18.08	135.62	0.138	0.021	0.159	1.790	0.275	2.065
CONGO	1,139	351.33	54.05	405.38	0.031	0.005	0.036	0.400	0.062	0.462
GHANA	303	239.41	36.83	276.24	0.006	0.001	0.006	0.073	0.011	0.084
KENYA	16,467	247.69	38.11	285.80	0.314	0.048	0.362	4.079	0.627	4.706
MAURITANIA	3,037	180.29	27.74	208.03	0.042	0.006	0.049	0.548	0.084	0.632
NIGERIA	1,724	277.49	42.69	320.19	0.037	0.006	0.042	0.478	0.074	0.552
SENEGAL	574	244.50	37.62	282.12	0.011	0.002	0.012	0.140	0.022	0.162

	Pre-primary level refugees	Pre-primary unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local Student	Refugee Mark-up	Refugee Student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
SUDAN	34,668	190.44	29.30	219.74	0.508	0.078	0.586	6.602	1.016	7.618
ZAMBIA	1,826	102.86	15.82	118.68	0.014	0.002	0.017	0.188	0.029	0.217
ZIMBABWE	589	2,958.52	455.16	3,413.68	0.134	0.021	0.155	1.743	0.268	2.011
UPPER MIDDLE INCOME										
EAST ASIA & PACIFIC										
CHINA	8,253	4,246.78	653.35	4,900.13	2.696	0.415	3.111	35.047	5.392	40.439
MALAYSIA	2,371	2,581.40	397.14	2,978.53	0.471	0.072	0.543	6.121	0.942	7.063
THAILAND	2,381	2,540.45	390.84	2,931.29	0.465	0.072	0.537	6.048	0.930	6.978
EUROPE & CENTRAL ASIA										
ARMENIA	493	553.44	85.14	638.58	0.021	0.003	0.024	0.273	0.042	0.315
BULGARIA	584	2,312.18	355.72	2,667.90	0.104	0.016	0.120	1.351	0.208	1.558
RUSSIAN FEDERATION	1,191	3,077.57	473.47	3,551.04	0.282	0.043	0.325	3.667	0.564	4.231
SERBIA	725	3,752.30	577.28	4,329.58	0.209	0.032	0.241	2.721	0.419	3.139

	Pre-primary level refugees	Pre-primary unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local Student	Refugee Mark-up	Refugee Student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
TURKEY	104,041	2,346.28	360.97	2,707.24	18.778	2.889	21.666	244.109	37.555	281.664
LATIN AMERICA & CARIBBEAN										
ARGENTINA	611	3,724.37	572.98	4,297.35	0.175	0.027	0.202	2.275	0.350	2.624
BRAZIL	9,871	3,282.02	504.93	3,786.94	2.492	0.383	2.876	32.397	4.984	37.382
COLOMBIA	6,876	1,831.16	281.72	2,112.87	0.969	0.149	1.118	12.592	1.937	14.529
COSTA RICA	3,101	4,003.25	615.88	4,619.14	0.955	0.147	1.102	12.413	1.910	14.322
DOMINICAN REPUBLIC	-	1,901.75	292.58	2,194.32	-	-	-	-	-	-
ECUADOR	13,670	1,089.91	167.68	1,257.58	1.146	0.176	1.322	14.899	2.292	17.192
GUYANA	599	572.84	88.13	660.96	0.026	0.004	0.030	0.343	0.053	0.396
MEXICO	4,098	1,907.64	293.48	2,201.13	0.601	0.093	0.694	7.818	1.203	9.021
PERU	23,555	1,354.49	208.38	1,562.87	2.454	0.378	2.832	31.905	4.908	36.814
VENEZUELA (BOLIVARIAN REP. OF)	1,933	4,307.18	662.64	4,969.82	0.641	0.099	0.739	8.327	1.281	9.608

	Pre-primary level refugees	Pre-primary unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local Student	Refugee Mark-up	Refugee Student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
MIDDLE EAST & NORTH AFRICA										
ALGERIA	2,722	645.03	99.24	744.26	0.135	0.021	0.156	1.756	0.270	2.026
IRAN (ISLAMIC REPUBLIC OF)	26,586	1,122.90	172.75	1,295.65	2.296	0.353	2.650	29.853	4.593	34.446
IRAQ	6,743	362.55	55.78	418.32	0.188	0.029	0.217	2.445	0.376	2.821
JORDAN	22,722	1,151.96	177.22	1,329.19	2.013	0.310	2.323	26.174	4.027	30.201
LEBANON	34,164	694.91	106.91	801.82	1.826	0.281	2.107	23.741	3.652	27.393
LIBYA	751	1,582.98	243.54	1,826.52	0.091	0.014	0.106	1.189	0.183	1.372
SUB-SAHARAN AFRICA										
SOUTH AFRICA	7,534	1,433.80	220.58	1,654.39	0.831	0.128	0.959	10.803	1.662	12.465
Grand Total	605,230				43.643	6.714	50.357	567.354	87.285	654.639

Annex 4: Refugee Education Financing – Primary

	Primary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
LOW INCOME										
MIDDLE EAST & NORTH AFRICA										
SYRIAN ARAB REPUBLIC	4,221	467.56	93.51	561.07	0.72	0.14	0.86	9.34	1.87	11.20
YEMEN	19,508	182.21	36.44	218.65	1.29	0.26	1.55	16.82	3.36	20.18
SOUTH ASIA										
AFGHANISTAN	14,573	62.27	12.45	74.72	0.33	0.07	0.40	4.29	0.86	5.15
NEPAL	805	134.67	26.93	161.61	0.04	0.01	0.05	0.51	0.10	0.62
SUB-SAHARAN AFRICA										
BURKINA FASO	5,985	109.16	21.83	130.99	0.24	0.05	0.29	3.09	0.62	3.71

	Primary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
BURUNDI	17,221	44.94	8.99	53.92	0.28	0.06	0.34	3.66	0.73	4.39
CENTRAL AFRICAN REPUBLIC	1,399	22.45	4.49	26.94	0.01	0.00	0.01	0.15	0.03	0.18
CHAD	90,612	59.41	11.88	71.29	1.96	0.39	2.35	25.47	5.09	30.56
DEM. REP. OF THE CONGO	125,014	39.27	7.85	47.13	1.79	0.36	2.14	23.23	4.65	27.87
ETHIOPIA	151,066	55.55	11.11	66.66	3.05	0.61	3.66	39.70	7.94	47.64
LIBERIA	1,370	112.05	22.41	134.45	0.06	0.01	0.07	0.73	0.15	0.87
MALAWI	8,129	33.66	6.73	40.39	0.10	0.02	0.12	1.29	0.26	1.55
MALI	6,558	126.87	25.37	152.25	0.30	0.06	0.36	3.94	0.79	4.72
MOZAMBIQUE	4,051	54.10	10.82	64.92	0.08	0.02	0.10	1.04	0.21	1.24
NIGER	52,956	54.17	10.83	65.00	1.04	0.21	1.25	13.57	2.71	16.28
RWANDA	23,127	36.14	7.23	43.37	0.30	0.06	0.37	3.95	0.79	4.75
SOMALIA	5,342	52.48	10.50	62.98	0.10	0.02	0.12	1.33	0.27	1.59
SOUTH SUDAN	70,999	64.29	12.86	77.15	1.66	0.33	1.99	21.60	4.32	25.91

	Primary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
TOGO	2,956	146.15	29.23	175.38	0.16	0.03	0.19	2.04	0.41	2.45
UGANDA	300,462	52.94	10.59	63.53	5.79	1.16	6.95	75.26	15.05	90.31
UNITED REPUBLIC OF TANZANIA	48,442	82.54	16.51	99.04	1.45	0.29	1.75	18.91	3.78	22.70
LOWER MIDDLE INCOME										
EAST ASIA & PACIFIC										
INDONESIA	1,070	671.77	134.35	806.13	0.26	0.05	0.31	3.40	0.68	4.08
PAPUA NEW GUINEA	1,603	356.54	71.31	427.85	0.21	0.04	0.25	2.70	0.54	3.24
MIDDLE EAST & NORTH AFRICA										
DJIBOUTI	4,611	1,225.02	245.00	1,470.02	2.06	0.41	2.47	26.72	5.34	32.07
EGYPT	35,176	411.72	82.34	494.06	5.27	1.05	6.32	68.51	13.70	82.22
MOROCCO	1,127	717.97	143.59	861.57	0.29	0.06	0.35	3.83	0.77	4.59

	Primary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
SOUTH ASIA										
BANGLADESH	153,895	135.91	27.18	163.09	7.61	1.52	9.13	98.95	19.79	118.74
INDIA	33,766	236.79	47.36	284.15	2.91	0.58	3.49	37.83	7.57	45.39
PAKISTAN	266,948	160.30	32.06	192.36	15.57	3.11	18.69	202.44	40.49	242.93
SUB-SAHARAN AFRICA										
ANGOLA	11,625	133.40	26.68	160.08	0.56	0.11	0.68	7.34	1.47	8.80
CAMEROON	91,347	90.42	18.08	108.50	3.01	0.60	3.61	39.07	7.81	46.89
CONGO	6,835	270.26	54.05	324.31	0.67	0.13	0.81	8.74	1.75	10.49
GHANA	1,818	184.16	36.83	220.99	0.12	0.02	0.15	1.58	0.32	1.90
KENYA	98,802	190.53	38.11	228.64	6.85	1.37	8.22	89.06	17.81	106.87
MAURITANIA	18,223	138.68	27.74	166.42	0.92	0.18	1.10	11.96	2.39	14.35
NIGERIA	10,342	213.46	42.69	256.15	0.80	0.16	0.96	10.44	2.09	12.53
SENEGAL	3,446	188.08	37.62	225.69	0.24	0.05	0.28	3.07	0.61	3.68
SUDAN	208,009	146.49	29.30	175.79	11.09	2.22	13.31	144.16	28.83	172.99

	Primary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
ZAMBIA	10,956	79.12	15.82	94.94	0.32	0.06	0.38	4.10	0.82	4.92
ZIMBABWE	3,534	2,275.79	455.16	2,730.94	2.93	0.59	3.51	38.05	7.61	45.66
UPPER MIDDLE INCOME										
EAST ASIA & PACIFIC										
CHINA	49,515	3,266.75	653.35	3,920.10	58.86	11.77	70.64	765.23	153.05	918.28
MALAYSIA	14,228	1,985.69	397.14	2,382.83	10.28	2.06	12.34	133.66	26.73	160.39
THAILAND	14,283	1,954.19	390.84	2,345.03	10.16	2.03	12.19	132.05	26.41	158.46
EUROPE & CENTRAL ASIA										
ARMENIA	2,957	425.72	85.14	510.87	0.46	0.09	0.55	5.96	1.19	7.15
BULGARIA	3,505	1,778.60	355.72	2,134.32	2.27	0.45	2.72	29.49	5.90	35.39
RUSSIAN FEDERATION	7,149	2,367.36	473.47	2,840.84	6.16	1.23	7.39	80.06	16.01	96.07
SERBIA	4,351	2,886.39	577.28	3,463.66	4.57	0.91	5.48	59.41	11.88	71.29
TURKEY	624,245	1,804.83	360.97	2,165.80	410.00	82.00	492.00	5,330.04	1,066.01	6,396.05

	Primary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
LATIN AMERICA & CARIBBEAN										
ARGENTINA	3,664	2,864.90	572.98	3,437.88	3.82	0.76	4.58	49.66	9.93	59.60
BRAZIL	59,227	2,524.63	504.93	3,029.55	54.41	10.88	65.30	707.39	141.48	848.87
COLOMBIA	41,259	1,408.58	281.72	1,690.30	21.15	4.23	25.38	274.94	54.99	329.93
COSTA RICA	18,604	3,079.42	615.88	3,695.31	20.85	4.17	25.02	271.03	54.21	325.23
DOMINICAN REPUBLIC	-	1,462.88	292.58	1,755.46	-	-	-	-	-	-
ECUADOR	82,022	838.39	167.68	1,006.07	25.02	5.00	30.03	325.32	65.06	390.39
GUYANA	3,596	440.64	88.13	528.77	0.58	0.12	0.69	7.50	1.50	8.99
MEXICO	24,589	1,467.42	293.48	1,760.90	13.13	2.63	15.76	170.70	34.14	204.84
PERU	141,331	1,041.92	208.38	1,250.30	53.59	10.72	64.31	696.64	139.33	835.97
VENEZUELA (BOLIVARIAN REP. OF)	11,600	3,313.21	662.64	3,975.86	13.99	2.80	16.78	181.82	36.36	218.18
MIDDLE EAST & NORTH AFRICA										
ALGERIA	16,330	496.18	99.24	595.41	2.95	0.59	3.54	38.33	7.67	46.00

	Primary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
IRAN (ISLAMIC REPUBLIC OF)	159,513	863.77	172.75	1,036.52	50.14	10.03	60.17	651.83	130.37	782.19
IRAQ	40,457	278.88	55.78	334.66	4.11	0.82	4.93	53.38	10.68	64.05
JORDAN	136,329	886.12	177.22	1,063.35	43.96	8.79	52.75	571.51	114.30	685.81
LEBANON	204,982	534.55	106.91	641.45	39.87	7.97	47.85	518.37	103.67	622.04
LIBYA	4,506	1,217.68	243.54	1,461.21	2.00	0.40	2.40	25.96	5.19	31.15
SUB-SAHARAN AFRICA										
SOUTH AFRICA	45,206	1,102.92	220.58	1,323.51	18.14	3.63	21.77	235.87	47.17	283.05
Grand Total	3,631,378				952.92	190.58	1,143.51	12,388.00	2,477.60	14,865.60

Annex 5: Refugee Education Financing – Secondary

	Secondary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
LOW INCOME										
MIDDLE EAST & NORTH AFRICA										
SYRIAN ARAB REPUBLIC	4,171	392.86	137.50	530.36	1.50	0.53	2.03	19.54	6.84	26.38
YEMEN	23,476	118.83	41.59	160.42	2.24	0.78	3.03	29.13	10.20	39.33
SOUTH ASIA										
AFGHANISTAN	9,247	67.73	23.70	91.43	0.80	0.28	1.08	10.36	3.63	13.98
NEPAL	814	119.25	41.74	160.99	0.09	0.03	0.12	1.14	0.40	1.54
SUB-SAHARAN AFRICA										
BURKINA FASO	4,513	175.78	61.52	237.30	0.88	0.31	1.19	11.50	4.02	15.52

	Secondary level refugees	Unit cost (2020 US$)				Cohort-average annual cost (US$ millions)			Total cost (US$ millions)	
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
BURUNDI	14,800	90.07	31.52	121.60	1.35	0.47	1.82	17.55	6.14	23.69
CENTRAL AFRICAN REPUBLIC	921	81.31	28.46	109.76	0.09	0.03	0.12	1.20	0.42	1.62
CHAD	71,025	180.22	63.08	243.30	13.87	4.85	18.72	180.26	63.09	243.35
DEM. REP. OF THE CONGO	83,885	30.28	10.60	40.87	3.09	1.08	4.18	40.22	14.08	54.30
ETHIOPIA	130,945	120.33	42.12	162.44	15.86	5.55	21.41	206.15	72.15	278.30
LIBERIA	1,480	491.23	171.93	663.17	0.63	0.22	0.85	8.16	2.85	11.01
MALAWI	7,143	102.40	35.84	138.24	0.73	0.26	0.98	9.48	3.32	12.79
MALI	4,469	303.10	106.09	409.19	1.63	0.57	2.20	21.20	7.42	28.62
MOZAMBIQUE	3,500	205.24	71.84	277.08	0.72	0.25	0.98	9.42	3.30	12.72
NIGER	32,421	78.95	27.63	106.59	3.35	1.17	4.52	43.54	15.24	58.78
RWANDA	21,102	201.58	70.55	272.14	4.13	1.44	5.57	53.65	18.78	72.42
SOMALIA	4,476	452.93	158.52	611.45	2.09	0.73	2.82	27.18	9.51	36.70

	Secondary level refugees	Unit cost (2020 US$)				Cohort-average annual cost (US$ millions)			Total cost (US$ millions)	
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
SOUTH SUDAN	51,093	166.41	58.24	224.65	9.82	3.44	13.26	127.65	44.68	172.33
TOGO	1,426	73.65	25.78	99.43	0.17	0.06	0.22	2.16	0.76	2.92
UGANDA	236,321	150.89	52.81	203.70	38.53	13.49	52.02	500.89	175.31	676.20
UNITED REPUBLIC OF TANZANIA	40,179	189.40	66.29	255.69	7.91	2.77	10.68	102.80	35.98	138.78
LOWER MIDDLE INCOME										
EAST ASIA & PACIFIC										
INDONESIA	892	670.95	234.83	905.78	0.62	0.22	0.84	8.06	2.82	10.87
PAPUA NEW GUINEA	1,279	1,764.11	617.44	2,381.55	2.41	0.84	3.26	31.35	10.97	42.33
MIDDLE EAST & NORTH AFRICA										
DJIBOUTI	4,252	22.63	7.92	30.54	0.09	0.03	0.13	1.20	0.42	1.63
EGYPT	30,485	577.70	202.20	779.90	17.73	6.20	23.93	230.45	80.66	311.10
MOROCCO	918	1,183.94	414.38	1,598.32	1.14	0.40	1.54	14.88	5.21	20.08

	Secondary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
SOUTH ASIA										
BANGLADESH	117,938	2,573.96	900.89	3,474.85	334.41	117.04	451.45	4,347.31	1,521.56	5,868.87
INDIA	26,953	489.20	171.22	660.42	14.09	4.93	19.03	183.20	64.12	247.33
PAKISTAN	217,747	317.41	111.09	428.51	72.70	25.45	98.15	945.16	330.80	1,275.96
SUB-SAHARAN AFRICA										
ANGOLA	7,485	544.08	190.43	734.50	5.12	1.79	6.92	66.59	23.31	89.90
CAMEROON	60,136	286.14	100.15	386.29	21.27	7.45	28.72	276.57	96.80	373.37
CONGO	5,863	382.86	134.00	516.86	2.28	0.80	3.07	29.59	10.36	39.95
GHANA	1,640	443.90	155.36	599.26	0.71	0.25	0.96	9.26	3.24	12.49
KENYA	88,973	382.03	133.71	515.75	33.28	11.65	44.93	432.70	151.45	584.15
MAURITANIA	13,391	198.54	69.49	268.03	3.02	1.06	4.08	39.29	13.75	53.04
NIGERIA	7,184	528.63	185.02	713.65	4.51	1.58	6.08	58.57	20.50	79.07

	Secondary level refugees	Unit cost (2020 US$)				Cohort-average annual cost (US$ millions)			Total cost (US$ millions)	
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
SENEGAL	2,796	209.98	73.49	283.47	0.62	0.22	0.84	8.06	2.82	10.88
SUDAN	163,096	144.15	50.45	194.60	25.46	8.91	34.37	331.01	115.85	446.86
ZAMBIA	9,494	140.79	49.28	190.07	1.35	0.47	1.82	17.49	6.12	23.61
ZIMBABWE	3,212	1,800.47	630.17	2,430.64	5.63	1.97	7.60	73.14	25.60	98.74
UPPER MIDDLE INCOME										
EAST ASIA & PACIFIC										
CHINA	39,525	1,434.67	502.14	1,936.81	60.61	21.21	81.82	787.88	275.76	1,063.64
MALAYSIA	9,549	2,849.18	997.21	3,846.40	33.14	11.60	44.74	430.84	150.79	581.63
THAILAND	14,202	980.88	343.31	1,324.19	12.72	4.45	17.18	165.40	57.89	223.29
EUROPE & CENTRAL ASIA										
ARMENIA	2,361	673.60	235.76	909.36	1.70	0.59	2.29	22.09	7.73	29.83
BULGARIA	2,798	1,915.77	670.52	2,586.28	5.73	2.00	7.73	74.47	26.06	100.53

	Secondary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
RUSSIAN FEDERATION	5,706	2,135.55	747.44	2,882.99	13.02	4.56	17.58	169.32	59.26	228.58
SERBIA	3,473	731.90	256.17	988.07	2.72	0.95	3.67	35.32	12.36	47.68
TURKEY	420,056	1,489.80	521.43	2,011.23	760.76	266.27	1,027.03	9,889.90	3,461.46	13,351.36
LATIN AMERICA & CARIBBEAN										
ARGENTINA	7,445	3,954.29	1,384.00	5,338.29	17.37	6.08	23.45	225.83	79.04	304.87
BRAZIL	47,278	2,708.20	947.87	3,656.07	136.84	47.90	184.74	1,778.98	622.64	2,401.62
COLOMBIA	50,967	1,350.39	472.64	1,823.02	54.36	19.03	73.38	706.65	247.33	953.98
COSTA RICA	14,851	3,419.09	1,196.68	4,615.77	54.27	18.99	73.26	705.48	246.92	952.40
DOMINICAN REPUBLIC	1,053	1,759.19	615.72	2,374.91	0.52	0.18	0.70	6.75	2.36	9.11
ECUADOR	65,474	482.97	169.04	652.01	33.80	11.83	45.63	439.36	153.78	593.14
GUYANA	2,870	599.98	209.99	809.97	1.84	0.64	2.48	23.93	8.37	32.30
MEXICO	19,628	1,572.52	550.38	2,122.91	32.99	11.55	44.53	428.85	150.10	578.95
PERU	112,817	1,377.82	482.24	1,860.05	166.13	58.15	224.28	2,159.72	755.90	2,915.62

	Secondary level refugees	Unit cost (2020 US$)			Cohort-average annual cost (US$ millions)			Total cost (US$ millions)		
		Local student	Refugee Mark-up	Refugee student	Base	Refugee Mark-up	Total	Base	Refugee Mark-up	Total
VENEZUELA (BOLIVARIAN REP. OF)	16,910	2,739.42	958.80	3,698.21	32.98	11.54	44.53	428.79	150.08	578.86
MIDDLE EAST & NORTH AFRICA										
ALGERIA	13,035	772.31	270.31	1,042.62	10.76	3.77	14.53	139.87	48.96	188.83
IRAN (ISLAMIC REPUBLIC OF)	127,331	1,310.65	458.73	1,769.38	178.37	62.43	240.79	2,318.75	811.56	3,130.31
IRAQ	29,928	868.80	304.08	1,172.87	29.41	10.29	39.71	382.35	133.82	516.17
JORDAN	102,120	926.56	324.30	1,250.86	106.03	37.11	143.14	1,378.35	482.42	1,860.77
LEBANON	139,552	1,489.82	521.44	2,011.26	250.49	87.67	338.16	3,256.36	1,139.73	4,396.09
LIBYA	4,805	1,039.40	363.79	1,403.18	4.35	1.52	5.87	56.52	19.78	76.30
SUB-SAHARAN AFRICA										
SOUTH AFRICA	36,086	1,328.80	465.08	1,793.87	51.25	17.94	69.19	666.23	233.18	899.41
Grand Total	2,800,961				2,708.08	947.83	3,655.91	35,205.03	12,321.76	47,526.79

Annex 6: Refugee Education Financing – Total

	Average unit cost (2020 US$)			Cohort-average annual unit cost (US$ millions)			Total cost (US$ millions)		
	Local student	Refugee Mark-up	Refugee student	Base	Refugee-Mark-up	Total	Base	Refugee-Mark-up	Total
LOW INCOME									
MIDDLE EAST & NORTH AFRICA									
SYRIAN ARAB REPUBLIC	444.16	113.52	557.67	2.25	0.67	2.93	29.30	8.77	38.08
YEMEN	153.87	44.05	197.93	3.59	1.05	4.65	46.72	13.68	60.40
SOUTH ASIA									
AFGHANISTAN	65.92	19.81	85.73	1.14	0.35	1.49	14.85	4.51	19.36
NEPAL	130.61	33.81	164.42	0.13	0.04	0.17	1.68	0.50	2.18
SUB-SAHARAN AFRICA									
BURKINA FASO	138.15	51.03	189.18	1.13	0.36	1.49	14.73	4.66	19.40

	Average unit cost (2020 US$)			Cohort-average annual unit cost (US$ millions)			Total cost (US$ millions)		
	Local student	Refugee Mark-up	Refugee student	Base	Refugee-Mark-up	Total	Base	Refugee-Mark-up	Total
BURUNDI	65.19	23.24	88.43	1.64	0.53	2.18	21.38	6.90	28.28
CENTRAL AFRICAN REPUBLIC	44.29	28.64	72.93	0.10	0.03	0.14	1.36	0.45	1.81
CHAD	109.48	51.52	161.00	15.91	5.26	21.17	206.89	68.36	275.26
DEM. REP. OF THE CONGO	37.06	7.74	44.79	4.96	1.45	6.42	64.51	18.89	83.40
ETHIOPIA	84.53	30.60	115.13	19.05	6.18	25.23	247.66	80.37	328.04
LIBERIA	296.84	75.41	372.25	0.69	0.23	0.92	8.92	3.01	11.92
MALAWI	64.01	25.04	89.05	0.83	0.28	1.11	10.83	3.58	14.41
MALI	195.29	99.41	294.70	1.95	0.63	2.58	25.32	8.24	33.55
MOZAMBIQUE	119.73	51.00	170.73	0.81	0.27	1.08	10.50	3.51	14.02
NIGER	64.22	25.68	89.90	4.44	1.39	5.83	57.73	18.05	75.78
RWANDA	109.62	44.65	154.27	4.44	1.51	5.95	57.78	19.59	77.38
SOMALIA	221.19	116.69	337.88	2.20	0.75	2.95	28.57	9.79	38.36
SOUTH SUDAN	104.96	52.10	157.05	11.56	3.78	15.34	150.24	49.15	199.39

	Average unit cost (2020 US$)			Cohort-average annual unit cost (US$ millions)			Total cost (US$ millions)		
	Local student	Refugee Mark-up	Refugee student	Base	Refugee-Mark-up	Total	Base	Refugee-Mark-up	Total
TOGO	129.38	4.38	133.76	0.33	0.09	0.42	4.30	1.18	5.48
UGANDA	93.74	42.91	136.65	44.58	14.68	59.27	579.59	190.89	770.48
UNITED REPUBLIC OF TANZANIA	129.01	50.58	179.59	9.43	3.07	12.50	122.58	39.90	162.48
LOWER MIDDLE INCOME									
EAST ASIA & PACIFIC									
INDONESIA	688.22	184.51	872.73	0.89	0.27	1.16	11.61	3.52	15.13
PAPUA NEW GUINEA	937.44	493.78	1,431.22	2.63	0.89	3.52	34.18	11.53	45.71
MIDDLE EAST & NORTH AFRICA									
DJIBOUTI	723.51	86.71	810.22	2.24	0.46	2.70	29.15	5.95	35.11
EGYPT	492.59	152.17	644.76	23.24	7.30	30.53	302.10	94.84	396.94
MOROCCO	927.69	323.83	1,251.52	1.45	0.46	1.91	18.88	6.00	24.88

	Average unit cost (2020 US$)			Cohort-average annual unit cost (US$ millions)			Total cost (US$ millions)		
	Local student	Refugee Mark-up	Refugee student	Base	Refugee-Mark-up	Total	Base	Refugee-Mark-up	Total
SOUTH ASIA									
BANGLADESH	1,106.00	773.86	1,879.86	342.37	118.62	460.99	4,450.79	1,542.05	5,992.84
INDIA	345.36	136.31	481.67	17.14	5.53	22.67	222.76	71.95	294.72
PAKISTAN	228.99	86.54	315.53	88.99	28.67	117.66	1,156.87	372.72	1,529.59
SUB-SAHARAN AFRICA									
ANGOLA	283.13	197.91	481.04	5.71	1.91	7.62	74.26	24.83	99.09
CAMEROON	163.50	99.69	263.19	24.42	8.07	32.49	317.43	104.89	422.32
CONGO	324.64	101.46	426.10	2.98	0.94	3.92	38.73	12.17	50.90
GHANA	301.86	106.44	408.30	0.84	0.27	1.11	10.91	3.57	14.48
KENYA	278.56	93.57	372.14	40.45	13.07	53.52	525.84	169.88	695.72
MAURITANIA	165.46	58.04	223.50	3.98	1.25	5.23	51.80	16.23	68.02
NIGERIA	336.81	170.87	507.68	5.35	1.74	7.09	69.49	22.66	92.16
SENEGAL	201.82	57.84	259.65	0.87	0.27	1.13	11.27	3.46	14.72
SUDAN	149.31	39.88	189.19	37.06	11.21	48.27	481.77	145.70	627.47

	Average unit cost (2020 US$)			Cohort-average annual unit cost (US$ millions)			Total cost (US$ millions)		
	Local student	Refugee Mark-up	Refugee student	Base	Refugee-Mark-up	Total	Base	Refugee-Mark-up	Total
ZAMBIA	107.35	36.32	143.67	1.68	0.54	2.21	21.78	6.97	28.75
ZIMBABWE	2,122.45	518.63	2,641.08	8.69	2.58	11.26	112.93	33.48	146.41
UPPER MIDDLE INCOME									
EAST ASIA & PACIFIC									
CHINA	2,605.60	388.28	2,993.87	122.17	33.40	155.57	1,588.16	434.20	2,022.36
MALAYSIA	2,355.05	878.16	3,233.21	43.89	13.73	57.62	570.61	178.47	749.08
THAILAND	1,551.56	366.29	1,917.85	23.35	6.56	29.90	303.49	85.23	388.72
EUROPE & CENTRAL ASIA									
ARMENIA	537.26	187.25	724.51	2.18	0.69	2.87	28.32	8.97	37.29
BULGARIA	1,879.58	530.01	2,409.60	8.10	2.47	10.58	105.31	32.17	137.48
RUSSIAN FEDERATION	2,333.43	589.10	2,922.53	19.47	5.83	25.30	253.05	75.84	328.88
SERBIA	2,084.57	192.64	2,277.21	7.50	1.90	9.39	97.45	24.66	122.11
TURKEY	1,738.65	392.18	2,130.83	1,189.54	351.16	1,540.70	15,464.04	4,565.03	20,029.07

	Average unit cost (2020 US$)			Cohort-average annual unit cost (US$ millions)			Total cost (US$ millions)		
	Local student	Refugee Mark-up	Refugee student	Base	Refugee-Mark-up	Total	Base	Refugee-Mark-up	Total
LATIN AMERICA & CARIBBEAN									
ARGENTINA	3,601.72	475.11	4,076.82	21.37	6.87	28.24	277.77	89.32	367.09
BRAZIL	2,663.45	749.20	3,412.65	193.75	59.16	252.91	2,518.76	769.10	3,287.87
COLOMBIA	1,407.97	366.90	1,774.88	76.48	23.40	99.88	994.18	304.25	1,298.44
COSTA RICA	3,295.77	946.35	4,242.12	76.07	23.31	99.38	988.92	303.03	1,291.96
DOMINICAN REPUBLIC	1,759.19	(3.73)	1,755.46	0.52	0.18	0.70	6.75	2.36	9.11
ECUADOR	715.34	131.88	847.21	59.97	17.01	76.98	779.58	221.13	1,000.72
GUYANA	516.58	166.51	683.09	2.44	0.76	3.21	31.77	9.93	41.69
MEXICO	1,547.46	435.02	1,982.48	46.72	14.26	60.99	607.37	185.44	792.81
PERU	1,204.89	382.24	1,587.13	222.17	69.24	291.42	2,888.27	900.14	3,788.40
VENEZUELA (BOLIVARIAN REP. OF)	3,057.62	875.57	3,933.19	47.61	14.44	62.05	618.93	187.72	806.65
MIDDLE EAST & NORTH AFRICA									

	Average unit cost (2020 US$)			Cohort-average annual unit cost (US$ millions)			Total cost (US$ millions)		
	Local student	Refugee Mark-up	Refugee student	Base	Refugee-Mark-up	Total	Base	Refugee-Mark-up	Total
ALGERIA	620.98	214.65	835.63	13.84	4.38	18.22	179.96	56.89	236.85
IRAN (ISLAMIC REPUBLIC OF)	1,067.29	364.18	1,431.47	230.80	72.81	303.61	3,000.43	946.52	3,946.95
IRAQ	515.10	266.55	781.66	33.71	11.14	44.85	438.17	144.87	583.04
JORDAN	925.06	259.29	1,184.36	152.00	46.21	198.21	1,976.03	600.75	2,576.78
LEBANON	901.04	496.34	1,397.37	292.19	95.93	388.12	3,798.47	1,247.05	5,045.52
LIBYA	1,159.80	302.69	1,462.49	6.44	1.94	8.37	83.67	25.16	108.82
SUB-SAHARAN AFRICA									
SOUTH AFRICA	1,222.75	368.21	1,590.96	70.22	21.69	91.92	912.91	282.02	1,194.92
Grand Total				3,704.65	1,145.13	4,849.77	48,160.39	14,886.65	63,047.03

Annex 7: Case study on the education of Palestinian refugees in UNRWA schools

Box 5: Cost-effectiveness in refugee education – the case of UNRWA schools in the West Bank and Gaza and Jordan

The United Nations Relief and Works Agency for Palestine Refugees (UNRWA) has been operational for nearly 70 years providing quality education services for Palestinian refugees in the West Bank and Gaza, Jordan, the Syrian Arabic Republic and Lebanon. Over 5.6 million Palestinian refugees fall within the UNRWA mandate. UNRWA schools enroll over 526,000 refugee students each year, managing 711 elementary schools with 22,475 educational staff.

However, for historical reasons, UNRWA is almost entirely dependent on voluntary contributions from a core group of donors. As such, its financing outlook is uncertain each year leading to difficulties in resource mobilization and long-term planning. It is further highly susceptible to changes in global economic dynamics. In 2019, UNRWA faced a budget shortfall of over US$200 million as a result of a funding cut from its largest single donor.

Despite severe funding shortages and political instability, coupled with refugee students that have suffered trauma as a result of occupation, conflict and displacement, UNRWA schools tend to outperform host country public schools. In the West Bank and Gaza and Jordan, UNRWA school children scored an average of a quarter of a standard deviation higher in international assessments than public school children, implying an advantage of almost a year of learning. Further, these education outcomes were achieved at lower unit costs than public education systems. For instance, the cost per student in UNRWA schools in 2009 was 20 percent lower than that in public schools in Jordan. In 2019, the annual cost per UNRWA elementary student was US$841.50.

There are important lessons to be learned here as host countries transition to inclusive national education systems. Abdul-Hamid et al. (2016) identify these key lessons in the management and operationalization of UNRWA schools that can be scaled up for improved integrated education systems. UNRWA recruits high quality teachers, provides them with a rigorous two-year training after they are hired, and then continuous professional training with school leadership mentorship and support. As a result, teachers tend to be more satisfied with their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jobs, time on task is higher and students are less likely to be off-task. UNRWA has a well-defined and regularly implemented accountability system. Students are assessed frequently, and feedback is given regularly on tests and quizzes. Students are encouraged to participate in class through questions and activities more frequently than just being lectured at. Finally, UNRWA successfully fosters community participation in education.

UNRWA schools provide a model example and strong foundational lessons for effective emergency responsiveness in refugee education, notwithstanding its operations as a parallel system. While these lessons will have to be adapted to different contexts given the situational realities in different host countries, they certainly provide the building blocks for cost-effective, quality education service delivery in resource-constrained environments.

Source: Abdul-Hamid, Husein, Harry Anthony Patrinos, Joel Reyes, Jo Kelcey and Andrea Diaz Varela. 2016. *Learning in the face of adversity – the UNRWA education programme for Palestinian refugees.* Washington, D.C: World Bank.

Annex 8: List of World Bank approved projects for the IDA Regional Sub-Window for Refugees

Country	Project Name	Total (US$ millions)[85]	RSW (US$ millions)
Bangladesh	Additional Financing for Health Sector Support Project	50.0	41.7
	Emergency Multi-Sector Rohingya Crisis Response Project	165.0	137.5
	Additional Financing for Reaching Out of School Children II	25.0	20.8
	Health and Gender Support Project for Cox's Bazar district	150.0	125.0
	Emergency Multi-Sector Rohingya Crisis Response Project Additional Financing	100.0	83.3
	Safety Net Systems for the Poorest Additional Financing	100.0	83.3
Burkina Faso	Second Additional Financing to the Social Safety Net Project: Scale-Up & Responding to the needs of Refugees and Host Communities	100.0	14.0
Burundi	Burundi North-East Region Refugee and Host Community Support Project	55.0	15.0

85 Representing approved projects as of May 2020.

Country	Project Name	Total (US$ millions)[85]	RSW (US$ millions)
Cameroon	CAMEROON Education Reform Support Project	130.0	30.0
	Community Development Programme Support Project Response to Forced Displacement	48.0	40.0
	Social Safety Nets for Crisis Response	60.0	30.0
	Health System Performance Reinforcement Project - Additional Financing	36.0	30.0
Chad	Chad - Refugees and Host Communities Support Project	60.0	50.0
Congo, Republic of	LISUNGI Safety Nets System Project II	22.0	18.3
Djibouti	Expanding Opportunities for Learning	15.0	5.0
	Djibouti Integrated Slum Upgrading Project	20.0	5.0
	Improving Health Sector Performance Project Second Additional Financing	6.0	5.0
	Integrated Cash Transfer and Human Capital Project	15.0	5.0
DRC	STEP Additional Financing II	445.0	220.0
Ethiopia	Ethiopia Economic Opportunities Programme	202.0	166.7
Mauritania	Mauritania Water and Sanitation Sectoral Project	40.0	10.0
	Health System Support Additional Financing	18.0	15.0
	Decentralization & Productive Cities	50.0	20.0
	Mauritania Social Safety Net System Project II	45.0	18.0

Country	Project Name	Total (US$ millions)[85]	RSW (US$ millions)
Niger	Niger Refugees and Host Communities Support Project	80.0	50.0
	Niger Learning Improvement for Results in Education Project	140.0	40.0
Pakistan	Strengthening Institutions for Refugee Administration Project	50.0	41.7
	Balochistan Livelihoods and Entrepreneurship Project	35.0	29.2
	Khyber Pakhtunkhwa Human Capital Investment Project	150.0	125.0
	Balochistan Human Capital Investment Project	36.0	30.0
Rwanda	Socio-economic Inclusion of Refugees & Host Communities in Rwanda Project	60.0	50.0
Uganda	Uganda Support to Municipal Infrastructure Development Programme - Additional Financing	360.0	50.0
	Integrated Water Management and Development Project	280.0	58.0
	Development Response to Displacement Impacts Project	150.0	125.0
	UG Investing in Forests and PAs Project	150.0	58.0
		3448.0	1845.5


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