

LEBANON: SUPPORT TO RACE II: TECHNICAL ASSESSMENT

1. **The Bank operation will support the Government of Lebanon's Reaching All Children with Education (RACE) program.** The technical assessment was conducted during the preparation of the operation, and consisted of an analysis of all program documents, reports, and related studies, and was complemented with interviews of key stakeholders throughout preparation. The assessment consists of three sections:

- The first describes the overall RACE program, providing an evaluation of the proposed technical arrangements, and identifies some key areas for improvement.
- The second outlines the Program's expenditure framework.
- The third conducts an economic analysis of the proposed Program.

2. **Launched in 2013, this second phase of RACE covers the period 2016-2021.** Following on the successful completion of RACE's first phase, the new operation coincides with the second phase of RACE (2016-2021), and is estimated to cost US\$ 2.1 billion. The PforR operation will be aligned with these dates, and therefore consists of disbursement-linked indicators spread across five years.

3. **Overall, the technical assessment finds that the RACE program has been satisfactorily designed.** The program incorporates many lessons identified from phase 1, and the selection of interventions to achieve stated objectives is largely grounded in evidence from both within Lebanon and globally. Still, the assessment identified some opportunities for further improving the program, specifically with regards to the institutional strengthening of the MEHE and other national actors.

4. **The selection of the DLIs within the RACE program follows an internal logic for incentivizing the resolution of critical system bottlenecks, and moving the education system along the results chain.** As a result of the technical assessment, eight disbursement-linked indicators have been proposed. The first aims to incentivize the enrolment of children into the education system. The second strives to keep them there, and encourage them to progress through the system, all the way through to secondary education. The third rewards the degree to which the system is tracking the learning results of students. Indicators four and five then strive to respond to the diagnostic situations that have been detected in DLI three. Finally, DLIs 6, 7, and 8 are those that seek to strengthen the MEHE system as a whole, to ensure that the gains made are sustainable and lasting over time.

Section I: RACE II, and the Program Description

5. **The RACE II program aims to achieve 10 outputs that are structured around three pillars:** i) Access, ii) Quality, and iii) Systems Strengthening. Each of these are described below. Within each pillar, the Bank-supported Program aims to support the achievement of specific output areas¹. Table X presents the overall RACE program, and situates some of the key elements being supported through the use of Disbursement-Linked Indicators.

¹ It is important to note that the RACE program, and the Bank-supported Program through the PforR lending instrument, are the same. [Imad: should we be using capital P or small p program?]

6. **The results framework for the overall RACE program was developed in a consultative fashion, under the leadership of MEHE and the RACE Program Management Team.** Working groups were established per pillar, with MEHE being represented and leading each, with a member of the donor community appointed to co-lead each working group.

PILLAR 1: EQUITABLE ACCESS

7. The first pillar aims to achieve “enhanced access to, and demand from, children and their caregivers; for equitable formal or non-formal education pathways.” Within this pillar, there are two outputs that activities will contribute to:

- A.1- Girls, boys, and their caregivers are provided with the necessary support to increase their demand for certified formal education or non-formal learning opportunities
- A.2- Girls and boys are equitably provided with increased access to appropriately equipped public schools and non-formal learning spaces

8. **Activities across all of these output areas are likely to contribute toward the proposed disbursement-linked indicator under pillar 1: *Proportion of school aged children (3-18) enrolled in formal and non-formal education (disaggregated)*.** For the purposes of the assessment, these activities consist of supply side activities such as construction and rehabilitation, as well as demand side activities. These will be considered separately below.

9. **On the demand side, activities under the Program are largely attributable to those that would be carried out directly by international partners such as UNICEF.** Under the guidance of MEHE, local and international organizations will intensify community outreach activities to vulnerable communities and refugees to provide them with the necessary information about opportunities for formal and non-formal schooling. In order to increase demand, the Program also plans to decrease education costs for households by subsidizing school tuition fees, distributing textbooks and learning materials, and facilitating transportation to schools. Cash Transfers (CCTs) are also considered in order to decrease, for households, the opportunity costs of sending children to school. For example, UNICEF is planning a Cash Transfer program aimed at families with school age children to encourage enrollment and attendance.

10. **On the supply side, the Program proposes to carry out a number of interventions. MEHE will rehabilitate and/or perform extensions for a number of schools.** This will include the addition of new classrooms, updating schools to conform with Lebanese national WASH (Water, Sanitation and Hygiene) standards, but also efforts to ensure that schools are more inclusive, particularly for students with disabilities. MEHE will also construct new schools in regions where it is necessary. Furthermore, schools will also be equipped according to MEHE’s Effective School Profile (ESP). Equipment will include desks, chairs, and boards; in addition to ICT equipment and laboratories.

Analytical Underpinnings of Pillar 1

11. **The assessment concurred with the prioritization of these access-linked activities to increase supply under the Program for the following reasons.** Investment in infrastructure is a priority of MEHE and responds to an urgent need. Statistics provided by the D-RASATI survey (2011) and recently updated under the Second Education Development Project (EDP II, 2014) show that among the 1,275 existing public schools, 75 percent need repairs. Of these, 25 percent need major repairs and among

these, 40 specific schools are considered to be structurally unsafe. In addition, a large number of public schools are overcrowded. This over-crowding occurs despite the fact that total capacity in the Lebanese public school system exceeds current enrollment.² This is due in part to the fact that some public educational infrastructure is located in areas with student demand that exceeds supply, while other infrastructure is located in areas with student demand that is below available supply. Some of this mismatch between where the schools are located and where the children live can and is being addressed through transportation (bussing), however, there is a clear need to invest in education infrastructure in some locations in Lebanon where student demand exceeds available supply and bussing is not practical.

12. **The assessment also concurred with the prioritization of the demand-side activities.** First, a recent survey confirmed that the greater the distance to school, the less likely children are to be enrolled; hence, support to transportation will make a difference (Alsharabati, Lahoud, and Nammour, 2016). Second, working from recent evidence from the Lebanese context, it's clear that the cash transfer program has had a meaningful impact on the refugee populations. A recent impact evaluation of UNHCR's initiative to distribute some of its aid to refugees through cash transfers starting in 2013-2014 showed that families receiving cash assistance were half as likely to send their children to work instead of to school (Masterson, 2016). Money was spent to meet basic needs, with no evidence of funds used for luxury or temptation goods. What is more, the quasi-experimental study showed no evidence of perverse incentives such as pull effects of crowding in ineligible recipients or otherwise artificially increasing the number of refugees (Masterson, 2016).

PILLAR 2: ENHANCED QUALITY

13. The second pillar strives for "enhanced quality of education services and learning environments provided, to ensure relevant, age-appropriate learning outcomes for children." Specifically, activities would contribute to the following four output areas:

- B.1- Teachers and educational personnel have improved capacities to provide learner-centered teaching in formal schools or non-formal spaces
- B.2- Educational personnel at the school-level are capacitated and empowered to proactively provide safe and enabling learning environments
- B.3- Communities are capacitated to actively engage in the promotion of learning and well-being of students and children in learning spaces
- B.4- Appropriate systems are effectively deployed to improve the monitoring and evaluation of teaching quality, learning outcomes, and learning environments

14. **Within each of these output areas, specific disbursement-linked indicators have been selected from RACE2 that relate to the Bank's Program.** To achieve them, the Program proposes to support a number of interventions and activities that will contribute to these results, including training for school leaders and teachers, grants to schools to strengthen school-based management, activating a network of

² Total capacity is calculated at 437,895 using 2.8 m2 per student, while total enrollment in the first shift is about 315,000. As of May 2016, MEHE is in the process of updating the physical infrastructure assessment.

community liaisons, and undertaking a number of evaluation and learning assessment activities to help teachers detect more precisely which students are struggling with what parts of the curriculum.

15. **With regards to training activities, the MEHE and international partners would support the training of teachers and educational personnel on learner-centered teaching, classroom management, and differentiating learning, including for those with special needs.** Much of this training and support can start immediately, building on existing activities supported under RACE 1 and related system support. Teachers and educational personnel will be trained on effective instructional techniques, student assessment and providing psychosocial support for learners, with particular attention for fostering diversity and gender equity. Trainings will be accompanied by monitoring and guidance from counselors who would visit the schools regularly to observe teachers and provide feedback. Other activities will include the development and distribution of teaching material including teaching guides. In the longer term, these trainings will be linked to the development of new curriculum, with training and support materials based on the new student learning standards expected to be developed as a part of the new curriculum.

16. **For school grants, the Program would support the training of school principals and administrators on the identification of school needs and the preparation of school improvement plans that meet both the schools' immediate and medium-term needs.** This would build on existing school grants programs run by MEHE and the RACE PMU. Financing in the form of grants would be provided to schools to achieve their school improvement plans. Particular focus would be on schools working to provide a safe and inclusive learning environment, in addition to schools working on improving student retention and learning achievements and outcomes of students.

Analytical Underpinnings of Pillar 2

17. **The assessment concurred with the emphasis placed on training, classroom observation and school grants.** However, it was cautioned that training activities would be most effective if paired with continuous monitoring and guidance provided by both the school-based managed (school principal, subject coordinators, etc.) and by counselors from DOPS. While training globally is often ineffective at changing teacher practices and improving student learning outcomes (e.g. Bruns and Luque, 2015), it can be effective at both: "...the intervention category which most commonly produces large improvements in student learning is pedagogical interventions that match teaching to students' learning..." (Evans and Popova, 2015). Classroom observations and teacher performance assessment should be based on clear and specific criteria set by the teacher standards developed by MEHE. Following evidence from, among others, Papay et al. 2016, teacher peer-learning should be encouraged by pairing identified high-performing teachers with teachers in need of assistance to meet and work on specific skill areas identified from classroom observations. Coaching-based training interventions can also be effective, while computer and other ICT classroom aides are expected to support improved instruction (following Conn 2014, Bruns and Luque 2015 and Evans and Popova 2015), which will be linked in later years to the newly developed curriculum.

18. **The assessment also concurred with the need for community liaisons.** There is ample evidence that, especially within the refugee communities, child protection issues are being insufficiently addressed. A recent review of the RACE program identified reducing bullying and violence in schools as a critical first

step toward better child protection (Jalbout, 2015). The bullying takes many forms, including for older children that are placed in classrooms with younger children. Discrimination against Syrian students has been documented in a number of cases. The daily harassment is an important driver behind Syrian students dropping out of school (Shuayb, 2014). Bridging the community-school divide, through appointing actors to take on the responsibility of personalized follow-up of Syrian students on behalf of school administrators, could go a long way in reducing this central risk of dropout. Community liaisons would also be charged with improving relations with teachers, and would follow-up on teacher requests, such as homework, areas previously identified as correlated with keeping Syrian kids from dropping out of Lebanese schools (Alsharabati et al, 2016). The MEHE and other actors such as the UN agencies have committed to redoubling their efforts in this area.

19. **Finally, without proper information as to the extent to which students are actually learning, an objective assessment of the quality of the education services is not possible.** Under RACE 2, MEHE will develop a national learning assessment framework, which will focus on formative assessments at the school-level. Particular attention will be given for Grade 2 to detect early difficulties in basic reading, writing, and numeracy skills; and for Grade 6 to detect difficulties in the sciences, mathematics, and language subjects.

PILLAR 3: STRENGTHENED SYSTEMS

20. The third pillar is focused on “enhanced governance and managerial capacities of MEHE and its institutions to plan, budget, deliver, monitor, and evaluate education services.” This pillar aims to achieve the following outputs:

- C.1- MEHE and its institutions manage an effective and accurate Education Management Information System (EMIS)
- C.2- A revised, interactive curriculum is implemented in schools and learning spaces to improve quality learning, life-skills and employability for children and youth
- C.3- Appropriate policies are endorsed and implemented to regulate education programs and services, strengthen school management, and professionalize teaching services, in formal schools and learning spaces
- C.4- MEHE and its institutions at central and regional level are strengthened to lead and coordinate the planning, implementation, and evaluation of the RACE II Strategy

21. **These outputs will be achieved through the following activities:** rolling out new education management information system, substantial institutional capacity building, curricular reform, and policy work that includes reducing all barriers to registering for education services.

22. **One of the main challenges faced during the implementation of the first phase of RACE is the unavailability of timely and reliable data, structured data collection systems, and systems-capacity to analyze data to impact policy decisions or programmatic interventions.** There are currently multiple data collection mechanisms working in parallel, in addition to long delays in the ability for MEHE or CERD to collect and use school-level data for decision-making. As a result, under RACE 2, MEHE will develop a data management framework detailing how data about schools, students, teachers, and other personnel is

collected, validated, categorized, and used by different stakeholders. MEHE will also deploy an EMIS in order to support the timely collection of the data, so that decision-making at both the school and the central MEHE and CERD levels is based on accurate and updated data.

23. **The current Lebanese formal curriculum dates back from 1997 and has not seen any major changes since that date.** It is strongly centered on specific concepts or information that students should know, rather than on competencies and skills that learners should acquire. MEHE and CERD are committed to revise the curriculum under RACE 2 so that it is competency-based, learner-centered, and relevant for the 21st century needs of the workforce. In addition to the formal curriculum, MEHE will develop standardized non-formal education programs that could work as pathways to formal education, particularly for children who have been out-of-school for a period of time.

24. **In order to ensure equitable access to educational opportunities and to improve the quality of education services and learning environments, MEHE will develop and endorse appropriate policies and implement them under RACE 2.** Particularly, MEHE will remove legal and documentation barriers for refugees to enroll in schools and register for exams. MEHE will also recognize learning achievement through certification of formal and non-formal schooling. MEHE will also develop and endorse frameworks for child protection, health counseling, and special needs education to ensure that formal and non-formal learning spaces are safe and inclusive spaces. In terms of monitoring of teaching and learning, MEHE will endorse the effective teacher standards and will develop a teacher performance management system in order to effectively monitor, evaluate, and improve teacher performance. A national learning assessment framework will also be developed to measure learning outcomes. Finally, a framework for school-based management will also be developed and endorsed to empower school leadership and promote school autonomy.

25. **Finally, in order to support these development efforts, MEHE and CERD will need to have their capacity strengthened in terms of staffing to plan, budget, deliver, monitor, and evaluate education services.** The Program will support the identification of the staffing needs at both MEHE and CERD, and the appointment of civil servants at critical positions in these institutions. Performance standards will be set for staff and disseminated in order to evaluate staff performance and address capacity development issues. Of particular focus are roles in procurement, financial management, strategic planning, and monitoring and evaluation.

Analytical Underpinnings of Pillar 3

26. **With regards to system monitoring, the assessment concluded that supporting the development and incentivizing the completion of a proper EMIS may be where the greatest contribution the Program makes to the overall RACE program lies.** As described above, due to the absence of timely accurate data, it is excessively difficult for the MEHE to properly allocate resources to those schools most in need, or otherwise direct efforts of the Ministry to those that would benefit the most. Timely data will go a long way in rendering current spending more efficient and better targeted.

Section II: Program Expenditure Framework

27. **Due to factors exogenous to the Ministry of Education, Lebanon's education sector operates with little budget planning.** The capacity for developing a Medium-Term Expenditure Framework is weak. When sectoral plans are produced, or when the Ministry of Finance issues a Medium-Term Financing Framework, neither are binding, nor adhered to. Aside from the absence of a planning culture within the administration, perhaps most important is the absence of an approved budget. The last budget to be approved by parliament was in 2006; since then, the public administration has been functioning on temporary annual budgets, with little view as to what the next year will bring.

28. **Still, a comprehensive overview of the expenditure framework is possible, working from various sources.** First, working from estimates for macro trends such as GDP growth, demographics, and other trends, and using recent analyses conducted through the World Bank's Public Expenditure Review and the recent costing exercise for the RACE program, some scenarios have been developed to estimate resource availability across the short, medium, and long term.

29. **The short-term financial conditions appear sound, though weakening toward the medium-term.** The last IMF Article IV consultation concluded estimated overall GDP growth to continue through until 2020, leading to a slight increase in total fiscal revenue (excluding grants). Correspondingly, total public expenditure is projected to rise slightly in the coming years, from and estimated 28.7 percent of GDP in 2014, to 30.8 percent of GDP by 2020 (IMF, 2015). Although precise estimates aren't available, it is expected that the education sector would benefit from this slight increase in expenditure, given in preponderance in the budget.

30. **With regards to the RACE program specifically, it is expected that the resource envelop required to cover the planned activities through 2017 will be met.** Support from the international community in the context of the refugee crisis has been robust, and has met expectations. Recent pledging conferences in London and Washington have resulted in substantial resources being dedicated to Lebanon's education sector. In London, donors pledged to support RACE with a total of US\$ 2.11 billion, entirely in grant resources. In addition, the WB has authorized on an exceptional basis US\$ 200M to be financed by the International Development Association (IDA) for Jordan and Lebanon. It is expected that about US\$ 100M of these concessional funds would be available to support RACE 2.

31. **Although the allocation of domestic financing to the education sector looks promising, and has been growing in real terms (figure 1), it has not kept pace with overall growth (figure 2).** This has resulted in a reduction in both the overall percentage of GDP allocated to education, as well as the share of public financing that goes to the sector.

Figure 1. MEHE Actual Expenditures (US\$ M)

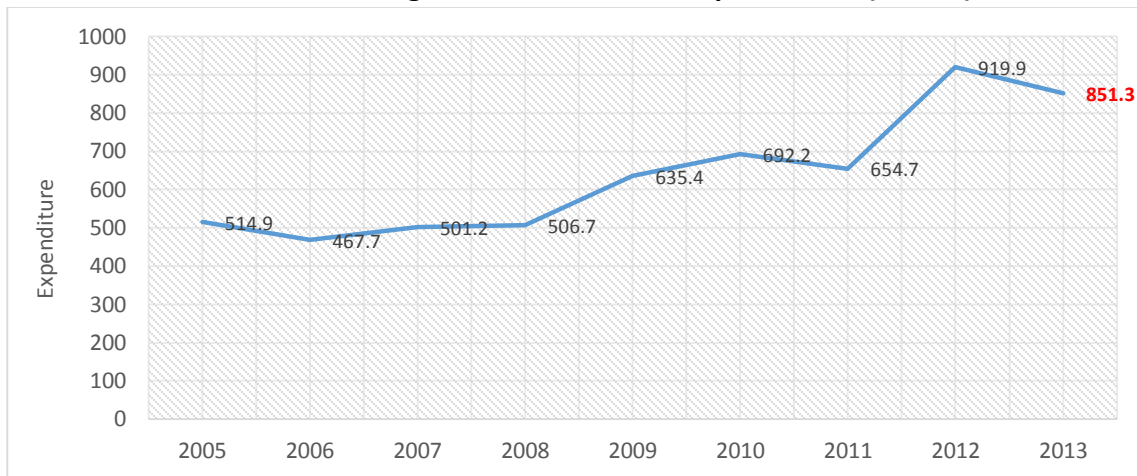
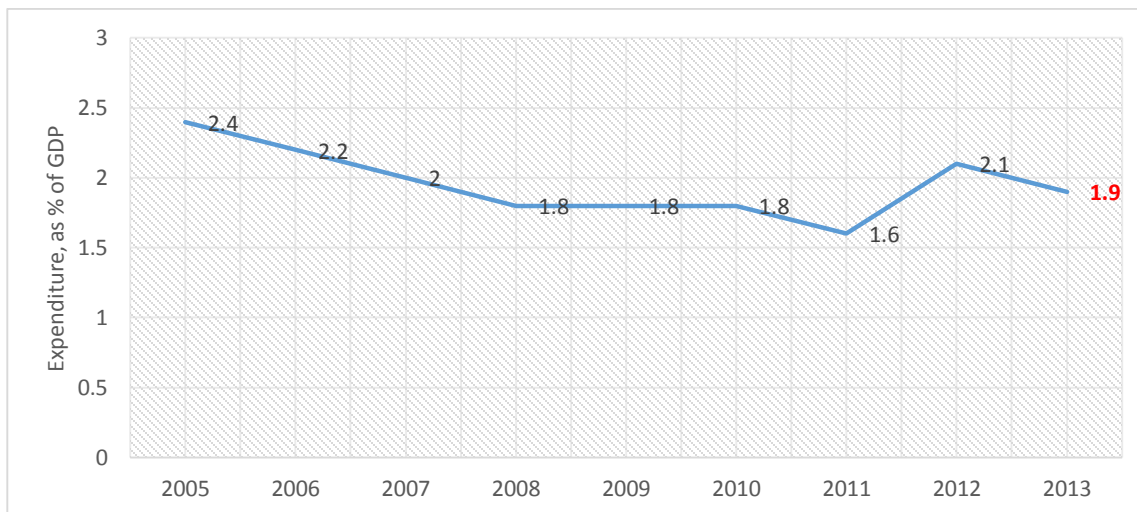


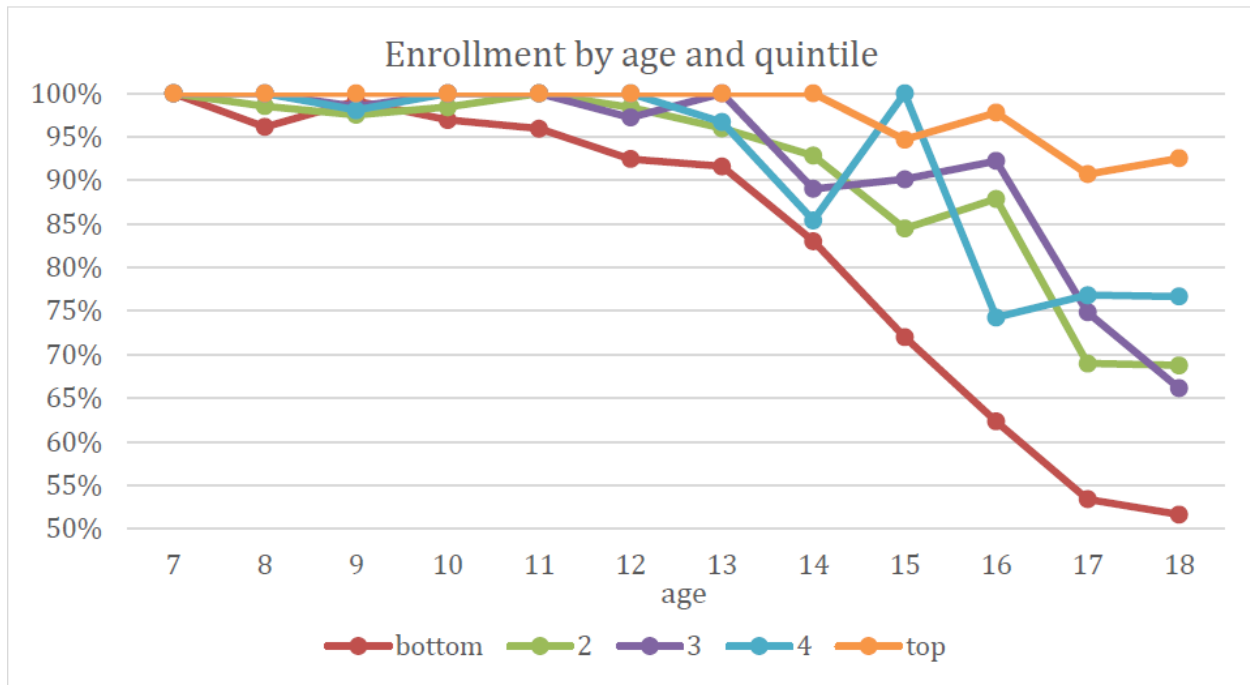
Figure 2. MEHE Expenditures as % of GDP



32. **The share allocated to education seems to contradict the importance placed on the sector; this is partly explained by high levels of private financing of services.** Although Lebanon's public spending on education is lowest among all countries of the Middle East and North Africa, it is also true that the public schools only serve 30 percent of Lebanese students. When subsidies to private schools (0.4 percent of GDP) and private expenditures (1.45 percent of GDP) are factored in, the total education financing reaches nearly 4 percent of GDP, more in line with regional averages.

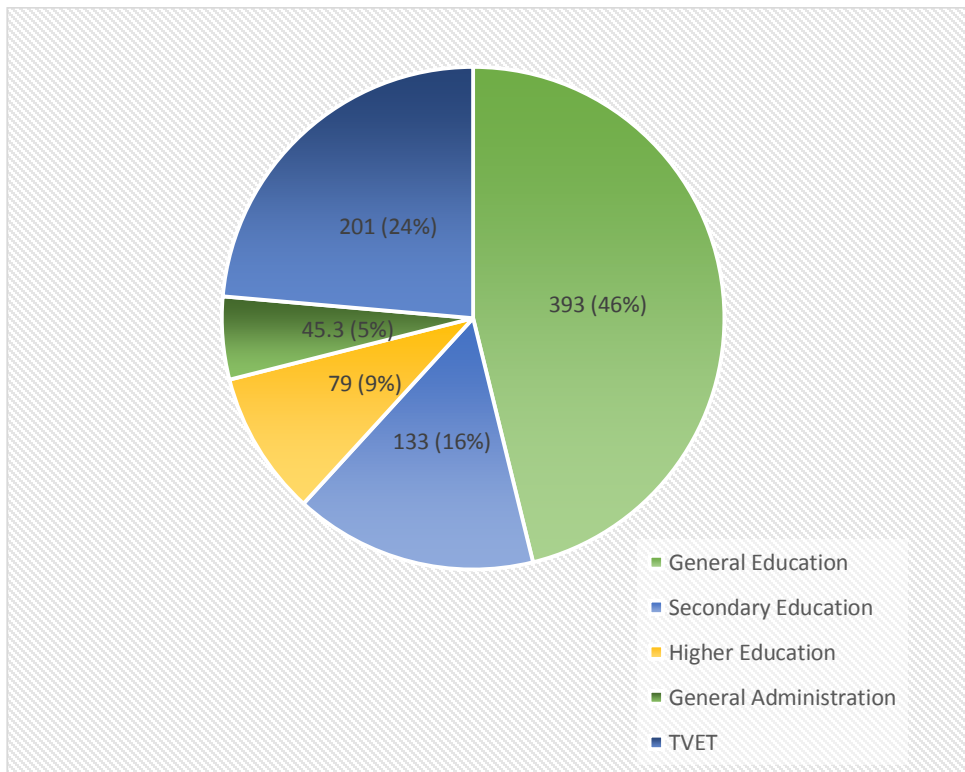
33. **This high proportion of private financing exacerbates inequalities in the education system.** Even prior to the refugee crisis, the Lebanese system was characterized by large inequalities in access and in quality of services received. This trend (Figure 3) has only grown worse in light of the onset of the refugee populations, since they have largely settled in poorer areas, bringing those poorer schools under even greater strain to deliver quality services. Inequalities are even more persistent with regards to availability and quality of services across geographic regions.

Figure 3. Enrollments by age and by income quintile



34. **The overall education budget finances four sub-sectors (not including the general administration):** General (including pre-primary and primary), Secondary, Higher Education, and Technical and Vocation Education and Training (TVET).

Figure 4. Expenditures by sub-sector, 2014 (US\$ M)



35. **Of that total annual budget, RACE represents about 15 percent of sector financing.** Now totaling an estimated US\$ 2.11 billion for the next five years, annual RACE financing is expected to represent less than 15 percent of annual national sector financing in 2016 (approx. US\$ 275 M as compared to US\$850 M). By 2020, however, RACE expenditures are planned to increase to US\$ 520 M, more than 50 percent of current annual national sectoral spending.

36. **As is the norm in the education sector, expenditures are made up in their great majority by recurrent costs such as salaries.** Staffing represents more than 80 percent of education spending. Importantly, the non-recurrent expenditures under the RACE program, estimated at YY, represent ZZ percent of the overall non-recurrent expenditures available to the MEHE.

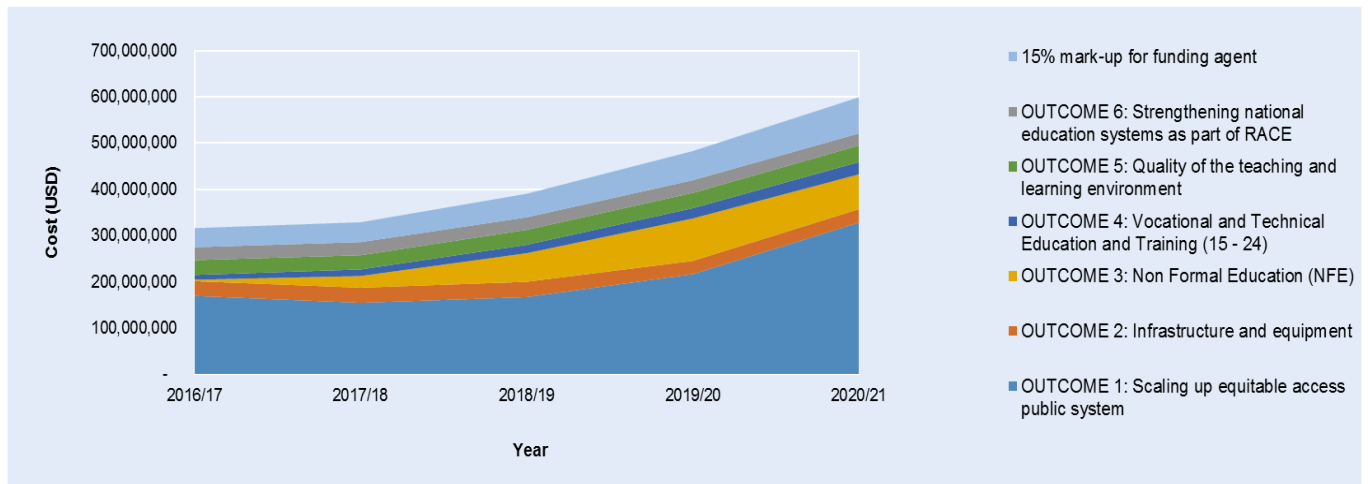
37. **With regards to specific program expenditures, estimates for costs over the medium-term have been done using the best available data from the MEHE, CERD, UN agencies, and other actors (Figure 5).** The costing model shows the following:

a. Unit costs for service provision are expected to increase slightly over time, from US\$ 385 and US\$ 592 for enrolling Syrians in the first and second shift in 2016 to US\$ 430 and US\$ 660, respectively (Oxford Policy Management, 2016).

b. With regards to teacher salaries, recent trends suggest significant increases for both civil servant teachers and contractual teachers, likely a result of increases in teaching hours. Still, there's some evidence of large inefficiencies in deployment of teachers, with few hours/week being reported, relative to pay (World Bank, 2016).

- c. Grants to schools will require at least \$4.4 million in financing over five years to fully implement School Improvement Plans for public schools identified as urgently needing to improve learning quality, including teacher training, supplemental student support and equipment.
- d. Construction activities are expected to cost an estimated US\$ 2 M for new construction, and about US\$ 235,000 for expansion. This accounts for most of the expected rise in expenditures of the program period.
- e. Overall, the costing model budgets approximately 15 percent in administration and overhead costs to be absorbed by the MEHE.

Figure 5. Projection of RACE program costs 2016-2021



38. **As a result of this and other analyses, a number of recommendations have been made to improve the processes and procedures within MEHE to increase overall capacity to manage the current crisis and for long-term system strengthening.** These institutional building recommendations revolve around making major gains in following four areas (for more on institutional building recommendations, please see Fiduciary Assessment):

- **Increasing enrollment:** Enrollment among both Lebanese and non-Lebanese students is lower than optimal in both pre-primary education and secondary education, and especially depressed among the poorest. For example, in the 2011/2012 school year, less than 55% of Lebanese 17-year olds in the lowest income quintile were in formal education programs, compared to more than 90% of Lebanese 17-year olds in the highest income quintile were in formal education programs. Less than 10% of Syrian refugees of secondary school age are estimated to be in school. A concerted effort is required to increase both access and demand in order to deliver education services to all.
- **Supporting teachers:** Teachers are the backbone of instruction delivery, and require improved support in the form of training, mentoring and instructional aides to improve service delivery and student learning. This support needs to be coupled with increased monitoring of teacher practices and performance.

- Student assessments: The public system currently conducts high-stakes eliminatory examinations at the end of 9th and 12th grades. In order to improve student learning and grade completion, a no-stakes student assessment system in lower grades could be used to identify students in need of assistance to target academic support before they drop out.
- Curricular reform: daily instructional content is at the heart of every school system, and Lebanon’s curriculum was last completely revised in 1971, with multiple partial revisions including recently in 1997, 2000 and 2012. MEHE and members of civil society groups have consistently advocated for comprehensive curricular reform to improve instruction and learning.

39. **Table 1 maps the DLIs within the RACE program. As a results of the technical assessment, the selection of the DLIs follows an internal logic for incentivizing the resolution of critical system bottlenecks, and moving the education system along the results chain.** Eight disbursement-linked indicators have been proposed. The first aims to incentivize the enrolment of children into the education system. The second strives to keep them there, and encourage them to progress through the system, all the way through to secondary education. The third rewards the degree to which the system is tracking the learning results of students. Indicators four and five then strive to respond to the diagnostic situations that have been detected in DLI three. Finally, DLIs 6, 7, and 8 are those that seek to strengthen the MEHE system as a whole, to ensure that the gains made are sustainable and lasting over time.

Table 1. RACE Result Areas and Proposed DLIs

RACE Result Areas	Disbursement-Linked Indicator (DLI)		Total financing allocated to DLI (in US\$ million)
I: IMPROVED ACCESS TO EDUCATION OPPORTUNITIES			
Enhanced access to, and demand from, children and their care-givers; for equitable formal or non-formal education pathways	DLI#1	Proportion of school aged children (3-18) enrolled in formal and non-formal education (disaggregated by Lebanese/non-Lebanese, m/f, and C1,C2,C3)	50
II: IMPROVED QUALITY OF EDUCATION SERVICES			
Enhanced quality of education services and learning environments provided, to ensure relevant, age-appropriate learning outcomes for children	DLI#2	Proportion of children in public schools completing specified grades [transition rate, disaggregated]	100
Communities are capacitated to actively engage in the promotion of learning and well-being of students and children in learning spaces	DLI#3	% of children at end of Grade 2 and Grade 6 able to perform at Grade-level in selected subjects ; test administered grade 2,6	20
Appropriate systems are effectively deployed to improve the monitoring and evaluation of teaching quality, learning outcomes, and learning environments	DLI#4	Teacher performance improved through direct observation, feedback, and support.	20
	DLI#5	% of second-shift schools with active community liaisons	20
III: ENHANCED ENABLING SYSTEMS AND ENVIRONMENTS			
MEHE and its institutions manage an effective and accurate education information-management system	DLI#6	Timely and robust data available for evidence-based policy-making	20

MEHE and its institutions at central and regional level are strengthened to lead and coordinate the planning, implementation, and evaluation of the RACE II Strategy	DLI#7	Strengthened national institutions capable of performing mandated functions over the long-term	14
	DLI#8	Foundational actions for conditions for learning	20