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BURUNDI

**ADDRESSING THE CHALLENGES AND OPPORTUNITIES IN
BASIC EDUCATION**

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(As of XXX, 2018)

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ABBREVIATIONS AND ACRONYMS

ABUTIP	<i>Agence Burundaise pour la Réalisation des Travaux d'Intérêt Public</i> (Burundi Agency of Public Works)
AFD	<i>Agence Française de Développement</i> (French Development Agency)
ASA	Advisory Services and Analytics
BAS	<i>Budget d'Affectation Speciale</i> (Special Sub-account)
BIF	<i>Franc Burundais</i> (Burundi Franc)
BISEM	<i>Bureau des infrastructures scolaires, de l'équipement et de la maintenance</i> (Office of School Infrastructure, Equipment and Maintenance)
BRARUDI	<i>Brasseries et Limonaderies du Burundi</i> (brewer and soft beverage company)
BRB	<i>Banque de la Republique du Burundi</i> (Bank of the Republic of Burundi)
CGE	<i>Comite de Gestion de l'Ecole</i> (School Management Committee)
CONFEMEN	Conférence des Ministres de l'Éducation des Etats des Gouvernements de la Francophonie (Conference of the Ministers of Education of the Francophonie)
CPIA	Country Policy and Institutional Assessment
COMESA	Common Market for Eastern and Southern Africa
CTB	<i>Cooperation Technique Belge</i> (Belgian Technical Cooperation)
DCE	<i>Direction Communale de l'Education</i> (Commune Education Directorate)
DEA	Data Envelopment Analysis
DHS	Demographic and Health Survey
DMU	Decision-making Unit
DPE	<i>Direction Provinciale de l'Education</i> (Provincial Education Directorate)
DPG	Development Policy Grant
DRC	Democratic Republic of Congo
DSA	Debt Sustainability Analysis
DTIS	Diagnostic Trade Integration Study
EAC	East African Community
ECD	Early Childhood Development
ECVMB	<i>Enquête sur les Conditions de Vie des Ménages au Burundi</i> (Survey of Household Living Conditions in Burundi)
EERC	Emergency Economic Recovery Credit
EFA FTI	Education for All Fast Track Initiative
EMIS	Education Management Information System
ERC	Economic Rehabilitation Credit
ERSG	Economic Reform Support Grant
ETP	Education Transitional Plan
FAO	Food and Agriculture Organization
FCE	<i>Fonds Commun de l'Education</i> (Education Common Fund)
FOASTAT	Food and Agriculture Organization Corporate Statistical Database
FONIC	<i>Fond National d'Investissement Communal</i> (National Investment Fund for Communes)
FY	Fiscal Year
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GHI	Global Hunger Index
GPI	Global Partnership for Education
HI	Global Hunger Index
HDI	Human Development Index
HR	Human Resources
HRMS	Human Resources Management System

IDA	International Development Association
IFMIS	Integrated Financial Management Information System
IMF	International Monetary Fund
ILO	International Labour Organization
ISTEEBU	<i>Institut de Statistique et d'Etudes Economique du Burundi</i> (Burundi Institute of Statistics and Economic Studies)
IT	Information Technology
ITAS	Integrated Tax Administration System
LICs	Low-income Countries
LSMS	Living Standard Measurement Study
M&E	Monitoring and Evaluation
MCSWL	Ministry of Civil Service, Works and Labor
MEESRS	<i>Ministère de l'Education, de l'Enseignement Supérieur et de la Recherche Scientifique</i> (Ministry of Education, Higher Education and Scientific Research)
MEFTP	<i>Ministère de l'Education, la Formation Technique et Professionnelle</i> (Ministry of Education, Technical and Vocational Training)
MESRS	<i>Ministère de l'Enseignement Supérieur et de la Recherche Scientifique</i> (Ministry of Higher Education and Scientific Research)
MFMOD	Macro-fiscal Model
MFPDE	<i>Ministère des Finances et de la Planification du Développement Economique</i> (Ministry of Finance and Economic Development Planning)
MHESR	Ministry of Higher Education and Scientific Research
MIDC	<i>Ministère de l'Intérieur et du Développement Communal</i> (Ministry of Interior and Local Development)
MPSVTAL	<i>Ministère de l'enseignement Primaire, Secondaire, Professionnel et de l'Alphabétisation des Adultes</i> (Ministry of Primary, Secondary, Vocational Training and Adult Literacy)
MTEF	Medium-Term Expenditure Framework
MW	Megawatt
NER	Net Enrollment Rate
NGO	Non-governmental Organization
NPLs	Non-performing Loans
OBR	Burundi Revenue Authority
ODA	Official Development Assistance
PACEF	Program to Support the Consolidation of Basic Education Project
PEMFAR	Public Expenditure Management and Financial Accountability Review
PER	Public Expenditure Review
PFM	Public Finance Management
PASEC	<i>Programme d'analyse des systèmes éducatifs de la CONFEMEN</i> (CONFEMEN Education Systems and Analysis Program)
PPB	Pedagogical Production Board
PSDEF	<i>Plan Sectoriel de Développement de l'Education et de la Formation 2012-2020</i> (Education Sector Plan 2012-2020)
PTE	<i>Plan Transitoire de l'Education</i> (Education Transition Plan)
QW	Quick Win
RESEN	<i>Rapport d'Etat du Système Educatif National</i> (Country Status Report on the Education Sector)
SDG	Sustainable Development Goal
SOE	State-Owned Enterprise
SSA	Sub-Saharan Africa
STR	Student-Teacher Ratio

UNICEF	United Nations Children’s Emergency Fund
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WB	World Bank
WDI	World Development Indicator
WEO	World Economic Outlook
WFP	World Food Programme

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Executive Summary

The Basic Education Public Expenditure Review (PER) provides an analysis of basic education expenditures and appropriations from 2010-2018. The objective of the PER is to assist the Ministry of Education, Technical and Vocational training (MEFTP) in setting its priorities and in making decisions about resource allocation, utilization, efficiencies, and management. The PER first reviews the poverty and macroeconomic development within which the Government operates, and provides an assessment of the sector's performance in basic education. The main section of the PER focuses on the sector's finance system by examining in detail financial sources, trends and composition and their impact on basic education inputs, outcomes and equity. The PER also assesses the adequacy, efficiency and sustainability aspects of basic education and, where appropriate, uses either international examples or secondary education for comparative purposes. Finally, the PER presents key policy recommendations for the government's consideration.

Burundi's macroeconomic context is confined by fiscal consolidation and limited fiscal space

Burundi experienced sustained growth from 2004-2014, but the 2015 events affected the country's economy and undermined its fiscal position. Burundi's economy was performing relatively well, averaging 4.2 percent growth in the period 2004-2014. The economy performed well because of improved macroeconomic management, countrywide peace and security, and several reforms aimed at fostering private sector development. The 2015 events led to a sharp economic contraction, dramatically reducing Government's fiscal space to improve public service delivery and increasing public debt. Real gross domestic product (GDP) declined by 3.9 percent in 2015 and remained negative in 2016. The difficult economic situation was marked by the contraction of economic activities due to the combined effects of weak domestic demand, climatic shocks and inadequate access to import inputs. The country relied heavily on donor aid, representing 4 percent of GDP or 13 percent of total government revenues between 2010 to 2014. However, the suspension of budget support by major donors since 2016 contributed to the foreign exchange shortage and consolidation of public expenditures. Although some efforts were made to protect the social sectors (that is, they were spared from a hiring freeze in the public sector), critical cuts in capital spending and the increased cost in imported inputs (such as school supplies) negatively impacted the sectors' service delivery.

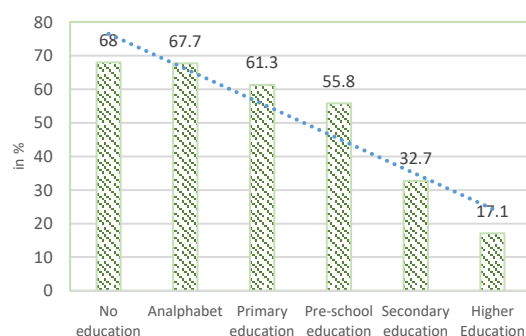
In the short term, the country's economic recovery and growth cannot free sufficient fiscal space for investments in the social sectors, such as education, particularly without external aid returning to pre-2015 levels. Burundi's economy started to show some signs of economic recovery, with real GDP growth estimated to have reached 0.5 percent in 2017 — and projected to average around 2.2 percent of GDP in 2018–20. However, per capita GDP growth is forecast to remain negative. Continued revenue enhancement is expected to reduce the fiscal deficit, but capital spending cuts will be maintained. Fiscal consolidation may be also undermined given potential spending pressures in advance of the 2020 general elections. Expenditure pressures combined with the continued low level of donor support could gradually lead to an increase in domestic debt. The country also remains vulnerable to increased foreign exchange pressures, further deterioration in financial sector stability, and exogenous climate shocks.

To achieve sustained growth and poverty reduction, investing in human capital is critical in Burundi

As Burundi seeks to foster robust growth and poverty reduction, investment in basic education is critical. In Burundi, where over 6 out of 10 people live under the national poverty line, basic education takes particular importance. The more households benefit from education, the higher employment

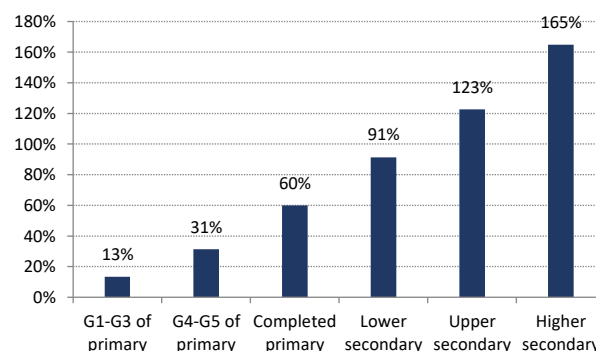
opportunities are, and the lower the level of poverty is (see figure E1). In fact, investing in education is associated with a high rate of return. An additional one year of education results in about 9.8 percent higher wages in Burundi. Wage workers who have completed a full cycle of primary education (Grade 6) earn 60 percent more than those with no education (figure E2).

Figure E1: Household Poverty by Level of Education of Head of Household (%)



Source: UNICEF, Education Sector Budget Brief, 2017.

Figure E2: Mincerian Regression Result: Earning Increases by Level of Education (Percentage)

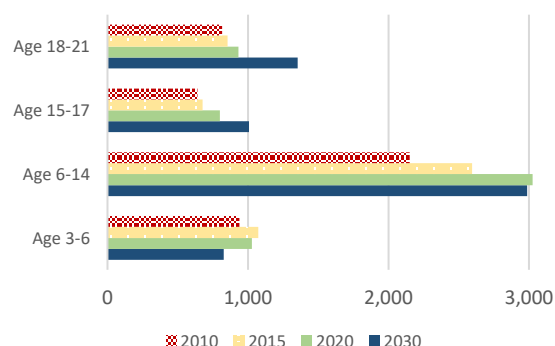


Source: Authors' estimate using ECVMB 2013.

However, investing in Burundi's human capital is lagging behind as evidenced by the country's low Human Capital Index. The Human Capital Index measures countries' contribution of health and education to the productivity of the next generation of their workers. Over the past 5 years, Burundi's Human Capital Index has increased only slightly from 0.35 to 0.38 and remains low, ranking 138 out of 157. The index estimates that in Burundi, an average child will be 38 percent as productive when she grows up as she could be if she enjoyed complete education and full health. It shows that Burundi cannot make sure children have the diet, health care and education in their early years to prepare them to take skilled jobs later in life.

At the same time, the large youth composition coupled with a high level of demographic pressure puts a severe strain on Burundi's education system, particularly in the early grades. Guaranteeing access to education for every child is a challenge in a context where almost half of the school age population is under the age of 15 and the demographic growth rate of 3.3 percent increases the population in schooling age (figure E3). There will be an acute need to scale up basic education to absorb 0.4 million additional children who are expected to enter the basic education system in the next 10 years. Without a robust and sufficiently funded basic education system, those children cannot properly be educated to become a productive labor force in the future. Considering only the increase in the school cohort, estimations show an increase in the cost of basic education by 27 percent from US\$ 42 million in 2016 to US\$ 53 million.

Figure E3: School Age Cohort: 2010-2030 (in thousands)



Source: ISTEEDU.

Despite a difficult context, Burundi has made some remarkable achievements in terms of learning outcomes but challenges remain in access and repetition

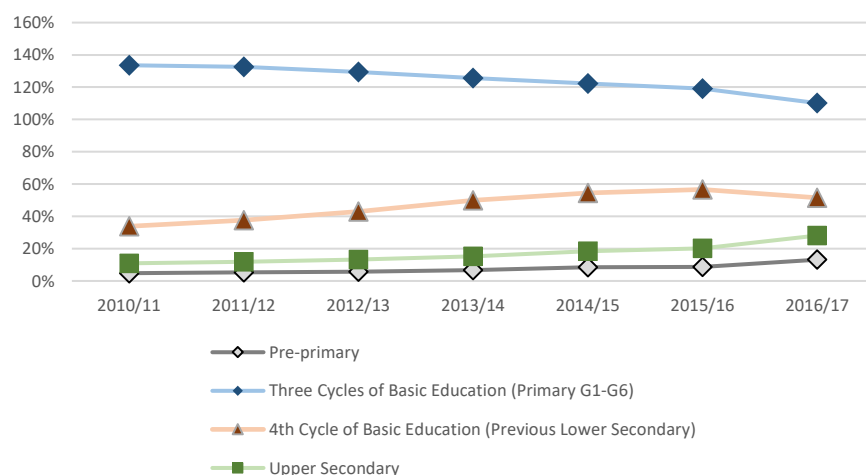
Burundi has made some strides in basic education over the past decade, though progress in access is mixed compared to other levels of education. To boost school achievement, the Government embarked on a set of education reforms in recent years, most notably the abolition of school fees in primary education in 2005. It also embarked on an ambitious reform of a 9-year basic education cycle in 2012, in line with the Sustainable Development Goals (SDG).¹ The basic education reform focused largely on the construction of Grade 7-9 classrooms. As shown in figure E4, progress in access to education shows a mixed picture across preprimary, primary and secondary education:

- **Access to pre-primary education in Burundi remains very low.** Despite an upward trend in the gross enrollment rates (GER) from 5 percent in 2015 to 9 percent in 2015 and 13 percent in 2016, this is still low by regional standards (the Sub-Saharan Africa average is 20 percent). Nonetheless, it is worth noting that the Government made efforts to increase pre-primary enrollment numbers as evidenced by an increase in public preschools over the past six years, accounting 59 percent of all preschools in 2016.
- **Access to primary education (Grade 1-6) had slightly declined in recent years, but enrollment rates are still above the Sub-Saharan African average and several peer countries.** Despite the country's successful increase in coverage of primary education since the introduction of Free Primary Education in 2005, recent GER trends in primary education show a slight decrease from 134 percent in 2010 to 119 percent in 2015, further declining with the new basic education structure to 110 percent in 2016/17². However, Burundi achieved gender parity in primary education for gross enrollment ratios in 2016. Also compared with Sub-Saharan African and peer countries, Burundi's primary net enrollment rate (79 percent) stands near the average.
- **The impact of the basic education reform is in particular visible in the increase in basic education 4th cycle coverage.** The GER for Grades 7 to 10 — that were called lower-secondary level in the previous education structure — increased from 33.9 percent in 2010 to 52 percent in 2016, owing to the construction of Grades 7-9 classrooms inside primary schools.
- **Upper secondary education registered also an important increase in enrollment** with the GER showing an upward trend from 11 percent in 2010 to 20 percent in 2015 and reaching 28 percent with the new structure in 2016.

¹ The basic education cycle is organized into 4 cycles: Cycle I includes grades 1 and 2, Cycle II includes grades 3 and 4, Cycle III includes grades 5 and 6, and Cycle IV includes grades 7, 8 and 9.

² Under the PSDEF, basic education was reformed to be nine years in length. The first changes, starting in school year 2013/14, focused on creating cycle 4, by adding successively Grade 7, 8 and 9 to schools. A new final exam was sat at the end of 2015/16, completing implementation of cycle 4. With this reform, primary official age (Grade 1-Grade 6) changes from 7-12 years into 6-11 years.

Figure E4: Gross Enrollment Rate (GER) by Education Level and Year, 2010-2016



Source: EMIS, 2010/11-2016/17 and ISTEPU Population

Note: From 2010/11-2015/16, the graph was done using the previous education structure. For 2016/17, the primary GERs were based on 6-11 year-old children, 4th cycle GERs on 12-14 year-old children, and secondary GERs on 15-17 year-old children.

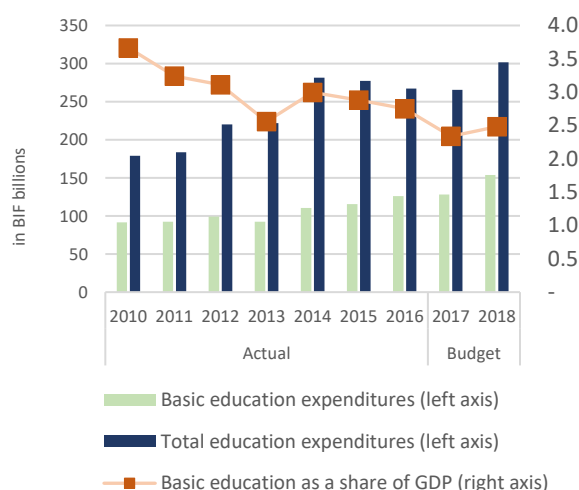
Burundi's learning outcomes are above SSA averages, which is impressive considering Burundi's fragile political and economic setting. Results from the international assessments, such as the 2014 CONFEMEN Education Systems and Analysis Program (*Programme d'Analyse des Systemes Educatifs de la CONFEMEN - PASEC*), shows good learning outcomes in reading and mathematics relative to other West African francophone countries. The assessment of the PASEC results also suggests gender and socioeconomic equity, given that girls outperform boys, and rural areas do better in mathematics than urban areas — and are only marginally worse in reading. These results are impressive considering Burundi's fragile political and economic setting. They have been attributed to a number of factors, such as the language of instruction (the home language of teachers and pupils, Kirundi is used as the language of instruction), pre-service teacher training and classroom pedagogy. Moreover, the education curriculum which has been in place for some thirty years has been also attributed to the outstanding results.

Nonetheless, despite Government's commitment to the education sector, key basic education outcomes remain low, particularly for the first three grades. The sector's investment has largely focused on the 4th cycle. In contrast, access to the first three cycles of basic education slightly declined between 2010 and 2016. Moreover, Burundi has one of the highest number of grade repetition rates compared to peer countries. These rates are particularly high in Grades 1 and 2 (with repetition rates of 29 and 28 percent, respectively) compared to Grades 3 and 4 (22 and 18 percent, respectively). This is in strong contrast to the Education Sector Plan 2012-2020 (*Plan Sectoriel de Développement de l'Education et la Formation – PSDEF*). It aims for repetition rates of 5 percent for students in the first year of each cycle, and no more than 15 percent in the second year. Dropout rates are also high, especially in the first two grades of primary education (10-15 percent), whereas completion rates remain very low. Of 100 children starting primary education, only 12 would reach grade 6 without repetition. Access tends to be lower in rural areas with higher poverty incidence. Among the main factors hindering the access of students to basic education in rural areas is the household poverty level, the education level of the head of household, and the distance to schools. Lastly, the recent events in 2015 and the sharp drop in the sector's funding might have eroded the 2014 PASEC achievements.

Government's important basic education reform has been undermined by a severe lack of resources

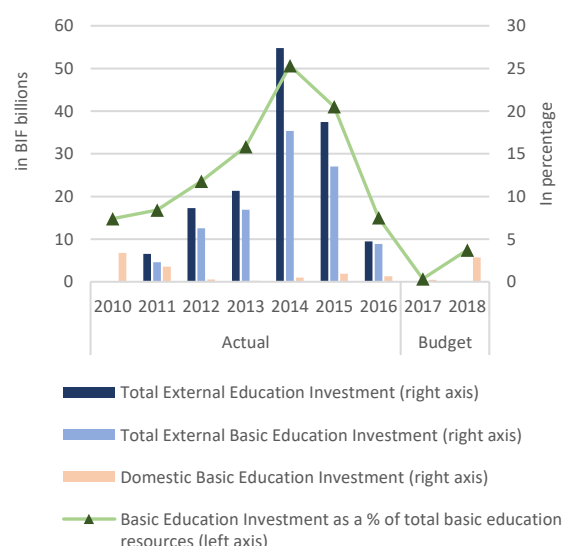
Burundi's commitment to basic education is reflected in the Government-led reform to introduce a 9-year basic education cycle, but a severe underfunding of the reform has eroded Government's efforts to improve access and quality of education. Despite Government's commitment to implement its basic education sector reform since 2012/13, public spending on basic education has shown a downward trend by 23 in real terms between 2010 and 2016. Per student spending as GDP per capita also dropped by more than half from US\$43 in 2010 to US\$18 in 2016, suggesting that sector spending on basic education has not kept pace with the growth in the school-age population (figure E4). Donor aid in support of Government education reforms increased from 5 percent in 2011 to 27 percent in 2015 of total basic education spending but this was not sufficient to offset the decline in Government's public education resources. Considering the decline in unit cost for basic education, it might be surprising that international benchmarking of Burundi's basic education spending shows it is around the Sub-Saharan average - one explanation might be the low level of Burundi's GDP.

E5: Basic Public Education Expenditure Trends, 2010-2018



Source: MFPDE and MEESRS.

E6: Composition of the Investment Budget by Source, 2010-2018



Source: MFPDE.

The suspension of donor aid in 2015 has not only left the basic education sector in a dire state but also underscores its vulnerability to the fluctuations and unpredictable aid flow. Prior to 2015, public investments in basic education was largely funded by donor aid (on average 83 percent) through the *Fonds Commun de l'Education* (Education Common Fund - FCE). However, this funding drastically declined by 30 and 69 percent with the suspension of budget support in 2015 and 2016 (figure E6). The development partners' contribution under the FCE has been critical to supporting the sector's basic education reform and improving school functioning. Almost half of the FCE's resources funded school infrastructure, in particular classrooms. In addition, important FCE funding provided the "topping up" of the school grants by an additional 60 cents (Burundi France 800) per student for school materials and maintenance. The interruption of this school grant 'topping up' severely affected the school learning environment, as well as the quality of education. In 2018, Government included the Education Support Fund (*Fonds de soutien de l'Education*) in the education investment budget, but it supports mainly post-basic education school materials and the public schools for gifted students.

Government's funding of the basic education reform has been confined to the payment of teacher salaries... The composition of education resources shows that Government spends on average 45 percent of its education resources on basic education - this is just below the GPE good practice

recommendation of 50 percent. Examining the distribution of public resources within basic education, salaries comprise the bulk of recurrent expenditures (on average, 95 percent). These salaries finance largely teachers (around 76 percent), while the rest is consumed by non-teaching staff. Despite the important share of the wage bill in basic education, teachers' basic salaries are below public sector average wages.

...leaving critical school inputs and investments severely underfunded. The low spending level of 5 percent on non-teacher salaries is far below the recommended international best practice of 25 percent. It has compromised critical school inputs, such as textbook purchases, teacher training, curriculum development and school maintenance. School grants were introduced to support the Government's policy of providing free basic education. However, these grants are also insufficient to provide for school materials and maintenance (amounting to 30 cents per student per trimester). Public investment in basic education, accounting for an average 10 percent, is also inadequate. This was evidenced by a recent sector diagnostic that showed a deficit of almost 22,211 classrooms and 688,704 school desks in primary schools in 2018.

To mobilize additional resources for basic education, the Government launched the Education Transitional Plan (ETP) 2018-2020. The plan prioritizes PSDEF activities in basic education that have not been funded in the context of budgetary constraints in the post-2015 period. In the short term, the ETP's measures are expected to be largely funded by donors. The ETP's medium term outlook education scenario projects that basic education spending will be at around 4 percent of GDP between 2021 and 2025. In 2018, budget appropriations for basic education accounted for 2.5 percent of GDP. Under the present macroeconomic outlook, it seems very unlikely that fiscal space will be available to allocate public resources in accordance with sector needs

In a context of resource constraints and the withdrawal of donor assistance, the scope for efficiency gains and reprioritization are limited

The sector's public financial management faces particular efficiency issues stemming from centralized budget planning and spending, ineffective procurement capacity and budget allocation and execution processes that are not aligned — resulting in discrepancies between the two. Whereas the budget execution of salary payments is fully executed, spending on goods and services has been mostly below appropriations (except in 2015), and capital spending is grossly under-executed (2011-2016). Procurement has been hampered by a lack of staffing and procurement expertise. It has been further exacerbated by a lack of funding, which led to the sector having a 60 percent procurement rate in 2016 and 2017.

There is also some scope to improve teacher management. First of all, even though the STR in basic education stood at 48:1, which is in line with the Government's target of 50, they are above the SSA average and mask severe disparities across grades, notably the early grades. Second, teachers are hired at the provincial level overseen by a Provincial Education Committee but the selection process is bureaucratic, rather than selective on the basis of quality, and schools have little influence over their personnel choices. Moreover, since teacher salary is regulated by civil service's rules, there is limited scope for implementing a system of rewards and sanctions that could improve teacher incentives. Third, teachers benefit by a plethora of allowances, but these are small and not strategically used to reward performance. Lastly, the Ministry does not utilize its Human Resources Management System (HRMS). Rather, it tracks and administers employee records through a simple Excel dataset.

Other sources of internal inefficiency are linked to repetition, delayed entry and completion rates. A rapid analysis shows that those inefficiency drivers result in substantial costs for the Government.

Based on 2016 primary public expenditures³ and the cohort analysis, the total public cost for one student completing Grade 5, without repetition, is around US\$163 (BIF 274,200), with roughly US\$32 spent per student per year. However, the cost increases to around US\$310 (BIF 523,600) if a student repeats and completes the cycle in more than 9 years.

An efficiency analysis at the commune level found that the system could have saved 6 percent of inputs for the same level of outputs produced. Efficiency scores vary across provinces and communes with efficient communes registering significantly lower repetition rates and performed better on national examinations. The better performing communes have, on average, 5 percentage points lower repetition rates for Grades 1 to 6, and 4 percentage points lower rates for Grades 7 to 9. Among the factor contributing to the efficiency of communes are the number of hours spend in class for Grades 7-9 and the number of student desks also appears to increase the efficiency scores. In contrast, the qualifications of teachers are not significant factors in influencing efficiency scores, a finding which corroborates the results of PASEC 2014 that suggests learning outcomes are not correlated with the educational level of teachers.

Figure E7: Distribution of Efficiency Scores by Provinces

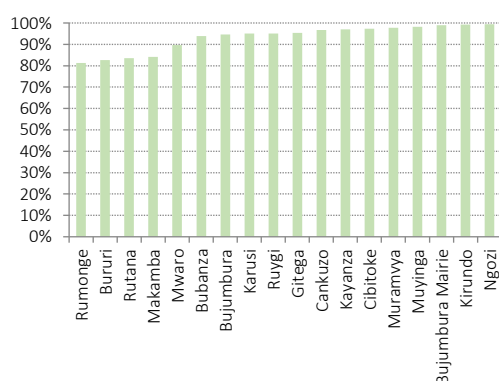
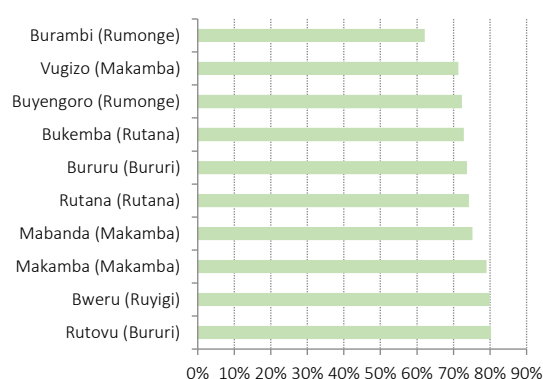


Figure E8: Ten Least Efficient Communes



Source: Authors' estimate based on EMIS, Transfers budget, and Basic Salaries of Teachers and National Examination Scores for Grade 9.

Finally, education spending is tilted toward post-primary education. Basic education receives less than half of public resources, but accounts for about 83 percent of total student enrollment. By contrast, the share of public expenditures spent on tertiary education accounts to almost one-fifth of public education expenditures, but with less than 2 percent of students enrolled.

Prospects for Reform

Burundi does not have the fiscal room to maneuver. In the short to medium term, the analysis shows that the government will continue to struggle to create fiscal space and reduce debt from its currently high level. The uncertain prospects of external financing pose serious difficulties to Burundi's socioeconomic development and growth.

Given the lack of fiscal space and ongoing fiscal consolidation, Burundi could only implement reforms to improve the efficiency of basic education, that is, trying to do more with the same level of budgetary resources, starting at the school level. One key area in which the government could strengthen interventions that have the greatest possible benefit is at the school level. To this end, the government needs to explore cost-effective ways to achieve efficiency gains, such as sharing best practices among schools and introducing child friendly school practices. The high repetition and

³ This includes public expenditure without investment.

dropout rates constitute another source of inefficiency. These can be targeted through low-cost measures, such as parental awareness campaigns or the introduction of automatic promotion. Evidence also suggests that there are high returns to investments in early childhood development programs, which could be funded by savings from reducing repetition rates. To ensure resources reach the areas of greatest need, it will also be critical to revise the school grant formula and reduce the uneven geographic deployment of teachers.

Strengthening budget management at the central and school level constitutes another key area for reform that support the more efficient use of resources. Reforms to enhance budget planning (notably the introduction of bottom-up planning) and execution (the establishment of treasury management policy and procedures) will support the more efficient and effective use of scarce basic education resources. These measures need to be complemented with capacity training for Ministry staff in the Integrated Financial Management Information System (IFMIS) and procurement to further improve sector performance. Additionally, the sector's administrative and financial reporting on basic education should be strengthened by rendering the Education Management Information System (EMIS) more effective, as well as by strengthening the financial and reporting system at the school level.

Spending in secondary education should be reoriented toward basic education. The reallocation of resources from secondary to basic education may significantly increase overall impact. These resources should focus on more spending for inputs that have a direct impact on educational outcomes, such as the construction of classrooms, an increase in school grants, and the purchase of school materials (textbooks, school desks, and so on).

Strengthening human resource management is a key policy reform necessary to improving the basic education sector's financial sustainability and reducing costs. The operationalization of the sector's human resource management and information system will be critical to improving the management and effective use of teacher resources. Considering the importance of the wage bill for the sector, it is also recommended that a wage bill forecasting model be adopted to strengthen budget formulation and monitoring. Current efforts to introduce the planned performance-based mechanism, is an important reforms that will contribute to improved school quality and efficiency.

Most importantly, there is an urgent need to mobilize development partner resources for basic education, specifically to finance critical inputs and school infrastructure. With the closure of the FCE, the Government should continue to pursue the mobilization of external resources. Thus, it will be important to identify a funding instrument that can attract donor aid and be managed off budget.

I. Introduction

Burundi is a small landlocked country facing demographic and poverty challenges aggravated by a cyclic crisis. Burundi is the second most densely populated country in Africa (approximately 11.2 million people and 470 inhabitants/square kilometer [km²]). The country's economy mostly depends on the agriculture sector, which employs 90 percent of the population. It is one of the five poorest countries in the world with a gross domestic product (GDP) per capita of US\$ 318.⁴ It has been increasingly dependent on donor aid, which accounted for more than a third of the national budget between 2012-2014. With close to 65 percent of its population living below the poverty line, Burundi ranks 184th out of 188 countries on the Human Development Index (HDI). The country has been plagued by political instability and persistent violence since its independence. Its current socio-economic and political landscape has been influenced by the aftermath of the 2015 presidential election, which plunged the country into a political and economic crisis and led to the suspension of budget support from major donors. The economic recovery process has been hindered by multi-plunged economic difficulties including the foreign exchange shortage, deteriorated investor confidence, government revenue shortfalls due to low domestic revenue capacity, coupled with limited aid flows and sluggish recoveries in manufacturing and services while the impact of climate shocks kept agricultural performance subdued. These recent shocks have left the country severely financially constrained, undermining growth and service delivery to citizens. As such, it has highlighted the need for increased efficiency in the use of public resources.

Despite a difficult and fragile context, Burundi has made some strides in national education over the past decade; nonetheless, the country's recent fiscal contraction — exacerbated by the suspension of budgetary aid — has severely eroded the Government's effort to improve access and quality of education. To boost school achievement, the Government adopted several critical reforms in recent years, most notably the abolition of school fees for primary education in 2005. In addition, the Government embarked on an ambitious reform of basic education, as laid out in the 2012 -2020 Sector Plan for Education and Training Development (PSDEF – *Plan Sectoriel de Développement de l'Education et de la Formation*) and the 2018-2020 Education Transition Plan (PTE- *Plan Transitoire de l'Education*). Some important progress has been made regarding access, gender parity and literacy rates over the past decade. Notwithstanding these commendable efforts, key sector performance indicators remain low compared to peers. Indeed, the country continues to grapple with providing equitable access and quality of schooling, in particular at the basic education level. The recent suspension of donor aid has undermined sectoral reforms and has left the sector in a dire state.

In light of these education sector challenges and in a context of continued economic vulnerabilities and reduced fiscal space, the main objectives of Burundi's Basic Education Public Expenditure Review are to: (i) assess the poverty and macro context and more recent developments setting the framework for understanding the basic education sector; ii) assess the governance of the sector, policy reforms and review the sector's achievements; (iii) assess the adequacy and sustainability of public spending in basic education; (iv) assess the effectiveness and efficiency of spending in basic education; and (v) provide policy recommendations to inform the management of public expenditures in the sector.

This Burundi Basic Education Public Expenditure Review is the second in a series of Programmatic PERs carried out by the World Bank (by the Governance and the Macroeconomics, Trade and Investment Practices) in partnership with United Nations Children's Emergency Fund (UNICEF), examining key public service delivery sectors and themes in Burundi.⁵ This Public Expenditure Review is a joint product of the World Bank and the Ministry of Education, Technical and Vocational Training

⁴ World Economic Outlook, 2017.

⁵ The first in the series was a Burundi Health PER (World Bank, 2017).

(MEFTP -Ministère de l'Éducation, la Formation Technique et Professionnelle) and the Education PER Steering Committee. The Education PER was prepared as a series of two modular products including the Education Expenditure Issue Note, and this full-fledged PER.

Data and Methodological Limitations

The PER is based on a mix of quantitative and qualitative data analysis, including sector and financial data, surveys and interviews, as well as data collection during field visits to Bujumbura, and the Provinces of Muramvya and Gitega. The main data sources used to conduct the analysis were: (i) the Education Management Information System (EMIS) for 2010/11-2016/17; (ii) the 2014 Program for the Analysis of Education Systems (PASEC); (iii) the 2013/14, and 2017 Survey on Households Living Conditions (ECVMB); the 2017 Demographic and Health Survey (DHS); (iv) the MEFTP and the Ministry of Finance and Economic Development Planning (MFPDE) budget and expenditure data from 2010-2018, complemented by the 2010-2016 BOOST data; (v) payroll data from the Ministry of Civil Service Work and Labor (MCSWL); (vi) sector documents (including the *Rapport d'État sur le Système Éducatif National* (Report on the National Education System) (2016); *Plan Transitoire de l'Éducation au Burundi 2018-2020* (the Education Transition Plan) (2018); *Diagnostic des Infrastructures et Équipements Scolaires du Burundi* (the Infrastructure Diagnostic) (2018); and the Living Standard Measurement Study (LSMS) for Côte d'Ivoire, Malawi, Uganda and Burkina Faso (2013/14); and (vii) other data collected from field visits. These datasets allowed for a comprehensive assessment using regression analysis, data envelopment analysis for efficiency, and benefit incidence analysis for equity assessment.

However, the data also presented limitations. First, basic education expenditures are available for 2010-2016, the 2017 outturn data is available only at an aggregated level for the education sector. Second, off-budget aid data is not included in the PER since this information is not tracked nor documented. Third the budget nomenclature does not allow for analysis of sector spending by administrative level⁶. Fourth, the MCSWL wage bill data misses key public employment data (for example, date of birth and age). Fifth, the EMIS does not include an Human Resources (HR) module. Also, HR information is available only in Excel format, and does not include the disaggregation of data between teacher and non-teacher staff.

Outline of the Report

The PER is structured around seven Chapters following this introductory Chapter. Chapter Two assesses the country context in terms of its poverty and macroeconomic development. Chapter Three provides an overview of the education sector's socioeconomic context and structure, as well as sector goals and priorities for basic education. Chapter Four examines key sector performance indicators, as well as the regional, economic, and gender dimensions of equity in basic education. Section Five examines basic education finance, focusing first on general sector financing aspects and then a more in-depth assessment of basic education finance. Chapter Six assesses the adequacy, sustainability and efficiency aspects of the basic education sector. The main conclusions and policy recommendations are provided at the end of the analysis.

⁶ The budget nomenclature does not allow for the tracking of allocations to the Provincial Direction of Education (DPE)/ the Commune Direction of Education (DCE) by province, nor does it allow for the collection, distribution and use of school fees.

II. Burundi's Poverty and Macroeconomic Context

This chapter analyzes both the poverty and macroeconomic context and more recent developments in Burundi. As such, it provides the framework for understanding the basic education sector, particularly the prospects for sector reforms. The first section examines poverty underlying unemployment and inequalities. The second section discusses economic growth and bottlenecks hampering growth, with a particular focus on the investment climate, trade, skills and finance. The last section provides an overview of public finance, examining revenue and expenditure trends and fiscal sustainability aspects.

2.1 Poverty and Inequality

Burundi remains one of the poorest countries in the world, trailing far behind many other low-income countries. Based on the 2014 household survey, an estimated 72.9 percent of Burundians lived below the international poverty line of US\$1.90 per day—nearly double the average for Sub-Saharan Africa (SSA) and low-income countries (LICs). This makes Burundi a country with the fourth highest rate of extreme poverty rate in the world (ECVMB 2014). Indeed, 64.9 percent of Burundians lived below the national poverty line⁷, and of these 38.7 percent lived below the food poverty line. Based on the Human Capital Index to measure countries' contribution of health and education to the productivity of the next generation of their workers, Burundi is at the bottom of the list. The index estimates that in Burundi, an average child will be 38 percent as productive when she grows up as she could be if she enjoyed complete education and full health. It shows that Burundi cannot make sure children have the diet, health care and education in their early years to prepare them to take skilled jobs later in life.

There is significant geographic variation in poverty rates in Burundi. Poverty is concentrated in the rural areas and in the North and Center-East provinces of the country. The poverty rate in the province of Muyinga (North region) was 78.6 percent and in Ruyigi (Center-East region) 82.8 percent. The rural-urban divide is glaring: 69 percent of Burundians in rural areas are poor, 21 percent in Bujumbura, and 41 percent in other urban areas. Inequalities between rural and urban areas are quite substantial and are mainly driven by significant differences in household endowments of livelihood assets. Differences in poverty rates by sex and marital status of household head highlight the degree to which women must depend on men for access to resources, such as land and farm labor. Most non-poor are themselves close to the poverty line, but most of the poor are far below it. Although it is a relatively small country, it is estimated that in 2030 Burundi will be the world's seventh largest contributor to global poverty (World Bank 2014/2015).

More than 80 percent of Burundians are poor according to numerous dimensions. Burundi had the 8th highest proportion of multidimensionally poor individuals (2014). Despite some progress, education and literacy levels are both low, particularly among women and rural residents. Furthermore, although enrollment in primary education has risen to 94 percent — higher than the 78 percent SSA average — completion rates are just 62 percent, lower than the SSA average of 69 percent. Only 7 percent of Burundians have any secondary education. According to the Global Hunger Index, Burundi is the most food-insecure country in the world (nearly double the SSA average), and 60 percent of its children are chronically malnourished, as demonstrated by the fact that Burundi has the highest rate of stunting (56 percent) in the world (DHS 2016-2017). Moreover, malnutrition has risen sharply since the early 1990s, long before the more recent political unrest made food insecurity worse.

⁷ If the international poverty line of \$1.90 (2011 PPP) per day is used, poverty in Burundi is estimated to be 72.9 percent in 2014.

Since 2014, poverty has risen slightly and inequality has worsened, particularly in Bujumbura. Based on the latest Survey on Household Living Conditions in Burundi (ECVMB 2017), it is estimated that poverty (based on the national poverty line) rose from 64.9 in 2014 to 66 percent in 2017⁸. This was mainly because of poverty in Bujumbura, which increased from 20.8 to 24.7 percent. During the same period, Burundi's Gini coefficient also rose from 36.1 to 37.7,⁹ again with a particularly steep increase in Bujumbura (37.6 to 44)¹⁰.

Unemployment rose significantly between 2014 and 2017, again especially in Bujumbura. The national unemployment rate, which includes unemployed individuals not actively seeking a job, rose from 2.4 to 7.8 percent. The problem was particularly severe in Bujumbura, where unemployment rose from 20.0 percent in 2014 to 32.9 percent in 2017¹¹. Jobs in Burundi are overwhelmingly concentrated in agriculture. In 2017, 83.5 percent of Burundi's workers were employed in agriculture, 10.7 percent in services, 3.9 percent in trade, and 1.9 percent in industry. Not surprisingly, urban employment is more diverse than rural: 40 percent of the urban labor force work in services (55 percent in Bujumbura). Employment primarily takes the form of informal work and independent farming: a full 51 percent of workers do not receive a formal wage; of these, 46.2 percent are unpaid farmers. The underemployment rate is also high in Burundi, specifically 65 percent in the agricultural and industrial sectors and 51 percent in the service sector. This translates into low productivity and low wages (ECVMB 2017).

Burundi's women and youth are particularly likely to have informal jobs. Although women account for 52.7 percent of the workforce, more women work in farming than men. Moreover, 71.2 percent of women workers are unpaid compared to only 28.5 percent of men. Conversely, the proportion of men with paid and waged jobs is higher than for women. For instance, only 7.2 percent of women work for wages compared to 18.6 percent of men. The younger generations seem to be slowly moving to non-farming jobs: currently 81.8 percent of youth (15–24 years of age) work in agriculture, compared to 84.9 percent of their elders. Youth also remain confined to unpaid jobs. For example, 65.4 percent of the youth are unpaid compared to 39.2 percent for 30-year-old and older workers. Fewer young workers are paid in agriculture, and fewer earn a wage in nonagricultural occupations.

2.2 Economic Development Challenges

Growth

Before the 2015 events, the economy of Burundi was performing relatively well. Improved macroeconomic management and countrywide peace and security resulted in positive real GDP growth, averaging 4.2 percent in the period 2004-2014¹². The growth rate has been insufficient to

⁸ Given the difference of survey methodologies between the ECVMB 2013-14 and the ECVMB 2017, a survey-to-survey imputation has been employed to estimate a poverty figure for 2017 which is comparable to the 2014 number. For details, see "Subjective Poverty and Recent Changes in Living Conditions: Findings from the Rapid Household Survey" (World Bank Poverty and Equity Global Practice, June 2018).

⁹ Inequality for Burundi may have been underestimated because the Burundi Poverty Assessment survey failed to sample the richest households and because of other measurement issues detailed in the 2016 Burundi Poverty Assessment.

¹⁰ Burundi's Gini score is the same as for Tanzania, but it is at least 5 points lower than those of the Democratic Republic of Congo (DRC) and Rwanda.

¹¹ Likewise, the International Labour Organization (ILO)-based unemployment rate, which only includes unemployed people who are actively looking for a job, increased from 1.6 percent in 2014 to 4.4 percent in 2017. Once again, the increase was particularly noticeable in Bujumbura, where the unemployment rate increased from 14.2 percent in 2014 to 23.2 percent in 2017.

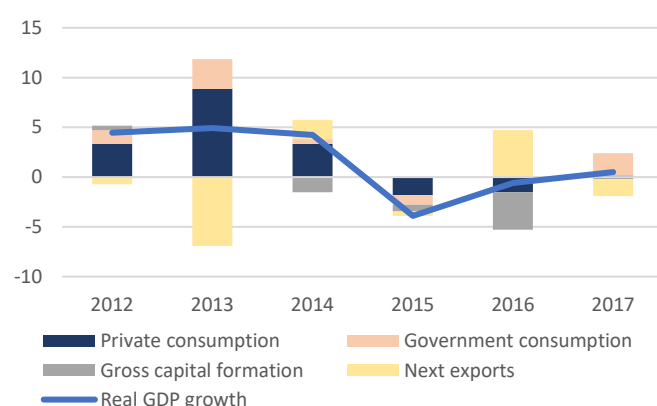
¹² These eleven years of uninterrupted economic growth followed the devastating civil war period in 1993-2003, which saw GDP growth averaging -1.8 percent annually.

sustain high rates of per capita income growth during the same period (0.9 percent). Between 2004-14, the Government's sustained commitment to reforms, mainly in public financial management and the investment climate, helped to stabilize the country's economy¹³. These efforts resulted in a slight rebound in growth, notably achieved amid a challenging and fragile environment (PEMFAR 2010; PER 2013).

The 2015 events put an end to the eleven years of positive growth. Real GDP declined by 3.9 percent in 2015, driven by a sharp drop in the urban formal and semi-formal economic activities. Commercial and industrial activities were strongly affected in the capital, Bujumbura, for several weeks in April-June 2015 in the run-up to the general elections in July. The domestic demand was further weakened due to the tense political situation and acute insecurity continued during the second half of 2015 after the elections. The secondary sector contracted by about 16.1 percent in 2015. This included a contraction in manufacturing, utilities (including energy), construction and mining. The primary sector contracted by 3 percent as well, mostly due to the combined effects of climatic shocks and the lack of use of fertilizers and access to inputs on a timely manner. Despite a noticeable growth decline in the tourism sector and trade, the tertiary sector showed some resilience — mostly due to commercial banking and telecommunications. Central Government activities also greatly impacted the situation, with an increase in security expenditures that drained almost all available domestic revenues and foreign exchange reserves.

The economy continued to contract in 2016. Real GDP contracted by an estimated 0.6 percent in 2016. Poor weather conditions dampened agricultural production and the hydropower energy supply. The industrial sector (including agro-processing and construction) contracted by 6 percent in 2016 (albeit less than the 16.1 percent in 2015), whereas the service sector continued to show some resilience. On the demand side, the sharp decline of public investment was the main factor driving contraction in 2016 (figure 1). Major donors suspended budget support in 2016, which equaled 4 percent of GDP (and 13 percent of total government revenues). In addition, implementation issues slowed disbursement of project funds, which could not compensate for the foreign exchange shortage because of the loss of budget support. Net exports contributed favorably to growth due to a significant improvement in the trade balance, as export growth combined with a decline in import growth.

Figure 1: Real GDP Growth and Contributions to Real GDP Growth



Source: World Bank estimate.

Note: GDP= gross domestic product.

After two consecutive years of economic contraction, Burundi's economy began showing some signs of economic recovery in 2017. In 2017, GDP growth is estimated to have reached 0.5 percent, up from

¹³ The strengthening in the quality of policies and institutions also led to an improvement in Burundi's overall Country Policy and Institutional Assessment (CPIA) score from 2008 to 2014 by 0.3 point.

-0.6 percent in 2016. The recovery came from the agriculture and industry sectors, as indicated in table 1.

Table 1: Main Economic Indicators: 2015–20

	2015	2016	2017 e	2018 f	2019 f	2020 f
Real GDP growth, at constant market prices	-3.9	-0.6	0.5	1.9	2.3	2.5
Private Consumption	-2.0	-1.7	0.2	3.0	2.0	2.0
Government Consumption	-3.9	0.1	8.8	-2.9	4.0	5.1
Gross Fixed Capital Investment	-4.8	-27.4	-2.0	11.7	5.3	3.1
Exports, Goods and Services	-13.8	6.0	31.8	5.0	3.5	3.0
Imports, Goods and Services	-2.0	-11.6	13.1	4.5	4.0	3.5
Real GDP growth, at constant factor prices	-3.9	-0.6	0.5	1.9	2.3	2.5
Agriculture	-3.0	-5.0	0.3	0.5	2.8	3.0
Industry	-16.1	-6.0	2.0	4.8	3.1	3.8
Services	0.4	3.9	0.2	1.8	1.8	1.8
Inflation (Consumer Price Index)	5.6	5.6	16.1	10.3	11.4	10.1
Current Account Balance (% of GDP)	-12.0	-11.5	-11.3	-10.1	-8.6	-7.4
Fiscal Balance (% of GDP)	-6.7	-6.9	-4.5	-3.8	-4.4	-5.6
Debt (% of GDP)	36.2	42.9	44.3	44.5	42.9	44.4
Primary Balance (% of GDP)	-5.9	-5.7	-3.5	-2.8	-3.4	-4.5

Sources: Data based on Macro-Fiscal Model estimates. World Bank, Macroeconomics, Trade and Investment Global Practice, and the Poverty and Equity Global Practice.

Notes: e = estimate; f = forecast; GDP= gross domestic product.

Drought conditions hindered a full recovery of the agriculture sector's performance in 2017. With only 1.3 percent of Burundi's cultivable land under irrigation, agricultural output is highly dependent on favorable rain.¹⁴ The sector showed a slight recovery (particularly from cash crops) due to a limited rainfall at the beginning of the year, as well as the unavailability of inputs (fertilizers and seeds) for timely use due to foreign exchange restrictions. The weakness in the sector's performance is also illustrated in the output of key agricultural exports such as tea. Indeed, the production of tea dropped by 12 percent in 2017 compared to the previous year (table 2). In contrast, coffee output, whose performance depends on other factors, expanded by 21 percent in 2017 compared to the previous year.

Table 2: Agricultural Production (in tons)

	Average 2011-2014	2015	2016	2017
Products				
Coffee ^{1/}	20,651	22,009	17,906	21,718
Tea ^{2/}	10,698	10,277	10,895	9,640

Source: Bank of the Republic of Burundi (BRB).

Note: 1/ Parche Arabica coffee.; 2/ Dry tea leaves. The year 2015 indicates the season for 2015/2016.

Industrial production recovered in 2017. The sector, which accounted for about 16 percent of GDP in 2017, grew by 2 percent in 2017. This compares with a historical average of 5 percentage points during 2006–14. Data from the Harmonized Index of Industrial Production compiled by the Burundi Institute of Statistics (ISTEEBU) indicate an increase supported by the strong performance of agro-processing industries, notably the leading *Brasseries et Limonaderies du Burundi* (BRARUDI) brewery and soft beverage company, the largest private sector employer in the country.¹⁵ Mining activity also increased

¹⁴ Land equipped for irrigation as a share of agricultural land is estimated at 1.1 percent in 2009 (FAOSTAT). Estimates from other sources (World Development Indicators and a report from the Nile Basin Initiative on the assessment of the irrigation potential in Burundi) indicate a ratio of 1.3 percent in 2012.

¹⁵ The Harmonized Index of Industrial Production compiled by the ISTEEBU includes over 22 sub-sectors and 56 products.

in 2017. A new mineral processing factory of rare earth was established on the outskirts of Bujumbura. Also, the first commercially operated gold mine began production in the province of Cibitoke in November 2017. However, energy production remains limited due to weak investment and climate hazards. Lower rainfall in 2017 depressed the generation of electricity from hydropower sources. The launch of the additional thermal power of 30 megawatts (MW) in September 2017 partially offset the reduction in hydropower generation and reduced the frequency of power outages at night.

The services sector continued to grow in 2017, albeit slowly. Preliminary estimates indicate that retail, banking, transport, and telecommunications registered positive growth. The credit expansion to finance the government deficit contributed to the increased volume of banking activity. As Burundi's population now has better access to mobile phones, the telecommunications sector is also registering positive growth. The uptake of mobile money has been on an upward swing since the beginning of 2017, after nearly 7 years of little to no growth.

Consumer spending did not recover from the recession and dampened GDP growth. Private consumption was the most important driver of growth prior to the crisis. However, consumer spending continued to be severely constrained in 2017 by several factors, such as the high level of inflation and labor market deterioration, thereby increasing unemployment. In 2017, public spending positively and significantly contributed to growth driven by an increase in wages and goods and services, this despite government controls to limit them. Growth in total investment spending remained negative despite an increase in private investment taking place in the mining sector, where investment is increasing slowly (figure 1).

The latest indicators point to stronger growth in the first half of 2018. A healthy increase across the board in the Industrial Production Index for the first half of 2018 suggests that the incipient recovery that began in 2017 is continuing into 2018. Indeed, based on ISTEEDU quarterly indicators, industrial activity accelerated in the first half of 2018 compared to the same period in the previous year. The overall increase of 4.5 percent was synchronized among all sub-categories. For instance, the performance of the agro-processing industries, notably the BRARUDI, was particularly strong. Stronger readings in other high-frequency indicators (energy production and total credit to the private sector) also suggest stronger economic growth for 2018 compared to 2017.

Real GDP growth is projected to average around 2.2 percent of GDP in 2018–20. Per capita GDP growth is forecast to remain negative, however. The good performance of the mining sector should contribute to an overall GDP growth of almost 2 percent in 2018, as the country is seeking to exploit the country's mineral potential. As such, it has begun to award licenses to boost investment. The services sector, which showed the most resilience during the crisis, is expected to be mostly driven by the performance of telecommunications, banking and insurance. Assuming normal weather conditions, the agriculture sector will grow faster in 2018-2019, following a period of contraction.

Growth Bottlenecks

Gains from the successful implementation of investment climate reforms over the 2007–2014 period have since been erased. Before the current crisis, Burundi had been among the top 10 reformers globally regarding ease of doing business. However, the gains achieved through government structural reforms have since been erased, and the country has lost ground on the Doing Business indicators. Burundi was ranked 169th in 2010 and improved to 117th in 2014. Burundi dropped to 157th of 190 countries in 2017, and fell again, to 164th in 2018¹⁶. The areas in which the country registered the largest decrease include those pertaining to economic management and public

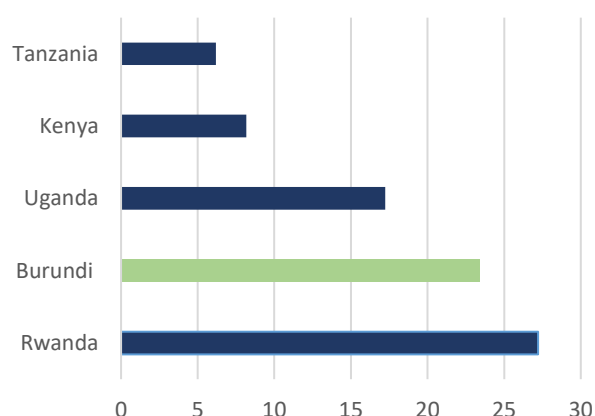
¹⁶ The decline recorded in the framework of structural reforms was also reflected in the CPIA score, which decreased by 0.4 points between 2015 and 2017.

sector management and institutions. Resumption of its reform momentum is critical if Burundi is to unlock its full economic potential and pave the way to sustainably achieving its *Vision 2025* objectives.

Lack of energy infrastructure is a major constraint to economic growth. Poor coverage and low-quality infrastructure create costs in terms of time and money. These constraints lower the return on capital and work, discourage domestic and foreign investment, and hinder economic growth. Despite the generation of an extra 30-MW of thermal power since the end of 2017, Burundi continues to display a severe generation and transmission capacity deficit. Improving access to energy will improve the enabling environment for businesses.

Despite being underdeveloped, regional trade is expanding in Burundi. External trade is limited by its narrow export base comprised of coffee and tea. However, gold is starting to assume a higher share of Burundi's exports (more than 30 percent of exports in 2017). Burundi's trade within the East African Community (EAC), which is the main community anchoring Burundi's regional integration, is still underdeveloped. Restrictions regarding the cross-border movement of goods, services, and labor continue, despite the common market protocol signed in 2010. However, compared to other EAC partner states, Burundi is positioning itself well on intra-regional trade (figure 2). Burundi's intra-regional trade averaged 27 percent of total trade during the period from 2007 to 2017. As a landlocked country, regional markets present unique opportunities for Burundi to diversify its exports in non-traditional goods¹⁷.

Figure 2: Share of East African Community Intra-regional Trade: 2006-2015



Source: East African Community Secretariat, East African Community Facts and Figures, 2014, 2015 and 2016 Reports.

Skills shortages and the small formal labor market also inhibit private sector development. The labor markets offer very few formal private sector jobs, with 90 percent of workers being employed in the informal economy. The lack of skills and education, particularly among rural and poor populations, is an impediment to accessing the formal sector. Despite recent attempts to improve the business environment by reducing the time and financial cost of incorporating a business, the institutions and regulatory framework are insufficient to integrate the informal sector into the formal sector.

The banking sector faces persistent vulnerabilities linked to increased governmental borrowing and the deterioration of its portfolio quality. In a context of limited access to external support, the government adjusted its monetary policy stance to finance the fiscal deficit, which translated into increased government borrowing from the domestic market. Limited access to credit is another important constraint faced by Burundi's firms. As commercial bank assets are increasingly

¹⁷ According to the Burundi Diagnostic Trade Integration Study (DTIS) Update (World Bank, 2012), regional integration can help mitigate external vulnerability. It also offers opportunities for export diversification in goods and services. As such, it can augment the size of its potential market, as well as the profitability of private investments.

concentrated in Government debt, the share of credit to the private sector has steadily declined. Against this background, the banking sector vulnerability has increased as the sector continues to be burdened by huge non-performing loans (NPLs) in private sector assets (at 14.6 percent by end-2017), while simultaneously being exposed to a rising public sector credit risk. Recent data show a further deterioration of portfolio quality with an increase in NPLs in May 2018 compared to the previous year.

The shortage of foreign exchange has led to foreign exchange restrictions and import rationing, hampering economic growth. The 2015 political crisis and spillover from the response of the donor community triggered a serious foreign exchange shortage. This in turn led to foreign exchange restrictions and rationing. It also had a major impact on essential imports, including fuel, capital and intermediate goods, thereby adversely impacting economic activity, domestic revenue mobilization, budget implementation, and fiscal deficits. Shortages in foreign exchange reserves have also limited much-needed imports for school supplies. Data for 2016 show that the volume of school supplies imports increased by 18 percent in 2016 while the value of these imports decreased by 19 percent during the same period¹⁸. This suggests a drop in the quality of imported products, as importers may have opted for cheaper products. This reflects the needs to adjust to the acute foreign currency shortages. In 2017, inflation related to education was strong at 13.6 percent up from 1.3 percent in 2016, suggesting an inflationary effect of the scarcity of foreign exchange to imports into the sector.

2.3 Overview of Public Finances

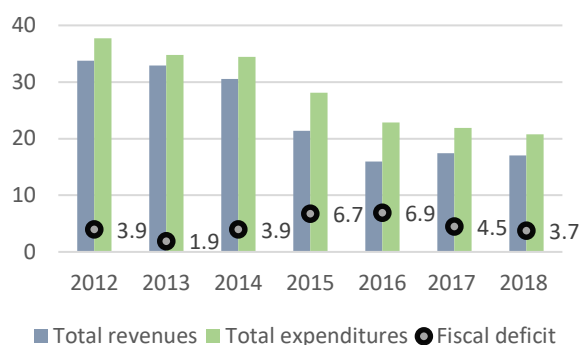
Revenue and Expenditure Trends

Maintaining a broadly prudent fiscal policy has remained central to Burundi's economic growth program. Following the political transition that launched the reform process¹⁹, the fiscal deficit declined to 1.9 percent of GDP in 2013 — down from 3.6 percent in 2010. This performance resulted from the Government's efforts to mobilize public resources, while applying more fiscal discipline to control the wage bill (both for the civil service and armed forces), as well as purchases of goods and services. In the period 2012-2014 when direct budget support steadily declined, better management of both the wage bill (averaging 7.9 percent of GDP compared to 8.6 percent in 2010) and purchases of goods and services (averaging 3 percent of GDP compared to 4.0 percent in 2010) resulted in an overall fiscal deficit averaging 3.3 percent of GDP. The Government modernized the legal and regulatory frameworks to improve budget preparation and execution, while also establishing the Burundi Revenue Authority (OBR).

¹⁸ Such data is not available for 2017

¹⁹ A series of World Bank budget support operations reinforced the modernization of Burundi's public finance management (PFM). These included: the 2000 Emergency Economic Recovery Credit (EERC); the 2002 Economic Rehabilitation Credit (ERC); and the series of development policy grants (DPGs) that started with the 2006 Economic Reform Support Grant (ERSG 1) followed by the ERSG 2 that covered the 2008–14 period. These reforms aimed at improving budget planning and execution procedures, increasing the share of priority economic and social development sectors in both voted budgets and executed expenditures, and introducing a computerized financial management information system (IFMIS).

Figure 3: Government Fiscal Deficit (as a percentage of GDP)



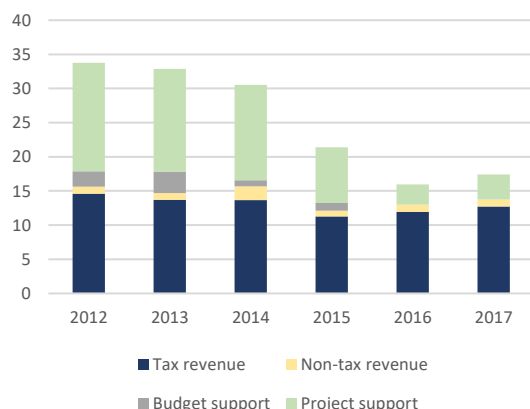
Source: MFPDE.

Burundi used to rely heavily on grants, but it is now coping with lower grant aid in the post-2015 period. Grants represented a large source of revenues, amounting to 53 percent of total revenues for 2010-2015. External budget support represented 3.4 percent of GDP annually in 2010-15, but has been suspended since 2016. Project grants which represented 14.1 percent of GDP during the period 2010-15 have also been considerably lower since 2016. They have been hovering around 3.3 percent of GDP in 2016-17. As in previous years, Burundi's budget relied on optimistic grant revenues in 2017. However, it missed its budgeted grant revenue targets by 45 percent in 2017. The improvement in domestic resource mobilization has not been sufficient to fully offset the decline in external aid.

The government adjusted to the sharp reduction of external aid since 2015 by improving mobilization of domestic revenues and consolidating expenditures including investment. The overall fiscal deficit decreased from 6.7 percent of GDP in 2015 to 4.5 percent in 2017 (figure 3).

The Bureau of Revenue continued to implement several measures introduced in 2016 to improve domestic resource mobilization. Tax revenues increased to 12.7 percent of GDP in 2017, an increase from 11.3 percent in 2015. Indeed, tax revenues are now the biggest source of public revenues in Burundi (figure 4). Tax revenue was higher than budgeted due to the introduction of several revenue-boosting measures, including increases in the fuel tax (with a 9 percent rate increase), the mobile phone tax (with a 24 percent rate increase) and the sugar tax (with a 50 percent rate increase) (see box 1 for a set of measures introduced by OBR). Although total domestic revenues have increased in Burundi, they are still among the lowest in the region since 2015 (figure 5) given the narrow tax base in the country. Most revenue stems from domestic activities (an average of 83 percent of domestic revenues coming from taxes on domestic activities such as taxes on goods and services and income tax).

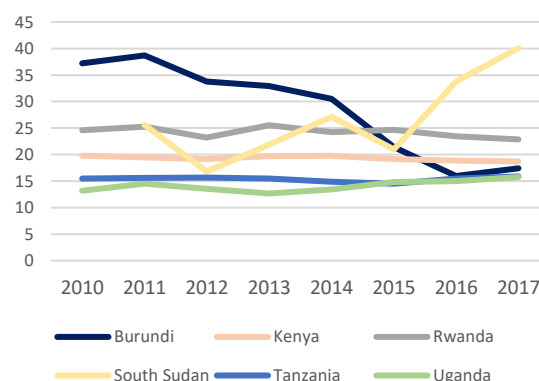
Figure 4: Government Revenues (as a percentage of GDP)



Source: MFPDE.

Note: Budget and project support includes grants.

Figure 5: Government revenues in the Region (as a percentage of GDP)



Source: World Economic Outlook (WEO) and the Burundi national authorities.

Box 1: The Burundi Revenue Authority's Strategy to Increase Revenue Collection

OBR's strategy to increase revenue collection is targeted around the following 4 elements:

- Increase revenue collection:
 - ✓ Computerization of domestic revenue collection with the Integrated Tax Administration System (ITAS) software
 - ✓ Improvement in taxpayer registration to enhance payments (both regular taxes and the recovery of arrears in lump sum taxes).
 - ✓ Heightened efforts (including more allotted staff) to reach out to micro and small tax payers. (expansion of the tax base), while also implementing stricter / tighter instructions for tax arrear recovery
- Internal reforms to the tax administration
 - ✓ Recruitment of the personnel needed to achieve the assigned performance goals
 - ✓ More trained staff and assigned Specific, Measurable, Attainable, Relevant and Timely (SMART) objectives (with bonuses rewarding performance)
- Education programs for taxpayers including
 - ✓ Sensitization campaigns to significantly foster tax compliance and reduce tax evasion
- Reinforcement of regional and international partnerships
 - ✓ To increase collaboration between the private sector and the government, and to create a consultative committee to more closely follow the OBR's activities.

Source: OBR Strategic Plan for 2018-2022.

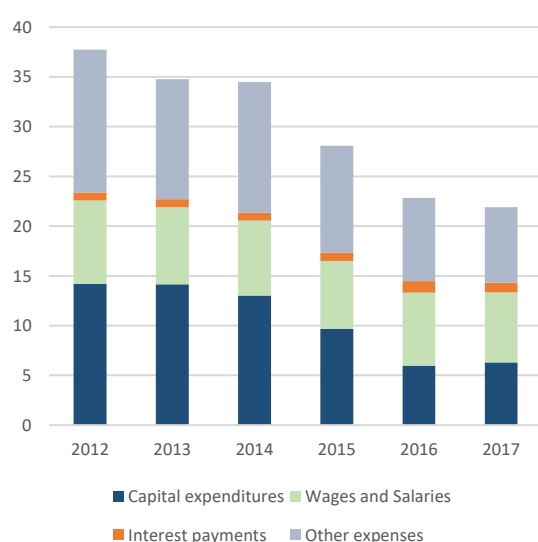
On the expenditure front, the government has taken measures to cut expenditures to reduce the overall financing needs. Since 2015, total spending has been severely reduced (figure 6). The government managed to control wage bills through freezes on new hires and on wage increases (except for the education, health and security sectors), as well as controls on the purchases of goods and services—two expenditure items which represent nearly half of total expenditures. Despite the reduction of the wage bill since 2015, it remains large by regional standards, averaging 7 percent of GDP since 2015. Burundi's wage bill, which accounts for 36 percent of current expenditures from 2014-2016, is higher than in other EAC countries where it ranges between 22 and 33 percent²⁰. Transfers represent the second largest category of current expenditures. This category includes

²⁰ World Development Indicators for Kenya, Rwanda, Tanzania and Uganda. No data are available for South Sudan. Data points for 2014-2016 depend on availability.

transfers to intergovernmental organizations (such as the EAC, and Common Market for Eastern and Southern Africa [COMESA]), financing for elections, support for funding education, and subsidies for the State administration units. Despite the increase in government debt, interest payments as a share of total expenditure remain limited, that is, below 5 percent in 2017.²¹

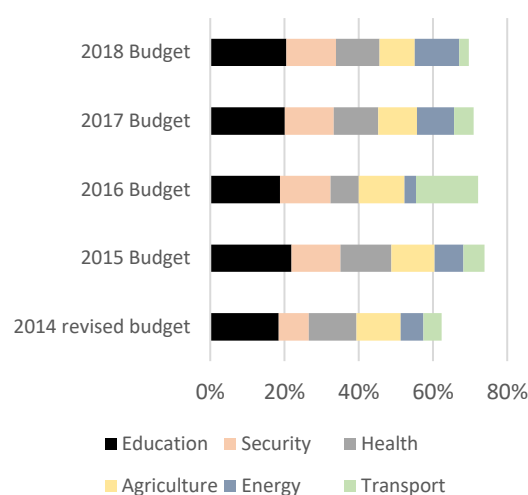
While social services and security continue to consume a significant share of the budget (54 percent) despite the fiscal consolidation, the absolute size of spending in these areas has declined. Burundi's civil service comprises nearly 100,000 workers (excluding the security sector). The education and health sectors account for 88 percent of total wage bill²². However, they are lower in absolute terms compared to the period prior to the crisis. The measure to freeze new recruitment has been maintained in 2018 in most sectors (with the exception of defense, security, health, education, the Revenue Office and local development) (figure 7).

Figure 6: Government Spending (as a percentage of GDP)



Source: MFPDE.

Figure 7: Sectoral Composition of Total Budgeted Expenditures (as a percentage of total sectoral budget)



Source: MFPDE.

Note: Security includes expenditures for the Ministry of the Interior, the Ministry of Public Security, and the Ministry of National Defense.

Fiscal consolidation has been mostly achieved by reducing capital spending; before 2015, capital spending was very high due to the availability of grant support. The reduction in aid and the declining fiscal space has led to cuts in capital spending. Whereas capital expenditure was budgeted at an average of 9.9 percent of GDP in 2016-2017, realized capital spending only reached 6.1 percent of GDP on average during this same period.²³ From 2010 to 2015, foreign aid was used to fully finance capital expenditure through project support. Funds from development partners were significantly reduced after 2015 and financed just half of capital expenditure in 2017. The remainder was financed by domestic resources. As a result of the reduction in public investment, current expenditure has become

²¹ As the Central Bank continues to increase liquidity to commercial banks, interest rates on Government securities stabilized in 2017.

²² ISTEEDU data for 2015.

²³ Investment levels remain much lower than their pre-crisis level of 14 percent of GDP from 2010 to 2014. Weaknesses in budget execution are due to the limited absorptive capacity of Government agencies. These weaknesses have also delayed the implementation of investment projects. Difficulties in the procurement process are another contributory factor to the Government's limited absorptive capacities.

more dominant in the budget, accounting for around 70 percent of total spending during 2015-2018 as compared to around 60 percent for 2011-2014.

With social sector, agriculture, and energy being major areas for capital spending in Burundi, its reduction could have a negative impact on long-term growth and poverty reduction. Capital spending in social sectors include education and health facilities through municipal investment projects.²⁴ For energy, the construction of the 30 MW thermal power station and the preparation of the construction of two hydroelectric power stations (Mpanda and Jiji Mulembwe) is the most significant recent investment. The three areas together accounted for 65 percent of total capital spending in 2017, with respective shares of 32.5 for commune projects, 18.6 percent for agricultural fertilizers subsidies and 15.3 percent for energy.

With limited access to external financing, the fiscal deficit has been primarily financed through discretionary central bank financing. In 2017, the deficit was largely financed using domestic resources with net domestic financing, accounting for 99.2 percent of total financing (table 3). Total net domestic financing more than doubled compared to the pre-crisis level in 2014. More importantly, since 2015, most of the fiscal deficit has been financed by the Central Bank and commercial banks through the issuance of Treasury bills and bonds. The share of Treasury bills and bonds held by commercial banks has risen by a factor of 7 between 2012 and 2017.

Table 3: Sources of Government Deficit Financing

	2012	2013	2014	2015	2016	2017
Net Lending/Borrowing (percent of GDP)	4.0	(0.0)	3.6	6.5	6.7	4.6
Domestic	2.2	(0.2)	2.5	6.3	6.3	4.6
of which financed by banks	-	-	-	1.5	2.3	2.8
of which financed by non-banks	-	-	-	0.8	1.6	1.0
of which Financed by the BRB	-	-	-	4.0	2.3	0.7
Foreign	1.7	0.2	1.1	0.1	0.4	0.0

Sources: International Monetary Fund (IMF) and the Ministry of Finance and Economic Development Planning (MFPDE).

Note: BRB= Bank of the Republic of Burundi; GDP= gross domestic product.

The fiscal deficit is also implicitly covered by accumulating arrears. A Comprehensive information on arrears is not yet available, but there is an indication of significant accumulation of domestic arrears. Although arrears still need to be verified, they could add another BIF 250 billion (US\$ 138 million equivalent) to government debt (equivalent to around 2.7 percent of GDP).²⁵ These include arrears owed to state-owned enterprises (SOEs), as well as arrears owed to suppliers and contractors. Burundi does not hold any “social debt” (for example, unpaid salaries for government employees) and has not failed to reimburse its external creditors.

²⁴ In the past 3 years, the Government transferred to every municipality a budgetary envelope of BIF 500 million (US\$ equivalent) per year to finance the implementation of the municipal development plans. From 2015 to 2017, priority has been given to the health and education sectors. However, since 2018, at least 80 percent of municipal investment projects is directed toward agriculture.

²⁵ A commission formed by the government has as its objective the measurement and verification of all government arrears. The budget law for 2018/2019 mentions a possible securitization of the arrears, thereby transforming them into government debt.

The 2018 budget targets a fiscal deficit of 2.6 percent of GDP, a major decrease from the figure of 4.5 percent recorded in 2017, supported by enhanced domestic revenues and further fiscal consolidation.²⁶

- **Revenue:** The total budget envelope, comprised of domestic revenues and grants, is projected at 19.8 percent of GDP in 2018. This is based on an assumption of modest increases in tax and non-tax revenues from 2017 outturns. Mining revenues have long been absent from the budget. They are to be introduced in the 2018 budget, and the recent issuance of two operating licenses is expected to lead to higher mineral output (gold, rare earth minerals and coltan).²⁷ Nevertheless, the expected amount of mining revenue is low, representing less than 1 percent of domestic revenues. Overall, the 2018 budget does not include any other new tax policy measures, as the government relies on the continued implementation of the revenue enhancement strategy launched in 2016.
- **Expenditure:** The government is committed to tightening expenditures in 2018, notably maintaining a hiring freeze in the public sector — with the exception of the health, education and security sectors. In the 2018 budget, recurrent expenses slightly exceed domestic revenues, leaving little room for resources devoted to investments.

The implementation of the 2018 budget appears to be challenging. During the first five months of 2018, revenues seemed to be on track and performed well, with a 19 percent increase compared to the same period a year before.²⁸ However, the government only budgeted a 2 percent increase in current expenditures over the year 2018, whereas during the first 5 months of 2018, current expenditures had already increased by 25 percent compared to previous years. Further adjustments will be needed during the rest of the year to contain the rise in spending, if the government wants to reach its target of a reduced fiscal deficit. The 2018 deficit will be largely financed by borrowing from the domestic market. Of this amount, 83 percent will be financed from Treasury bills and bonds and the BRB statutory advances.

Domestic debt is expected to continue growing, however. The recent trend of resorting to the intensive use of Treasury bills and bonds will continue. It may lead to a rise of domestic debt if no policy change is observed. Looking ahead, without access to external financing, Burundi's budget deficit financing option will remain limited to domestic financing.

Fiscal Sustainability

The decline in economic activity following the 2015 political crisis negatively impacted domestic revenue mobilization. Since peaking in 2011, both revenues and grants declined, thereby constraining spending and contributing to higher fiscal deficits in the aftermath of the 2015 crisis. This resulted in a significant deterioration in the budget balance in 2015 and 2016. Despite an improvement in the

²⁶ The authorities are switching from the calendar fiscal year to the EAC budget cycle, which runs from July to June. A transition budget covering July 2018 to June 2019 was approved in June 2018. A revision to the 2018/2019 budget will be submitted to the Parliament in November 2018. Thereafter, the budget will be approved in May of every year.

In nominal terms, the budget for 2018/2019 is almost identical to the budget for the 2018 calendar year (except for a small increase in tax revenues and transfers and subsidies by 1.8 and 5.4 percent, respectively). In terms of GDP, the ratios appear smaller due to a higher estimated GDP for the fiscal year 2018/2019 as compared to calendar year 2018. The budget revision in December 2018 is expected to provide refined numbers for the second half of the fiscal year (FY) 2018/2019.

²⁷ Two licenses have been recently awarded by the government: one for the exploitation of gold and associated minerals at Masaka, and another license has been renewed for the exploration of Colombo-tantalite and associated minerals.

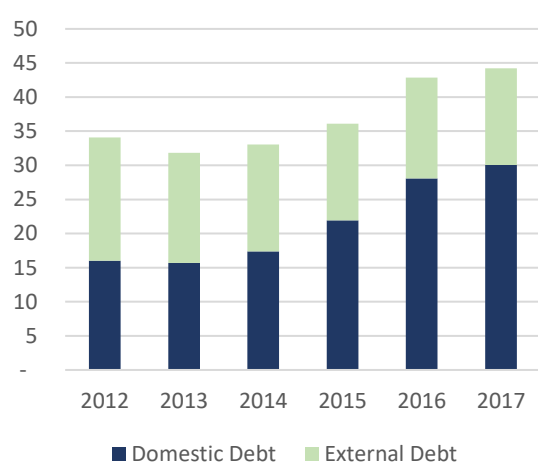
²⁸ Aggregated preliminary data for 2018 are available from the Central Bank. Data covers the first five months of the year at the time of the report.

budget balance in 2017, it calls into question budget sustainability over time without a significant improvement in domestic revenue mobilization in the context of reduced donor assistance.

Since 2015, the country has accumulated significant domestic payment arrears, posing a risk to debt sustainability. Data about the government debt stock do not currently include the amount of domestic arrears accumulated. A debt analysis including domestic arrears and contingent liabilities — including those arising from public-private partnership investments — would shed more light on the sustainability of the debt.²⁹

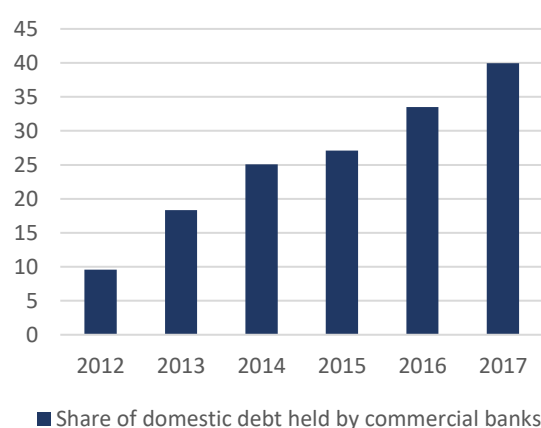
Declining external aid combined with sluggish domestic revenue mobilization increased the Government's recourse to non-concessional financing, thereby worsening the debt situation in a country that was already in debt distress before the crisis. The lack of external financing since the 2015 political crisis makes central bank lending and monetization of the deficit the Government's only resort. The weight of domestic public debt has dramatically increased since 2015 (figure 8). Domestic debt represents more than two-thirds of the total debt stock compared to 47 percent in 2012. This debt is mainly in the form of short-term Treasury bills (less than a year) and longer-term bonds (2-5 years) financed by commercial bank and Central Bank advances to the Government (figure 9). The short maturity of domestic debt contributes to the elevated vulnerability of the overall debt portfolio.

Figure 8: Domestic Debt



Source: BRB and World Bank Staff estimates.

Figure 9: Government Domestic Debt (percentage)



Source: BRB and World Bank Staff estimates.

The failure to curtail monetary deficit financing and the crowding out of spending on priority social programs and infrastructure projects are detrimental to economic growth. Budgetary operations are crowding out the private sector, negatively impacting economic activity. The expenditure profile is tilted towards recurrent spending and inhibits public investment in priority sectors, particularly infrastructure and social outlays. Government expenditures should be prioritized in favor of basic infrastructure, the agriculture sector (which is labor-intensive) and improving human capital in order to promote more sustainable and inclusive growth.

Burundi's public debt levels are among the highest in the EAC. Given limited external support since 2015, public debt has continued to grow steadily over the last three years. Total public debt rose to 44.2 percent of GDP at the end of 2017, largely due to a rise in domestic debt, as external borrowing

²⁹The methodology used to assess public debt-related risks in the new framework developed by the IMF and the World Bank has been strengthened in order to identify domestic debt distress episodes, such as those that would come from domestic arrears. See International Development Association (IDA)-IMF (2017).

options remain limited. Burundi is among the most indebted countries in the EAC, alongside Kenya and South Sudan³⁰ (table 4).

Table 4. Public Debt in EAC Countries (as a percentage of GDP)

	2014	2015	2016	2017
Burundi*	33.1	36.1	42.9	44.2
Kenya	48.6	51.6	53.5	55.6
Rwanda	29.1	33.4	37.3	40.6
Tanzania	33.8	37.2	38	38.2
Uganda	30.8	33.5	37.2	39
South Sudan	38.3	69.3	86.5	66.3

Source: IMF, Regional Economic Outlook, April 2018, and *World Bank Staff estimates.

The country is at high risk of debt distress. Because its export base is very low, Burundi is at high risk of external debt distress. The last joint IMF / International Development Association (IDA) Debt Sustainability Analysis (DSA) update in March 2015 indicates that Burundi continues to be assessed at a high risk of debt distress. The present value of debt-to-exports ratio, although gradually declining, is projected to stay above the 100 percent policy threshold until around 2020. The debt service-to-exports ratio slightly and temporarily breaches this threshold.

Unsustainable fiscal deficits have threatened the capacity of the domestic financial sector to support economic growth. Commercial banks increased credit to the private sector by only 3 percent in 2017, following a previous credit contraction of -3 percent in 2015. This suggests an increasing liquidity constraint, mostly due to heightened exposure to the Government's fiscal fragility. Treasury bills increased by 153 percent from 2015 to 2017³¹, amounting to 33.5 percent of the total assets of the commercial banks. By literally pushing the banks' asset portfolio toward credit to the Government, a possible credit squeeze effect might compound the current difficult business environment. This context contributes to the delaying of a potential growth rebound. However, the quality of the commercial banks' asset portfolio has also worsened again. Non-performing loans reached 14.6 percent of this portfolio in 2017³², after writing-off provisioned two-year-old unpaid loans in the banks' financial statements. By end December 2017, the subsectors most affected by deteriorating loans included: tourism (55 percent of accorded loans to the subsector were unpaid); construction (32.2 percent); crafts (25 percent); coffee (18.6 percent); trade (21.0 percent); and industry (17.8 percent).

Deviations from the projected fiscal consolidation could jeopardize financial and macroeconomic stability. Fiscal consolidation could be hampered by spending pressures during the time leading to the 2020 general elections. Expenditure pressures combined with the continued low level of donor support could gradually lead to an increase in domestic debt. Domestic debt is already on the rise and increasingly financed by commercial banks, resulting in the crowding out of the private sector. The recent rise in government debt and the shift in the composition of creditors are sparking fears of a potential debt crisis. These are based on the rise in the estimated amount of domestic arrears — already at an elevated level — and the rise in ordinary advances, illustrating the difficulties the Government is having in financing its domestic debt. Against this background, the recourse to domestic borrowing including ordinary advances is bound to increase in the future, thereby leading to a loss in the efficiency of monetary policy. If the central bank intensifies printing money to finance the government fiscal deficit, higher levels of inflation are expected. In turn, negative real interest rate yields would further compromise the profitability of the banking sector. A comprehensive debt management strategy would help keep debt levels at sustainable levels and ensure consistency with

³⁰ The convergence criterion is public debt ≤50 percent of GDP in net present value terms of debt.

³¹ Subscriptions of T-bills increased by 72 percent between December 2014 and December 2015.

³² NPLs reached 11.1 percent in 2014, 18.7 percent in 2015 and 12.8 percent in 2016.

the government's medium-term fiscal policy. As part of such a strategy, the government would need to constantly evaluate the costs and benefits of different categories of debt, including domestic and international loans from bilateral and multilateral sources. A comprehensive strategy for clearing domestic arrears and avoiding further accumulation in future would allow for a gradual reduction in the stock of verified domestic arrears.

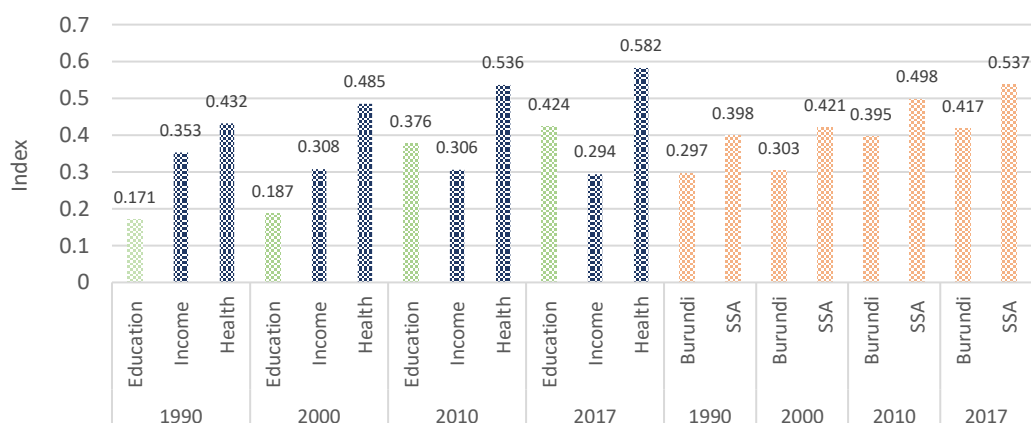
III. Education Sector Overview

This chapter provides an overview of the education sector. The first section presents Burundi's socioeconomic context and is followed by a brief presentation of the education system's structure. The last part of this chapter outlines the basic education sector goals and priorities.

3.1 Burundi's Socio-Economic Context

Despite some progress in improving human development between 2000 and 2017, Burundi lags behind the SSA average, ranking 184 out of 188 countries. The HDI index is measured by life expectancy, education and per capita income indicators. As illustrated in figure 10, education has contributed to Burundi's low HDI score. Although the education component improved between 2010 and 2017, amounting to 0.424 in 2017 from 0.187 in 2010, it remains lower than the health component. Burundi's HDI index has been continuously ranked below the SSA average for more than two decades, with the gap slightly increasing in 2017. Burundi's HDI value puts the country in the low human development category, which will make it difficult for the country to compete in the global economy.

Figure 10: HDI Component Trends and SSA Comparison



Source: United Nations Development Programme (UNDP) Human Development Report 2018.

Note: HDI= Human Development Index; SSA= Sub-Saharan Africa.

Burundi has a young, growing population — with more than half of the population under the age of 15. The country has a relatively large school aged cohort, with an estimated 50 percent of 0-15 year aged children (pre-primary, primary and lower secondary age) and 29 percent aged 15-21 (upper secondary and tertiary age). Among the school age cohort, about half are female. According to National Institute for Statistic and Economic Studies (*Institut de Statistique et d'Etudes Economiques - ISTEEDU*), the school-aged population (approximately 6-21 years of age) is expected to increase by 20 percent from 5.2 million in 2015 to over 6 million in 2030. Likewise, the total population is expected to reach 13.4 million by 2030.

The large youth composition coupled with a high level of demographic pressure puts a severe strain on Burundi's education system, particularly in the early grades. At present, the basic education age cohort (6-14 years old) accounts for the largest subgroup, which will not change according to the 2030 projections (figure 11). In the context of its reform agenda, the Government will have to meet an increasing demand of children aged 6-14 in the coming years. This implies important efforts to

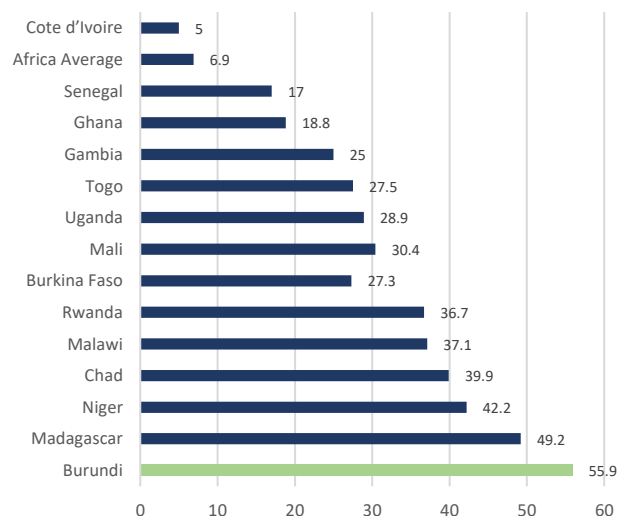
construct classrooms and recruit teachers, while optimizing available public resources in a constrained macroeconomic context.

Figure 11: School Age Cohort: 2010-2030 (in thousands)



Source: ISTEEDU.

Figure 12: Comparison of Stunting in Children Under 5 Years of Age (%)



Source: World Health Organization (2018).

Burundi's high prevalence rates of underweight children coupled with a high level of food insecurity undermines early childhood learning. Burundi has one of the highest incidences of stunting in Africa, at 57.5 percent among children under the age of five. This is also far above the Sustainable Development Goal (SDG) target of 29 percent (figure 12). This situation has significant implications for cognitive development and learning outcomes. According to UNICEF, stunting in early life is linked to 0.7 grade loss in schooling, a 7-month delay in starting school and a reduction in lifetime earnings of between 22 and 45 percent.³³ Burundi is also the most food insecure country in East Africa, with one of the highest Global Hunger Index (GHI) scores worldwide. It has a score of 30, indicating a 'high level of hunger'. Research has shown that chronic hunger in children can lead to increased absenteeism, and poor behavioral and poor academic functioning. Burundi's political instability and insecurity since mid-2015, coupled with natural disasters, has further exacerbated the country's malnutrition and food security challenges (FAO and WFP 2016).

3.2 Structure of the Education System

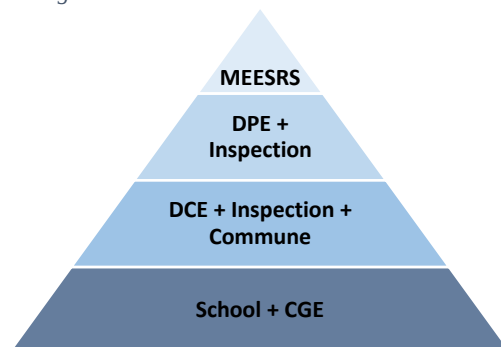
The organizational structure of the education system has changed several times in recent years, reflecting shifting sectoral priorities. Until 2015, the education sector was managed by two Ministries, namely the Ministry of Primary, Secondary, Vocational Training and Adult Literacy (MPSVTAL) and the Ministry of Higher Education and Scientific Research (MHESR). In 2016, these ministries were merged into a single Ministry of Education, Higher Education and Scientific Research (*Ministère de l'Éducation, de l'Enseignement Supérieur et de la Recherche Scientifique* - MEESRS) responsible for all levels of education — except for vocational training and adult literacy. The later were transferred to the Ministry of Civil Service, Works and Labor. Most recently, in May 2018, the sector was restructured again, splitting the Ministry of Education into the Ministry of Education, Technical and Vocational training (*Ministère de l'Éducation, la Formation Technique et Professionnelle*

³³http://www.europarl.europa.eu/meetdocs/2009_2014/documents/acp/dv/background_/background_en.pdf.

-MEFTP) and the Ministry of Higher Education and Scientific Research (*Ministère de l'Enseignement Supérieur et de la Recherche Scientifique – MESRS*). Basic education is now under the management of the MEFTP.³⁴

The Ministry's operations are partially deconcentrated across two administrative tiers: Provinces and Communes. There are 18 Provincial Education Directorates (*Direction Provinciale de l'Education – DPE*) and Inspectorates, which are in turn further divided into 129 Commune Education Directorates (*Direction Communale de l'Education – DCE*) and Inspections (figure 13). In addition to the central and provincial governments, the 129 decentralized territorial entities (*communes*) participate in the renovation and construction of primary, secondary, and vocational schools.

Figure 13: Burundi Education System Organizational Chart



Source: Authors' depiction.

Note: CGE= School Management Committee; DCE=Commune Education Directorate ; DPE= Provincial Education Directorate; MEESRS= Ministry of Education, Higher Education and Scientific Research.

Burundi's formal education system follows a 6-3-3-4 structure. This includes six years of lower education (3 "cycles" of 2 years each), which officially begins at age 6, followed by three years of upper education (a single "cycle" of 3 years). Lower and upper education together comprise the basic education level (*'École Fondamentale'*) covering grades 1-9. Basic education is followed by three years of senior secondary education (*'post-Fondamentale'*), including both general and technical schools, before four years of higher and tertiary education (figure 14).

The current basic education structure introduced in 2012/13 replaced the previous primary-secondary system. The old system had failed to provide adequate access to primary education. Also, it had very low transition rates from primary to secondary school (it stood at 33 percent in 2008). To address these weaknesses, the new structure moved to the unified basic education level with automatic promotion for grades 1-9 and a final National Test to complete the level. The results from the basic education exams in 6 compulsory subjects for all students in the 9th grade determine admission to secondary schools. The reform was initiated with Grade 7 in 2012/13, and the first batch from the 9-year schooling cycle graduated in 2016/17.

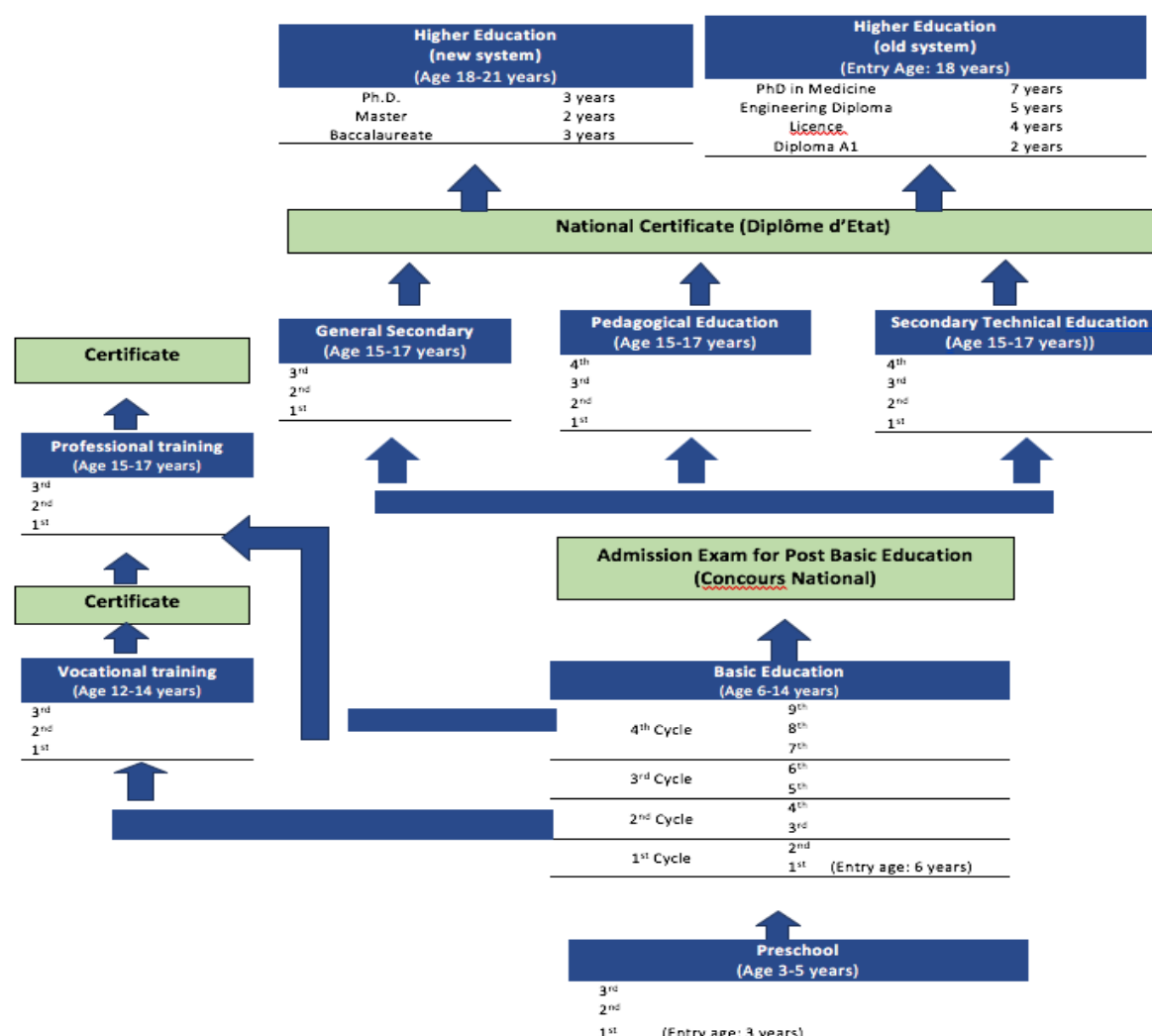
Post-basic education targets the cohort of students aged 12-17 years, and can last up to 6 years, depending on the students' chosen academic path. One option of post-basic education is secondary education, which consists of three streams, namely general, pedagogical and technical education. It aims to train skilled workers to meet the needs of the country, and prepares them for higher education. At the end of the senior secondary education "cycle", students sit for the State Examination (*Examen d'État*), and results are used for the selection of students to move on to higher and tertiary education. The other option is vocational education and training of up to 6 years. It prepares students to meet the needs of the community. It is geared toward initial and continuous training activities for

³⁴ The PER covers the period 2010-2018. Thus, the report refers primarily to the institutional organization that prevailed in May 2018.

young people in school — or even for those out of school who wish to develop their work skills. Depending on the level of completion of the vocational stream, students can obtain different forms of certification, such as the Certification of Skills. This is open to early school leavers and young people who have never been to school. Alternatively, the Qualified Worker Diploma is available to all those who have completed 9 years of basic education.

Access to higher education for students aged 18 years and older is conditional on having successfully obtained the national certificate (*Diplôme de l'État*) at the end of the secondary cycle. The public sector is an important provider of higher education through the University of Burundi and the *École Normale Supérieure*. The Ministry introduced an important reform of tertiary education in 2012, with the adoption of the Bologna process³⁵. This consists of 3-2-3 for the Bachelor, Master and Doctorate degree levels. Since then, two teaching systems have coexisted. The existing structure consists of either short-cycle courses conducted over a period of 2 to 3 years on average (*Diplôme*) or 4-year-long term courses (*Licence*), with the exception of the faculties of agronomy and medicine where training lasts 5 and 7 years, respectively (Engineering Diploma or a Doctor of Philosophy [PhD] in Medicine).

Figure 14: Burundi's Education System

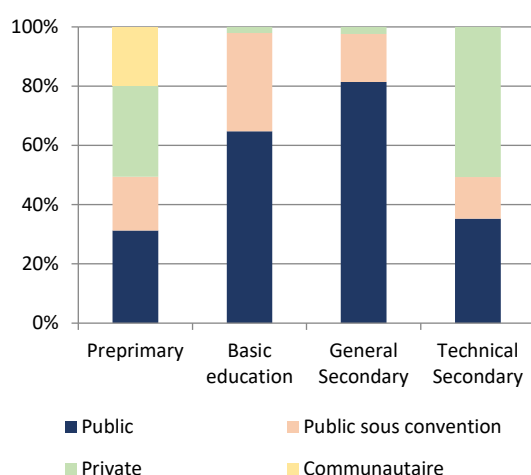


Source: World Bank (2016).

³⁵ The Bologna Process refers to the agreement first signed in that Italian city by the 30-member countries of the European Higher Education Area to harmonize the standards and quality of higher education provision across member states.

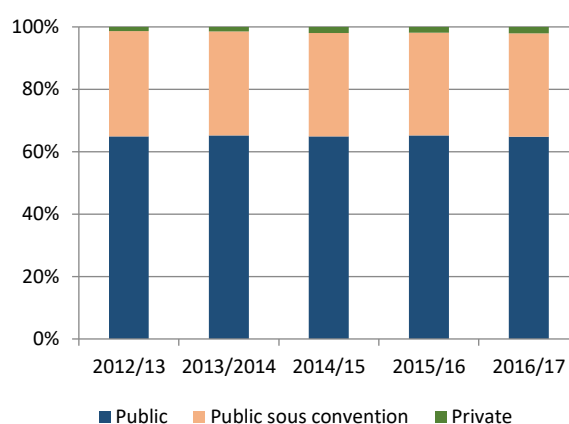
The public education system is comprised of public schools, “*public sous convention*” (that is, religious institutions that are subsidized by the Government) and private schools (entirely privately funded).³⁶ In 2016/17, Burundi had 6,955 pre-primary, primary, secondary and vocational schools across Burundi. Of the 2.9 million students, most are enrolled in public schools (65 percent), one third in grant-aided schools (“*public sous-convention*”), 4 percent in private schools and 1 percent in community schools.

Figure 15: Total Enrollment for Basic and Secondary Education by Level and School Type, 2016/17



Source: EMIS 2016/17.

Figure 16: Enrollment in Basic Education by School Type 2012/13-2016/17



Source: EMIS 2016/17.

In Burundi, the public sector is the largest provider of basic and secondary general education. Public and private schools account for one-third of enrollment in pre-primary education (figure 15). Private schools supplement the limited capacity for early childhood programs, but the cost is fully borne by families. At the basic education level, 65 percent of students were enrolled in public schools and 33 percent in grant-aided schools. This enrollment pattern has remained the same over the observed period from 2012/13 and 2016/17 (figure 16). The relatively high share of grant-aided schools underscores Government’s effort to ensure access to basic education. Public schools in general education cater to 80 percent of students, but they are less prevalent in technical education (which enrolls 30 percent of students). By contrast, private schools play a pivotal role in technical secondary education, accommodating over half of the enrolled students in 2016/17.

3.3 Sector Goals and Priorities in Basic Education

In an effort to achieve universal primary education, the Government of Burundi embarked on a set of education reforms aimed at improving equity, coverage and quality. In 2005, Burundi, abolished school fees, thereby rendering primary education free for children during their first six years of schooling. In 2012, the Government adopted a sector strategy plan for education and training (*Plan Sectoriel de Développement de l'Éducation et la Formation –PSDEF*) covering 2012-2020.³⁷ The plan aims to “achieve universal primary education and to educate the majority of youth until they reach an age where they can find their place in society.” A first three-year action plan from 2013-2015 was developed. Its implementation has been supported by technical and financial development partners in the education sector through the establishment of the FCE.

³⁶ Information on enrollment and tertiary institutions is not documented in the EMIS.

³⁷ The reform of basic education was promulgated by Law No. 1/19 of 10 September 2013.

Progress in the implementation of the PSDEF's first three-year action plan has been mixed. Over 6,500 classrooms were built between 2012-2015. A new curriculum for Grades 1-4 and new disciplines, such as entrepreneurship and the Kiswahili language, were introduced. They were accompanied by teacher training, new textbooks and materials in recent years. The share of double shift schools declined from 57 percent in 2010/11 to 35 percent in 2014/15, and repetition rates decreased in cycles 1 – 3. Another achievement has been the reduction in the variance in teacher deployment across provinces. Further, a school canteen unit was created to provide school feeding in zones affected by food insecurity. The government has also instituted a ban on the exclusion of students from school for a lack of a uniform or other basic item. Importantly, this coincided with a substantial reduction in school dropout rates. However, the student-teacher ratio has not changed, and the primary completion rate remains at 50 percent. Reforms have not yet reached the school level to improve retention, progression, and completion rates. Furthermore, the 2015 political crisis considerably hampered the implementation of the reforms because of the reduction in donor aid (see Chapter 5.1 and 5.2).

In 2018, the Government launched the Education Transitional Plan (ETP) for 2018-20; it prioritizes PSDEF activities in basic education due to the lack resources for the education reform agenda in the context of budgetary constraints in the post-2015 period. Following the closure of the FCE and domestic budget cuts in and after 2015, the MEESRS decided to focus on PSDF priorities in basic education. It also chose to develop a more comprehensive sector plan once the country's macroeconomic situation has improved. The Education Transition Plan for 2018-2020 focuses on improving (i) access, equity and quality of learning in basic education; (ii) links between basic education and vocational training; (iii) strengthening the resilience of the system; and (iv) governance and management of the sector (see Table 5). The ETP builds on a range of analytical work carried out between 2016 and 2018.³⁸ The plan has been endorsed by the Government and the development partners and depends largely on donor aid funding (Chapter 6.3).

³⁸ These include the MEESRS's reports : *Rapport d'État sur le Système Éducatif National, Pour une politique éducative plus inclusive et axé sur la qualité Burundi* (2016), the *Plan Transitoire de l'Éducation au Burundi 2018-2020* (2018), and the *Diagnostic des Infrastructures et Équipements Scolaires du Burundi* (2018).

Table 5: Key ETP Reforms for Basic Education, 2018-2020

STRATEGIC AXIS	REFORMS	PLANNED RESULTS	
		Base year: 2015-16	Targets: 2020-2021
Access to basic education	• Construction of 900 classrooms in cycles I-III. • Redeployment and recruitment of teachers for I cycle (criteria: double vacancy, student-teacher ratios, and so on). • Awareness campaign to reduce late arrivals by students. • Abolishing repetition in the 9th grade.	• Enrollment rate of 6-year-old students in first grade: 22 to 35 percent. • Primary completion rate (6th grade): 60 to 76 percent. • Repetition rate (cycle 1): 25 to 17.2 percent. • Repetition rate (cycle 1-3): 22 to 13.5 percent.	
Enhance school quality	• Curriculum development. • Teacher training. • Availability of guides and manuals for I-III cycles. • Improved learning conditions, with a focus on I cycle.	• PASEC results of 2nd grade students in Kirundi, French and Math. • One textbook per student in grade 1 for each discipline (Kirundi, Math and Geography).	
Improve equity	• Increase teaching time. • Recruitment and redistribution of teachers.	• Decrease of class size of more than 90 students in I-III cycles. • Increase the length of school year and reduce the exams period.	
Strengthens resilience of school system	• Pursue school feeding and health measures. • Create manuals for firms and local partners in constructing schools. • Develop a support package for students who interrupted their schooling. • Ensure free basic education	• Construction of integrated centers. • Number of students accessing school feeding increased.	
Fostering link between vocational and basic education	• Involvement of private sector in vocational training. • Enhance agriculture and livestock vocational training programs.	• Number of students in vocational centers increased.	
Improve governance	• Pursue the deconcentration and decentralization of the education system. • Strengthen planning and M&E capacities	• Allocations to deconcentrated services: US\$ 232,000 to US\$ 353,000. • Decrease of supplementary teachers in I-III cycles. • Timely availability of statistical data at the end of June of each year. • Allocations to basic education as a share of recurrent expenditures: from 46 to 49 percent.	

Source: MEESRS 2018.

Note: M&E= monitoring and evaluation; PASEC= CONFEMEN Education Systems and Analysis Program.

IV. Performance of Burundi's Basic Education Sector

This chapter reviews the progress pertaining to the most important basic education outcome indicators (that is, enrollment, repetition, completion and dropout rates). It also examines the learning environment and other factors that have contributed to these results. The second part of the chapter looks at equity issues in basic education outcomes, with a particular focus on inequality in access, as well as the inequality in dropout and out-of-school incidences.

4.1 Key Performance Indicators

Enrollment

Access to pre-primary education in Burundi remains very low. Despite an upward trend in the gross enrollment rates (GER) from 5 percent in 2015 to 9 percent in 2015 and 13 percent in 2016, this is still low by regional standards (the Sub-Saharan Africa average is 20 percent). Nonetheless, it is worth noting that the Government made efforts to increase pre-primary enrollment numbers as evidenced by an increase in public preschools over the past six years, accounting 59 percent of all preschools in 2016.

Access to the first three cycles of basic education has slightly declined since 2010/11. Despite the country's successful increase in coverage of primary education since the introduction of the Free Primary Education Program in 2005, recent gross enrollment rate (GER) trends in primary education show a slight decrease from 134 percent in 2010/11 to 119 percent in 2015/16 (figure 17). It reaches 110 percent in 2016/17 with the new structure of basic education³⁹. The GER for the first three cycles of basic education is higher than 100 percent, driven by a large share of over-aged pupils⁴⁰ due to late entry and high repetition rates, particularly in the early grades. This fact is reflected in the persistent gap between the GER and net enrollment rates (NER). As of 2016/17, the NER is estimated at 79 percent.

With the initiation of reforms, the basic education 4th cycle coverage has slowly increased since 2012/13. The GER for Grades 7 to 10 — that were called lower-secondary level in the previous education structure — registered a 17 percent increase (from 33.9 to 56.7 percent, figure 17) from 2010 into 2015. In 2016/17, Grade 10 was removed in line with the new structure, completing the implementation of the basic education 4th cycle. The GER of the 4th cycle⁴¹ is estimated at 52 percent. This increasing trend results from the construction of Grades 7-9 classrooms inside primary schools, that is, from roughly 1,200 classrooms in 2013/14 to 5,020 in 2016/17.

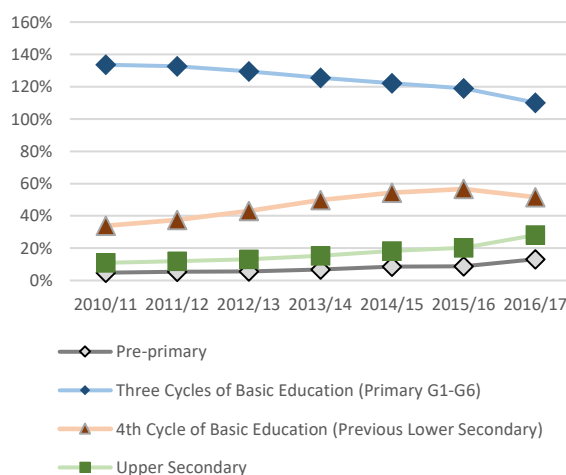
Compared with Sub-Saharan African and peer countries, Burundi primary enrollment rates stand near the average. In 2016, the Sub-Saharan African average for GER in primary education is estimated at 98 percent, which is lower than Burundi's rate of 110 percent. In terms of NER, the country stands just above the Sub-Saharan African and peer countries average (respectively, 79 percent and 78 percent, see figure 18). However, Burundi's net rate is relatively low compared to its neighbors, such as Rwanda (96 percent).

³⁹ Under the PSDEF, basic education was reformed to be nine years in length. The first changes, starting in school year 2013/14, focused on creating cycle 4. This was done by adding successively Grades 7, 8 and 9 to the schools. A new final exam was conducted at the end of 2015/16, completing implementation of cycle 4. With this reform, the primary official age (Grades 1-6) changes from 7-12 years into 6-11 years.

⁴⁰ Many students start basic education late, that is, at 7 years of age instead of 6.

⁴¹ Lower secondary becomes the basic education 4th cycle, and the official age changes from 13-16 years to 12-14 years.

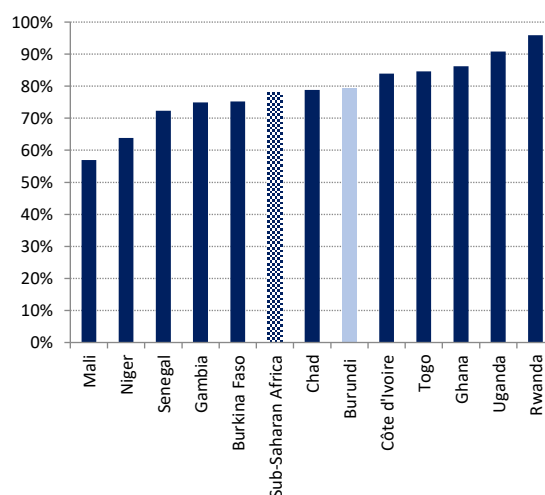
Figure 17: Gross Enrollment Rates (GER) by Education Level and Year



Sources: EMIS, 2010/11-2016/17 and ISTEUBU Population Projection.

Note: From 2010/11-2015/16, the graph was done using the previous education structure. For 2016/17, the primary GERs were based on 6-11 year-old children, 4th cycle GERs on 12-14 year-old children, and secondary GERs on 15-17 year-old children.

Figure 18: Primary Net Enrollment Rates (NER) in Sub-Saharan African and Peer countries, 2016



Sources: UNESCO Statistics 2013-2016, and EMIS 2016/17 (Burundi).

In contrast to basic education, upper secondary education registered an important increase in enrollment. The numbers of children attending general and pedagogic upper secondary school increased two-fold from 2010/11 to 2015/16, that is, from about 68,600 to nearly 132,000 students. This constitutes an average annual growth rate of 14 percent. By contrast, the average annual growth rate is only around 2 percent per year for primary education. The GER increased from 11 percent in 2010/11 to 20 percent in 2015/16, reaching 28 percent with the new structure in 2016/17.

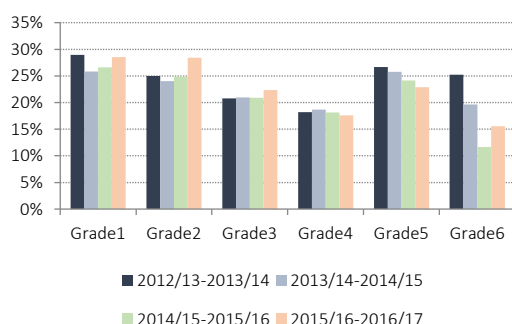
Repetition, Completion, and Dropout Rates

Repetition rates remain high and constant during the early grades of basic education. Repetition rates are high in Grades 1 and 2 — that is, at 29 and 28 percent, respectively — compared to 22 and 18 percent, respectively, in Grades 3 and 4 (figure 19). These rates were almost constant in recent years. However, repetition rates significantly declined for Grade 6, specifically by 9 percentage points between 2012 and 2015. The PSDEF policy stipulated repetition rates of 5 percent for students in the first year of each cycle and no more than 15 percent in the second year, but it seems that this policy has not been followed in practice. The Ministry has established some criteria points for promotion and repetition conditions for each cycle, which might introduce more rigor into the system.⁴² These high repetition rates at early grades may be due to a combination of factors, such as the large numbers

⁴² Ministerial Ordinance number 610/1058 of 2016 establishes progression class and repetition conditions to basic education.

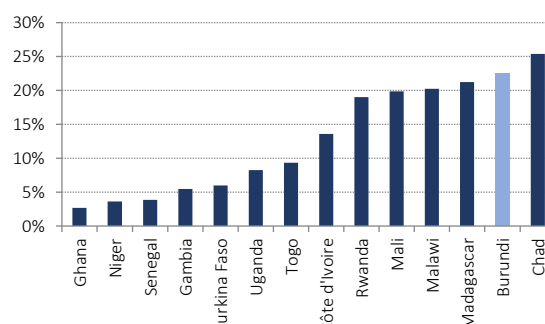
of over-age children and the lack of available spaces⁴³. Indeed, student-teacher ratios are very high during the first two grades (that is, above 80:1 at the national level), with an annual growth of classrooms at 2 percent. In grade 6, the student-teacher ratio is at 47:1, as of 2016.

Figure 19: Repetition Rates in Primary Schools, 2012/13 to 2015/16



Source: Authors' estimate based on EMIS 2012/13 to 2016/17.

Figure 20: Repetition Rates in Primary Schools in African Peer Countries



Source: UNESCO Statistics 2014, 2015.

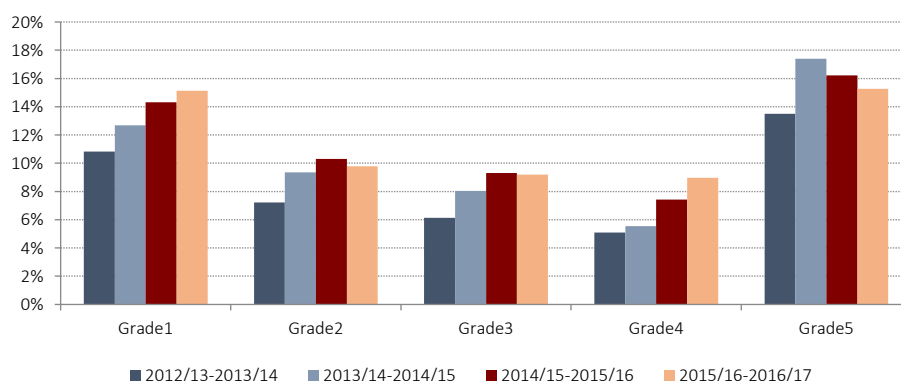
Compared with peer countries, Burundi has high grade repetition rates. In the five peer countries (figure 20), repetition rates in primary schools are less than 10 percent. In Niger and Burkina Faso for example, the rates are due to the practice of automatic promotion, and grade repetition is only limited to the last grades of primary education sub-cycles (UNESCO 2012). However, Burundi is among countries with very high repetition rates, as is Chad. In 2010, Burundi, Chad, Madagascar, and Rwanda had on average more than 20 additional pupils in Grade 1 than in the final grade of primary school (UNESCO 2012).

Dropout rates of around 10 to 15 percent are also high in the first two grades of basic education. It should be noted that children who drop out during the early grades might re-enter the system later. However, this then increases the prevalence of over-age students in schools. Moreover, the dropout rate increases with the level of education, reaching 15 percent at grade 5 in 2015/16-2016/17 (figure 21). According to the ECVMB (2013), failure at school and prohibitive costs are cited as the main reasons for school dropouts. Among 13-16-year-olds, it is cited on average 38 percent and 20 percent, respectively, for failure at school and cost issues⁴⁴.

⁴³ Burundi is among the group of countries (including the Central African Republic, the Congo, Lesotho, and Namibia) that have high repetition rates in all grades. Fluctuations also occur between grades. These fluctuations may be due to a combination of factors, such as over-age children, the lack of available spaces in certain grades, and the use of national examinations limiting access to education (UNESCO 2012).

⁴⁴ Detailed analysis on the dropout rate will be presented in the Equity section.

Figure 21: Dropout Rates in Primary Schools, 2012/13 to 2015/16



Source: Authors' estimate based on EMIS 2012/13 to 2016/17.

Note: The dropout rate is calculated using two consecutive school years. It is the proportion of pupils, in a given grade for a given year, who are no longer at school the following school year.

Outcome rates are better in the previous lower secondary level of education than in primary education. Indeed, repetition rates in Grades 7 to 9 stand at around 13 to 19 percent, respectively, in 2015/16, relatively lower than in the early grades. Moreover, dropout rates are no more than 12 percent for those three upper grades, leading to a higher survival rate during the last grade of lower secondary education.

The Learning Outcomes Puzzle

Burundi outperformed almost all of the 10 West African francophone countries that participated in a 2014 learning assessment (PASEC). The 2014 PASEC results for Grades 2 and 6 in math and reading are remarkable, outperforming all the other participating countries in three of the four tests (figure 22). For instance, students in the early primary years scored 627.7 in language (Kirundi) and 605 in mathematics, a full one hundred points above the average of the ten participating West African francophone countries.⁴⁵ The assessment of the PASEC results also suggests gender and socioeconomic equity, given that girls outperform boys, and rural areas do better in mathematics than urban areas — and are only marginally worse in reading.

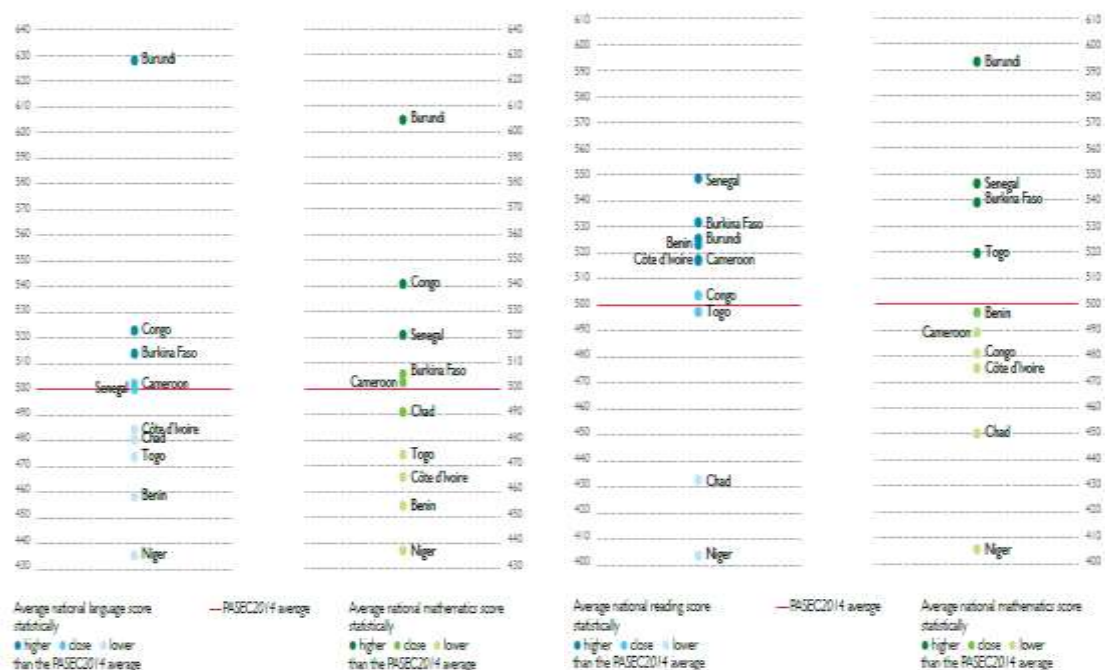
Paradoxically, these high learning outcomes were registered despite the relatively poor learning environment, with Burundi's schools being average or below average in comparison with other countries participating in the PASEC. Class size and repetition rates are high, and double shifting accounts for 46 percent of the classrooms. Also, the official schooling time is low (855 hours annually compared to 914 hours in PASEC countries). The classroom and school equipment levels are close to other PASEC country averages; however, there is a lack of textbooks in the classroom (5.1 percent of pupils have their own textbooks compared to 35.7 percent in PASEC countries). Some students lack books in schools (5.1 percent of schools have a library as compared to 12.4 percent on average). At home, pupils have few opportunities to do homework. In this context, 45.7 percent of Year 3 teachers never give homework (PASEC 2014).

The PASEC learning assessment results are impressive considering Burundi's fragile political and economic setting, but recent events may have eroded these achievements. The results have been attributed to a number of factors, such as the language of instruction, teacher pre-service training, classroom pedagogy, and the curriculum. Kirundi is used as the language of instruction. Teaching and

⁴⁵ It should be noted that these results are consistent with the Early Grade Reading Assessment results carried out in 2011 and 2012, which revealed that 39.7 percent of the primary Year 2 students assessed were independent readers, 39.9 percent could read partially, and 20.4 percent were non-readers. (World Bank, Burundi ASA (P161127) Summary of the Findings of the Four Analytical Studies, 2017).

learning are facilitated by the fact that Kirundi is the home language of teachers and pupils. The PASEC results confirm this: when students are assessed in French, their scores are similar to those in other countries. Additionally, the education curriculum had been in place for some thirty years and is therefore known and well understood. However, these outstanding results might have been adversely affected by the 2015 political crisis that led to the withdrawal of donors and the suspension of the Common Education Fund, which had a serious impact on the Government's investment budget. A severe underfunding of the sector's maintenance and investment needs has been further aggravated by additional pressure on Burundi's education system caused by increases in the schooling population due to a high demographic growth rate.

Figure 22: PASEC Results



Source: PASEC 2014 report.

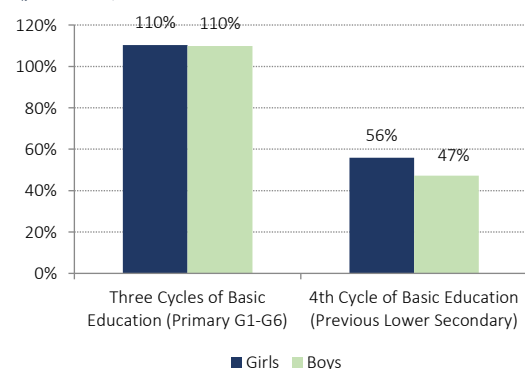
Note: The left panel is for early primary school and the right panel is for late primary school.

4.2 Equity Issues in Basic Education Outcomes

Inequality of Access

There is almost equal parity between girls and boys in the first three cycles of basic education. Burundi has achieved gender parity in primary education for gross enrollment ratios in 2016/17 (figure 23). The introduction of Free Primary Education in 2005 has benefited girls as well boys. Nevertheless, the GER of the 4th cycle of basic education for boys is 9 percentage points less than for girls. According to the ECVMB 2013, failure at school is cited as the main reason for school dropouts among boys aged 13-16 years.

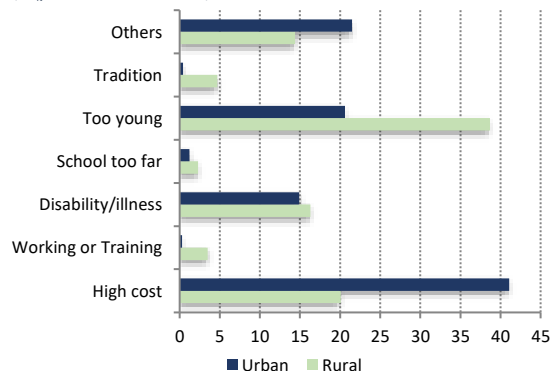
Figure 23: Gross Enrollment Ratio in Basic Education by Gender, 2016/17



Source: Authors' estimate based on EMIS 2016/17 and the ISTEPU Population Projection.

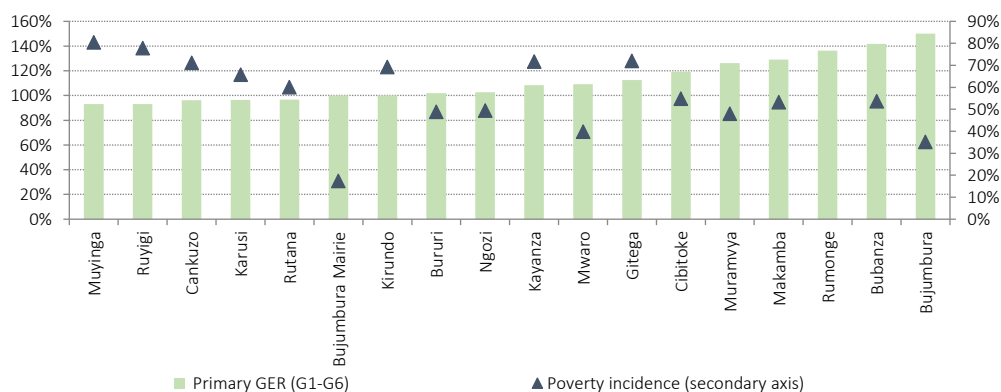
Note: Primary GERs are based on 6-11 year-old children, and 4th cycle GERs are based on 12-14 year-old children.

Figure 24: Reasons for Non-Schooling, Children Aged 7 to 12, by Residence Area, 2013-2014



Source: Authors' estimate using the ECVMB 2013.

Figure 25: Primary Gross Enrollment Ratio by Province in 2016/17 Ranked by Poverty Incidence



Source: Authors' estimate based on EMIS 2016/17 and the ISTEEDU Population Projection.

Note: Primary GERs are based on 6-11 year-old children.

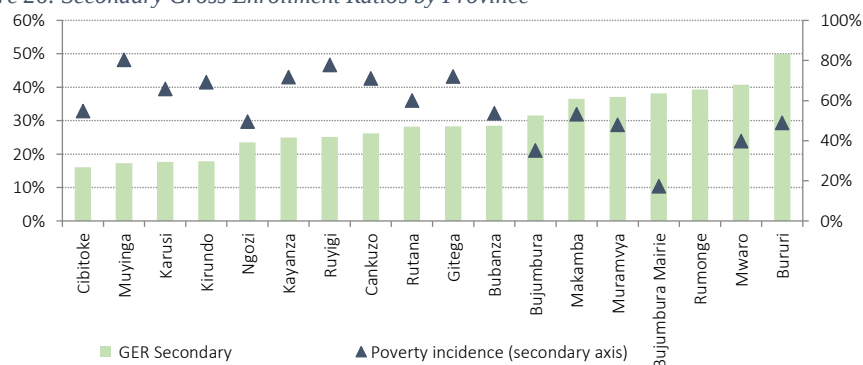
Access to the first three cycles of basic education differs relatively across provinces and is inversely related to poverty incidence. The Musinga and Ruyigi provinces have less than 95 percent of GERs, whereas Bujumbura registered a ratio above 150 (figure 25). A key aspect worth noting is that Musinga and Ruyigi have the highest poverty incidence (80 and 78 percent, respectively), whereas the poverty rate is only 35 percent in Bujumbura. The correlation estimates indicate that correlation coefficients with poverty incidence are negative and significant, suggesting that provinces with high poverty status have low access in primary education.

The poverty level is the main reason that prevents access to schools in urban areas, whereas in rural areas children's age is the biggest factor. Based on the ECVMB 2013, among children aged 7 to 12 who have never attended school, 41 percent reported the cost as the barrier to schooling in urban areas (figure 24). Children are considered "too young" in 39 percent of cases in rural areas. This fact might be linked to the reason that schools are located farther away in rural areas.

According to regression analysis, household poverty and household-head education are the key determinants of access to education, whereas in rural areas, distance (expressed in time) from school is an additional factor (annex 1). Regression analysis suggests that children coming from an educated head of household are more likely to attend school. Although children coming from the poorest households are more likely to never attend school, the probability decreases starting from the second quintile, both in urban and rural areas. However, in rural areas the average time to primary school significantly influences access to education. Household surveys suggest that, on average, children aged 7 to 12 in rural areas live 23 minutes or farther from primary schools.

In contrast to basic education, girls are lagging behind at the secondary level, and access varies widely across provinces and economic groups. The GER for girls is less than 6 percentage points than for boys. Based on the ECVMB 2013, failure at school, prohibitive costs and refusal of parents are the three main reasons for the non-schooling of children aged 13 to 16 years. Whereas access to primary education is equal for all wealth quintiles in 2012/13, the situation changes dramatically at the secondary level. Only 6 percent of pupils are from the poorest quintile at the previous lower secondary level, and the distribution becomes highly unequal at the higher secondary level, with 39 percent of students coming from the richest quintile and 5 percent from the poorest. Moreover, four provinces (Cibitoke, Musinga, Karusi, and Kirundo year?) registered secondary GERs of less than 20 percent in 2016/17. In contrast, secondary GERs range from 37 to 50 percent across six provinces with low poverty status (figure 26). This fact tends to confirm that the higher the poverty rates, the lower the access to secondary education.

Figure 26: Secondary Gross Enrollment Ratios by Province



Source: Authors' estimate based on EMIS 2016/17 and the ISTEPU Population Projection.

Note: GER= gross enrollment ratio. The results are ranked by poverty incidence as of 2016/17, Secondary GERs based on 15-17 years-old children.

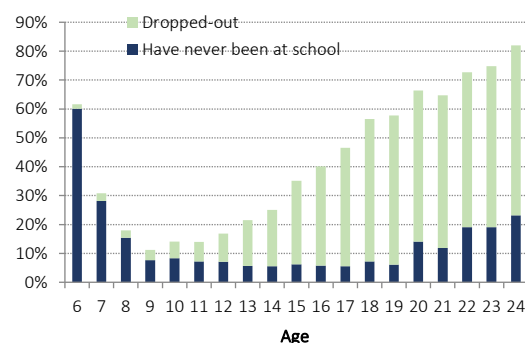
Inequality in Dropout and Out-of-school Incidences

The proportion of children who have never been to school at age 6 is high, and school dropouts start at about age 10. Based on DHS 2016, 28 percent of 7-years-old have never attended school. The rate for 6-year-olds is as high as 60 percent, which is the entry age for primary school according to the 2013 reform (figure 27). The reform of primary education is ongoing. However, most children still enter school at age 7, as captured in EMIS 2016/17, with more than 66 percent of children age 6 remaining out-of-school. Whereas school dropouts start at about 10-years-of-age (6 percent), this rate increases gradually with age. Nearly 10 percent are no longer in school at age 12, and this rate climbs to 34 percent for those aged 16 (figure 27). Overall, 18 percent of children aged 7-12 children are out-of-school, compared to 30 percent of children aged 13-16 in 2016.

Burundi has a higher dropout rate incidence compared to peer countries in Sub-Saharan Africa. In 2016, 24 percent of 13-16 year-old children in Burundi were no longer at school, whereas the rate was only 3 percent in Uganda or 7 percent in Senegal (figure 28). However, the proportion of children who have never been to school for this age group is relatively low, at 6 percent in contrast with 30 percent in Senegal or Burkina Faso.

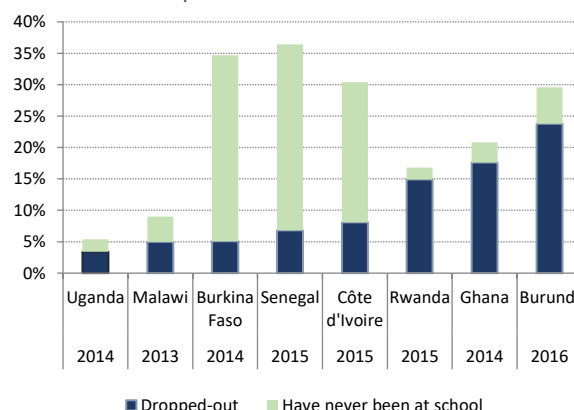
Children living in rural areas have a higher out-of-school incidence, whereas no significant difference exists between boys and girls in early ages. In 2016, 14 percent of 7-12 year-old children have never attended school in rural areas, whereas the rate is only 4 percent in urban areas (figure 29). School dropout rates are also higher in rural than in urban areas for children aged 13-16. However, about 13 percent of girls and boys have never been at school at early ages, whereas the rate was higher for girls than for boys among older cohorts aged 17-20, with a 3-percentage point difference (figure 29). Nonetheless, their school dropout incidence is almost the same, at around 48 percent.

Figure 27: Out-of-School Rate by Age, 2016



Source: Authors' estimate using DHS 2016.

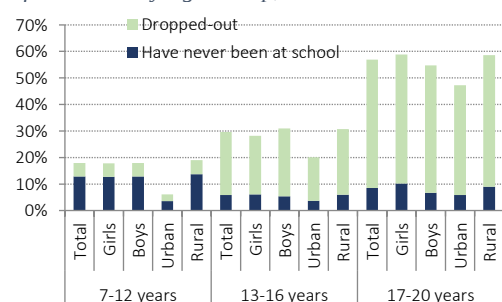
Figure 28: Out-of-School Rate among Lower-Secondary-Age Children in Peer Africa Countries



Source: DHS for Burundi, Ghana, Rwanda, and Senegal; LSMS for the remaining countries.

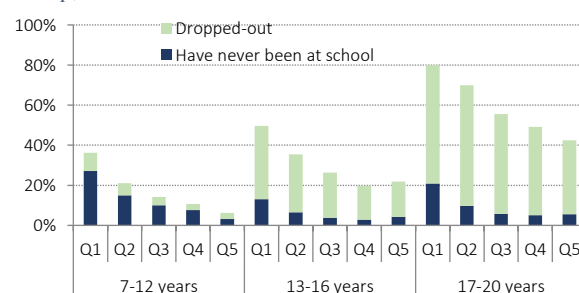
Note: Lower secondary age, 13-15 year-olds for Ethiopia and Rwanda, 13-16 year-olds for Burundi and 12-14 year-olds for the remainder.

Figure 29: Out-of-School Rates by Gender and Areas of Residence by Age Group, - 2016



Source: Authors' estimate using DHS 2016.

Figure 30: Out-of-School Rates by Wealth Quintile and Age Group, 2016

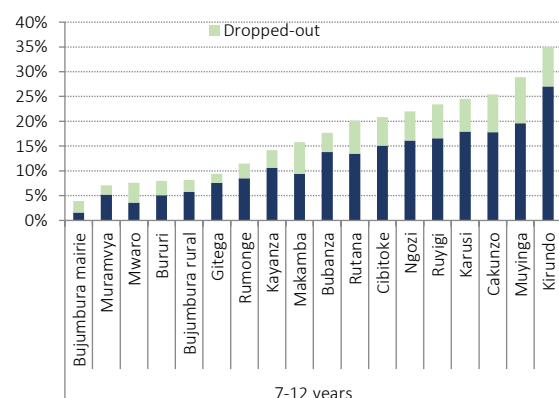


Source: Authors' estimate using DHS 2016.

Poor children have higher out of school rates. Nearly 27 percent of children aged 7-12 from poor households have never attended school, whereas the rate is only 3 percent for children from the richest wealth quintile (figure 30). The school dropout rate is also higher among children from the poorest wealth quintile, specifically for 13-16 and 17-20 year-old children.

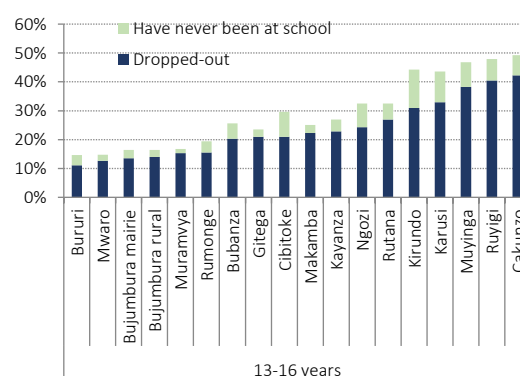
The out-of-school incidence in the country is unequal across provinces. Children who never attended school comprise more than 20 percent in the Kirundo and Muyinga provinces for those children aged 7-12. This compares to 2-5 percent in Bujumbura Mairie, Mwaro and Muramvya (figure 31). However, more than 40 percent of children aged 13-16 are no longer at school in Cakunzo and Ruyigi, whereas only 13 percent dropped out in Bururi and Mwaro. Overall, 6 out of 18 provinces registered school dropout rates above the national average (from Rutana to Cakunzo in figure 32).

Figure 31: Out-of-School Rates by Region for 7-12 year-old Children, 2016



Source: Authors' estimate using DHS 2016.

Figure 32: Out-of-School Rates by Region for 13-16 year-old Children, 2016



Source: Authors' estimate using DHS 2016.

Most of the children who drop out school do not complete primary school. In 2016, 66 percent of children aged 13 to 20 who are no longer at school had not finished primary school. Specifically, 68 percent in rural areas were no longer at school compared to 51 percent in urban areas. Only 14 percent of those rural youth completed lower secondary education, whereas the rate for urban youth was 21 percent.

Failure at school and the prohibitive costs are cited as the main reasons for school dropouts, whereas household poverty proves to be the key driver based on dropout regression analysis. Based on ECVMB 2013, among 13-16-year-olds, 38 percent mentioned that failure at school is the main reason for their dropping out, following by cost issues, respectively, for 19 and 30 percent in rural and urban areas, respectively. However, regression analysis shows that household poverty is the most important determinant of school dropouts (see annex). Indeed, the probability of dropping out of school decreases significantly with wealth quintiles in both urban and rural areas. For both areas, the education level of the head of the household and the distance to school for lower secondary schools are not significant factors in determining dropout rates.

V. Basic Education Sector Financing

The purpose of this chapter is to assess the financing of basic education in Burundi. The first two sections focus on the sector's public finance management issues and general funding. It lays out the context of the sector's financing system, and then provides an in-depth examination of Burundi's basic education expenditures. In this context, basic education expenditures are examined in terms of trends, composition, performance and equity issues. Where appropriate, results are assessed against the financing system and performance of secondary education.

5.1 Budget Planning and Execution Process

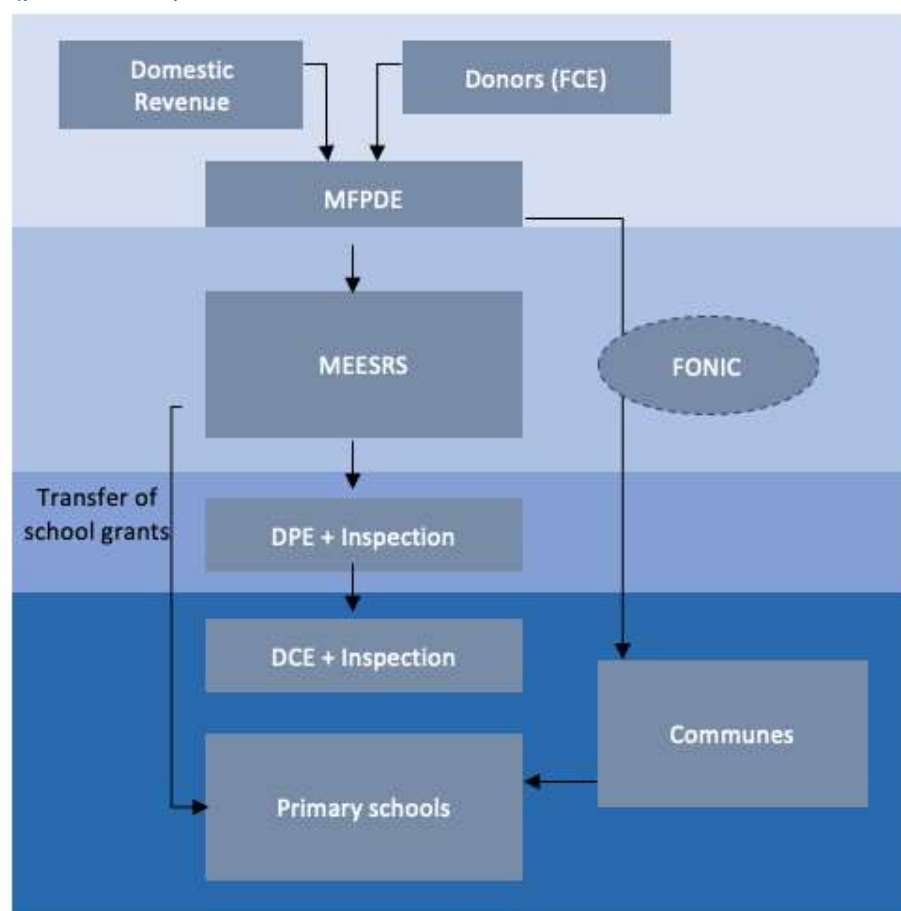
In a tight fiscal context, the budget preparation process has shifted from a “bottom-up” to a “top-down” approach. Prior to 2015, the education budget was prepared through a consultative mechanism at the level of the DCE, and then submitted to the DPE for consolidation. It then went to the central administration for incorporation in the Ministry's draft budget proposal. In recent years, because of the shortage of external and domestic resources, budget planning became a centralized process among the Ministry's Directorates. A parallel planning process for education investment priorities takes place at the level of the communes, which is funded by the National Investment Funds for Communes (*Fond National d'Investissement Communal* - FONIC). However, it is not coordinated with MEESRS's budget planning process.

The Ministry of Education has prepared Medium-Term Expenditure Frameworks (MTEF) in the past, although the current context has rendered the MTEF process an exercise in futility. Following the Government's adoption and effective use of a central MTEF since 2010, the sector ministries for education, health and agriculture have been developing their own MTEFs to translate their strategic priorities into budget allocations. For the education sector, the exercise has been put on hold as public resources are not sufficient to establish a link between the sector's goals and the available budget.

The management of education spending remains very centralized. The central government is responsible for payment of the salaries for the DPE, the DCE, the inspections offices and teachers. The Ministry allocates funds to schools, as well as provincial and communal offices based on the number of schools. As shown in figure 33, the Ministry provides public resources to the provincial and commune offices (the DPE and DCE) for their operational costs (such as petrol, vehicle maintenance, and so on), as well as schools grants (*frais de compensation*) to primary schools. Most of the investment budget is managed at the central level. Until 2015, development partners also contributed 'in budget' to the financing of the education system through the FCE, allocating resources to the central and deconcentrated levels. Lastly, the communes also finance the construction and rehabilitation of primary and secondary schools through the FONIC. In some cases, they provide 'in kind' construction materials to schools.⁴⁶

⁴⁶ The FONIC's fund for development projects (including health and education) amounts to BIF 500 million (or US\$ 250,000) per commune annually.

Figure 33: Flow of Funds



Source: Authors' representation.

Note: MFPDE= Ministry of Finance and Economic Development Planning; MEESRS = Ministry of Education, Higher Education and Scientific Research ; BRB= Bank of the Republic of Burundi; FCE=Education Common Fund; FONIC= National Investment Fund for Communes.

The new procurement law of January 2018 strengthens the procurement procedures, but challenges remain. To improve compliance with public procurement regulations, the recently introduced procurement law has strengthened institutions and procedures, such as shortening the bidding process for national and international public contracts.⁴⁷ According to the Decree's Article 13, however, sector public agencies, such as the Pedagogical Productions Board (PPB), are banned from participating in competitive bidding for textbook production. This has raised questions about the sector's ability to procure textbooks. The Ministry has been preparing annual procurement plans, with the bulk of the procurement focusing on textbooks for post-basic education, school desks and chalk. Although the public contracts combined are relatively small (less than US\$ 2,000,000 compared to US\$ 15.6 millions of procured goods and serviced funded under the FCE in 2014)⁴⁸, the Ministry's procurement is undermined by insufficient staffing and a lack of procurement expertise and information technology (IT) equipment. This has contributed to a low procurement outcome. On average, only 60 percent of the procurement has been carried out between 2016 and 2017. In 2017, one of the bigger public contracts for school desks was canceled due to some technical irregularities in the bidding documents. Finally, education procurement has been much lower than actual demand and according to anecdotal evidence also the quality of the textbooks deteriorated confirming the

⁴⁷ Law N 1/04 of January 29, 2018 modifying the law N1 / 0 of February 04, 2008 on the Code of Public Markets (*Loi N 1/04 du 29 Janvier 2018 portant modification de la loi N1/0 du 04 Fevrier 2008 portant Code des Marches Publiques*).

⁴⁸ A.D.E., Évaluation du Fonds Commun de l'Éducation FCE II 2013-2015, 2017.

decrease in quality imports (for example, the Ministry purchased 6,000 school desks in 2018, whereas the estimated need stands at 200,000).

The Ministry of Education is connected to the Integrated Financial Management Information System (IFMIS), but some shortcomings still prevent the full use of the system. The Ministry of Education is successfully connected to the system, and it is managed by a dedicated budget officer of the MFPDE (*“controleur de la dépense”*) placed at the Ministry of Education. However, the Ministry’s budget department does not utilize the necessary capacities to operate the system for monitoring and reporting purposes. Some financial information, notably the use of school grants, is not captured by the IFMIS.

School financial and physical reporting is cumbersome. Schools prepare financial reports on the use of the school grants using traditional paper or Excel sheets that are then submitted to the Ministry. Activity reports are prepared by the schools on a monthly, trimestral and annual basis together with financial reports. These are submitted first to the DCE and then to the DPE for consolidation and final submission to the MEESRS.⁴⁹ The reporting system constitutes a substantial administrative burden for the school principals. In the absence of reporting templates, they struggle to ensure the regularity and quality of reports.

Some form of school accountability for financial reporting is in place. Schools that manage their funds in line with procedures receive an appreciation note from MEESRS, whereas schools that perform poorly are requested to submit payment receipts. Furthermore, schools receive comparative performance information on exam results to stimulate ‘yardstick competition. However, they receive no other comparative information about the performance of other schools, districts or provinces. Overall, the practice of providing feedback to schools based on financial reports is quite regular.

The effective tracking of budget allocations is also undermined by difficulties in classifying teachers according to the different levels of education. Although the chart of accounts provides a classification by level of education, the appropriations do not always reflect the actual distribution of resources. The wage bill remains a key challenge. It is allocated separately to basic and secondary education. In fact, though, basic education teachers tend to also work at secondary schools or preschools. Likewise, teachers at secondary schools also teach at the basic education level.

5.2 Overview of Burundi’s Education Sector Financing

Funding Sources

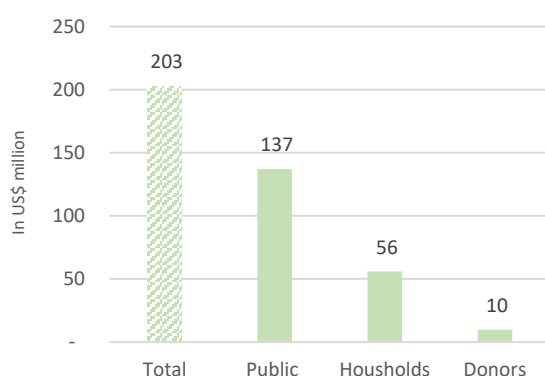
In Burundi, the education sector depends heavily on Government financing, which focuses its efforts on primary education; households and development partners finance the remaining third and also concentrate their efforts on primary education. As illustrated in figure 34, in 2012 the total cost of the education sector in Burundi represented US\$ 203 million (BIF 292 billions), of which 68 percent (US\$ 137 million) was funded by the Government, followed by households which contributed 28 percent (US\$ 56 million), and development partners who funded 5 percent (US\$ 12 million).⁵⁰ The breakdown of education spending by level shows that government spending is high across all levels.

⁴⁹ The activity reports contain information about the number of teachers, student enrollment, school dropout rates, textbooks, school infrastructure stock taking and exam results. Report on School Return (*Rapport de la Rentrée Scolaire*), Schools of Cumba, Somba, Muramvya II, 2015 and 2016.

⁵⁰ It should be noted that donations from non-governmental organizations (NGOs) and civil society constitute an additional source of education financing that would be captured under donor aid. However, these resources are managed off-budget and therefore cannot be quantified.

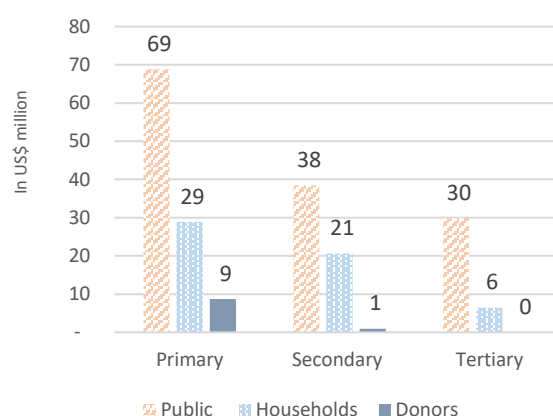
However, its contribution decreases to US\$69 million at the primary level and to US\$ 30 million at the tertiary level (figure 35). Households contribute one-third of total spending to primary education (US\$ 29 million). This share increases slightly at the secondary education level, although in absolute terms household spending dropped to US\$ 21 million and to US\$ 6 million at the tertiary education level. As expected, most of the funds from the development partners are concentrated at the primary level due to the universal primary education initiative. However, in relative terms its contributions were not substantial in 2012, accounting for less than 10 percent of total spending on primary education. It is reasonable to assume that this funding composition partially changed in subsequent years with the pooling of resources of several development partners under the FCE.

Figure 34: Burundi's Sources of Education Sector Finance, 2012



Sources: MFPDE, and ECVMB 2012/13.

Figure 35: Education resources by level and source, 2012



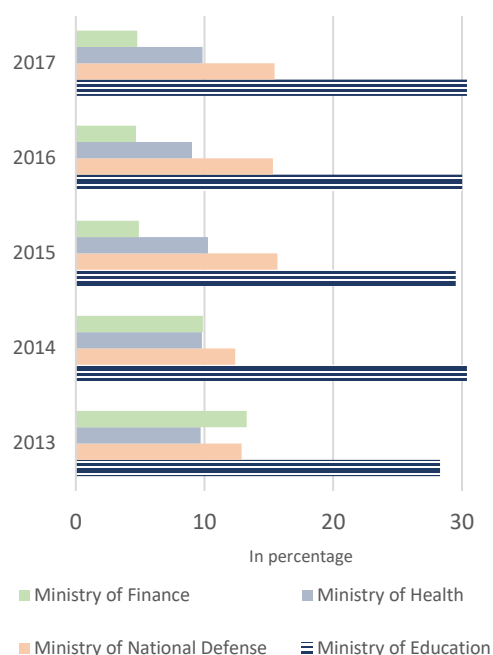
Sources: MFPDE, and ECVMB 2012/13.

Composition

The education sector accounts for the largest share of the national budget, and was largely managed by the MPSVTAL until it merged with the MHESR as a single education Ministry, the MEESRS, in 2016. In line with the sector composition analysis in Chapter 2.3, the importance of the education sector in terms of public resources is also reflected in the administrative classification (figure 36). The Ministries of Education combined accounted for, on average, 30 percent of total public expenditures between 2013-2017, followed by the Ministry of National Defense (14 percent), the Ministry of Health (10 percent) and the Ministry of Finance (7.5 percent). Among the Ministries of Education, the MPSVTAL spent around 80 percent of the total public resources between 2010 and 2015 (figure 37). This is in line with the Government's PSDEF that focuses on basic education.⁵¹ The Ministry experienced a nominal growth rate of education spending of 7 percent, on average, between 2010 and 2015. However, in real terms, the Ministry's public expenditures decreased by 6 percent, indicating that the Government was not able to prioritize sufficient public resources for the Ministry to compensate for double-digit inflation.

⁵¹ There are a few educational programs that are managed by other sector ministries (such as the Ministry of Civil Service, Works and Labor and, most recently, the Ministry of Finance). However, the total funding level of these programs combined is not substantial.

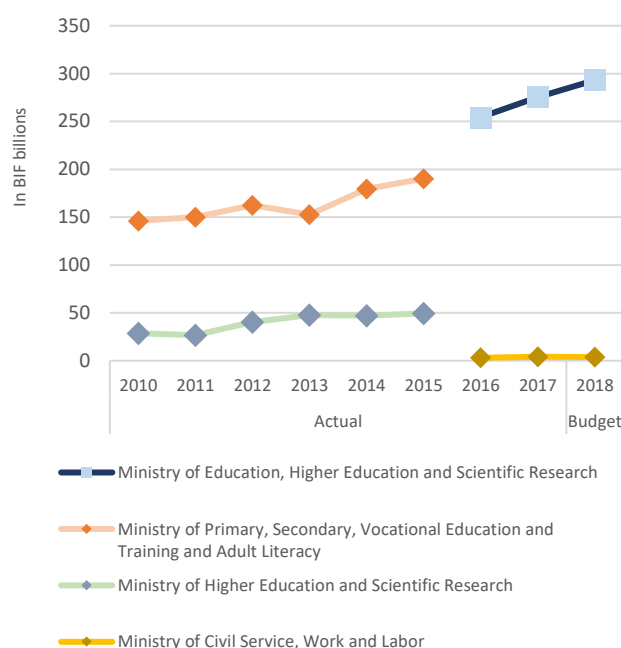
Figure 36: Public Expenditures of Selected Key Sector Ministries, 2013-2017 (%)



Source: MFPDE.

The Ministry of Education includes the Ministry of Basic, Secondary and Vocational Education (2013-2015), the Ministry of Higher Education and Scientific Research (2013 and 2015) and the Ministry of Education, Higher Education and Scientific Research.

Figure 37: Key Education Ministries in Charge of Education, 2010-2018

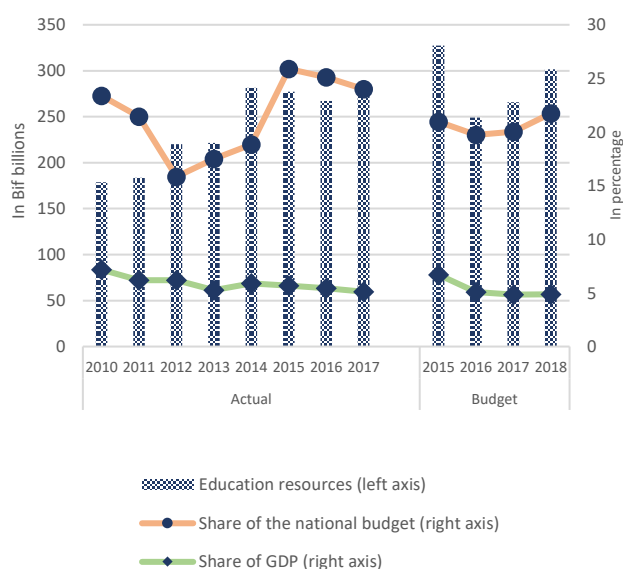


Source: MFPDE.

Trends

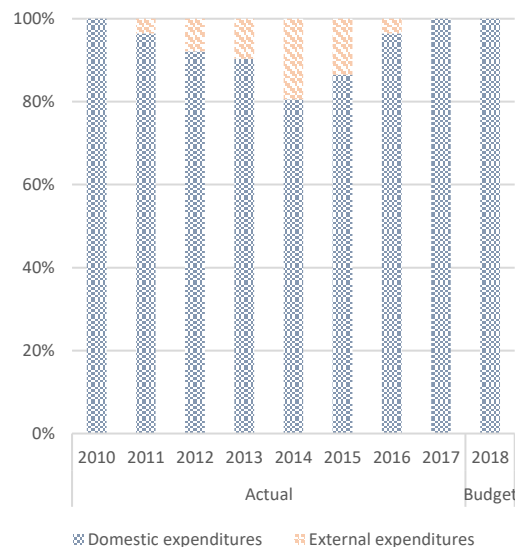
From 2010-2017, public education expenditures increased by more than half in nominal terms, but declined in terms of GDP and real terms — a worrisome development given the important funding needs for the implementation of the Government's education sector reform plans. In terms of the national budget share, public education expenditures declined from 23 percent in 2010 to 16 percent in 2012, but then increased modestly reaching 25 percent in 2017. However, the Government's education expenditures declined in real terms by one fourth between 2010 and 2017, as well as by share of GDP, that is, from 7 percent in 2010 to 5 percent in 2017 (figure 38). Externally funded education expenditures showed an upward trend in real terms between 2011 and 2014, accounting for one-fifth of total public education resources (or 92 percent of investment expenditures) in 2014. But this increase was not enough to offset the decline in the Government's public education resources, and in subsequent years donor aid dropped sharply in real terms and as a share of the budget (figure 39).

Figure 38: Trends in Educational Appropriations and Expenditures, 2010-2018



Source: MFPDE.

Figure 39: Public Expenditure Trends by Source, 2010-2018



Source: MFPDE.

The events in 2015 adversely affected the funding of the education sector in 2015 and 2016, while recent increases in the 2017 and 2018 budget were not sufficient to have an impact. The sector's financing was affected by mid-year budget cuts in 2015, as well as by cutbacks in the 2016 budget appropriations. These cuts amounted to one-fifth of expenditures and were part of a broader curtailing of Burundi's domestic resources as a result of the country's economic contraction. The suspension of the Common Education Fund, which constituted the main funding source for the implementation of the Ministry's education sector reform, adversely affected investment in school infrastructure, educational materials and training. Furthermore, shortages in foreign exchange, as well as the Government's rationing policy, led to delays in the purchase of imported education materials needed for the implementation of the basic education reform (involving new textbooks, materials for the construction of new schools, and so on). In this context, the educational-related imported goods are not considered part of the Government's list of essential imported goods that have privileged access to official reserves. Following the sharp drop in education resources, the Government made efforts in recent years to increase budget appropriations in 2017 and 2018, though in real terms budgetary allocations either declined (2017) or marginally increased (2018) as a result of the double digit inflation.

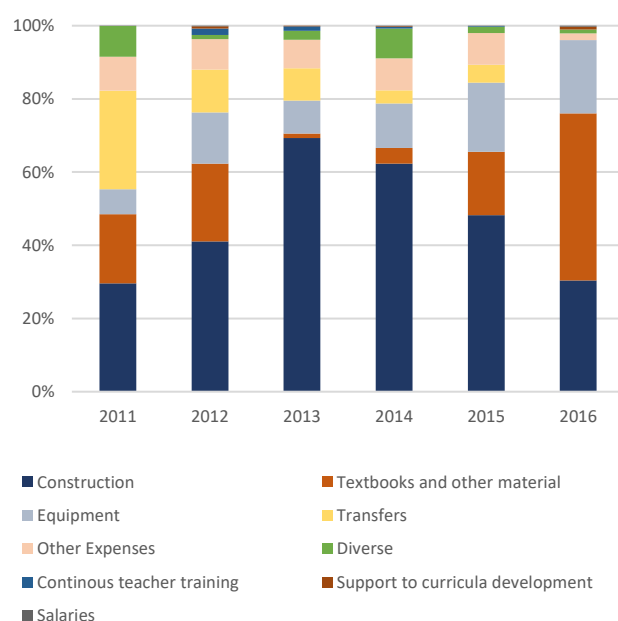
External Aid

The second FCE established in 2011/2012 aligned with Burundi's Education Sector Strategy (PSDEF), and was considered a successful instrument to support the Government's education reforms.⁵² The FCE has aimed to support the education sector's investment by largely funding the construction of classrooms (47 percent), the purchase of textbooks and other learning materials (18 percent) and school equipment (13 percent) (figure 40). The Fund was managed jointly by the Ministry of Education

⁵² The FCE was initially established in 2008 by a group of development partners (France, Belgium, Luxembourg and the United Kingdom) to support the Government's education policy, notably the provision of free primary education and the effort to achieve gender equality. The FCE design was revised in 2011 with the creation of a special account ("Budget d'Affectation Spéciale" (BAS)) under the general account of the Treasury, and was supported by a procedure manual. As of 2012, the FCE was financed by Belgian Cooperation, France (through the French Development Agency, *Agence Française de Développement*, AFD) and Norway, as well as funds from the GPE. The FCE was administered by the Belgian Technical Cooperation (CTB), with UNICEF acting as the coordinating agency.

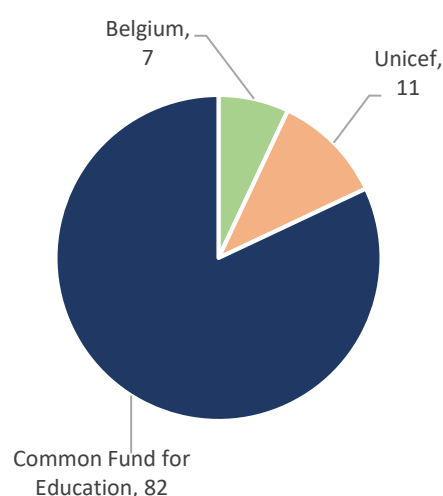
and the development partners through a special sub-account (*Budget d’Affectation Speciale* - BAS) under the general treasury account. This disbursement arrangement has contributed to an improved alignment with national procedures. It has also enhanced aid harmonization and coordination in the sector, and strengthened the sector’s planning and management performance. At the same time, it has reduced fiduciary risks associated with budget support.⁵³ Moreover, the annual inclusion of the FCE appropriations and expenditures in the Budget Law augmented the visibility and traceability of education resources in the budget. Compared to other donor aid provided outside of the FCE but also “on budget”, the FCE constituted the main funding instrument for the Government’s sector investment reforms, followed by UNICEF and Belgium (figure 41). The sector also benefits from external resources that are off budget, but the level of aid is not known and is difficult to quantify.⁵⁴

Figure 40: Breakdown of FCE Funding by Economic Classification



Source: MEESRS.

Figure 41: External Aid by Funding Source



Source: UNICEF 2016.

Alternative modalities for channeling resources into the education system outside of the Budget Law were used after 2015 to minimize the impact of the crisis on the education system and children’s schooling. With the suspension of the FCE in 2015, the remaining GPE financing was restructured and incorporated under UNICEF’s *Program to Support the Consolidation of Basic Education Project* (PACEF). The financing of the PACEF amounted to on average less than US\$5 million off-budget funding between 2016 and 2018. It focuses on a few key priorities of the basic education sector, such as classroom construction, curricula development, better data collection and analysis, and capacity building. Since 2016, UNICEF has acted as the managing entity for the Fund, but will hand over its mandate to the French Development Agency (AFD).

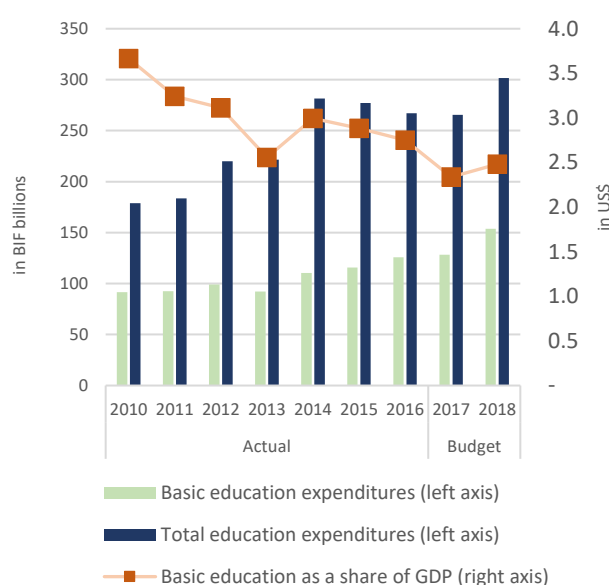
⁵³ A.D.E., Évaluation du Fonds Commun de l’Éducation FCE II 2013-2015, 2017.

⁵⁴ Some of the key development partners and NGOs that have been providing off budget support include UNICEF, World Food Program, the United Nations Population Fund, Care International, Handicap International and World Vision International.

5.3 Basic Education Sector Financing^{55,56}

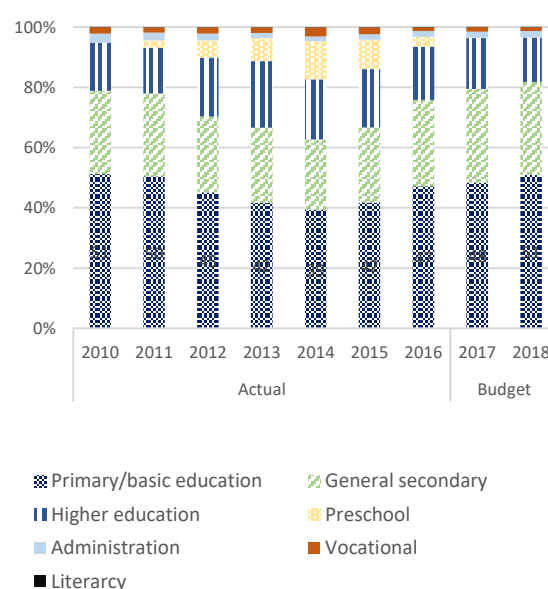
The distribution of resources reflects the country's prioritization of basic education, but the spending level is low — and the spending pattern points to some inefficiencies. Although basic education expenditures have been gradually rising from 2010-2016, they declined in real terms by 23 percent. This stands in contrast to total education expenditures, which declined in real terms by 17 percent over the same period (figure 42). Basic education resources also fell as a share of GDP from 3.7 percent in 2010 to its lowest level of 2.3 percent in 2018. In terms of the share of total public education expenditures, basic education is on average at 45 percent between 2010 and 2016 whereas the share spent on secondary and post-secondary education amounts to 26 percent and 18 percent, respectively over the same period (figure 43). Government spends on average 45 percent of its education resources on basic education - this is just below the GPE good practice recommendation of 50 percent. It is still below the GPE good practice recommendation of 50 percent. It is noteworthy that basic education received 47 percent of public resources in 2016, but it accommodated about 83 percent of total enrollments. By contrast, the share of public expenditures spent on tertiary education accounts to almost one-fifth of public education expenditures, but with less than 2 percent of students enrolled.

Figure 42: Basic Public Education Expenditure Trends, 2010-2018



Source: MFPDE and MEESRS.

Figure 43: Distribution of Education Expenditure Allocations and Spending by Level of Education, 2010-2018



Source: MFPDE and MEESRS.

Economic Expenditures

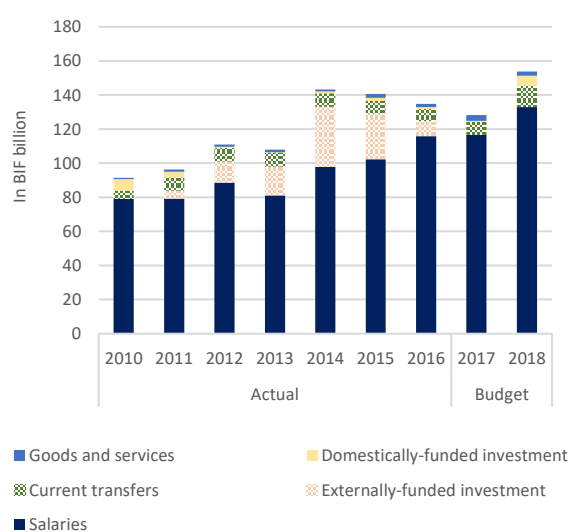
Critical educational inputs and infrastructure investments are severely underfunded in basic education, underscoring concerns about the adequacy of school inputs and classrooms. Salaries comprise the largest portion of basic education expenditures (on average 79 percent) and 95 percent

⁵⁵ Note basic education expenditures are available only for the period 2010-2016. The education expenditures and appropriations include on-budget external resources (based on the FCE planned and disbursed donor aid) but excludes off-budget donor aid, since the latter is not reported.

⁵⁶ It should be noted that the estimate of basic education finance is most likely an underestimation. This is due to the fact that some of the IV cycle buildings/classrooms are still on the premises and managed by secondary schools. Therefore, it is impossible to attribute this funding portion to basic education.

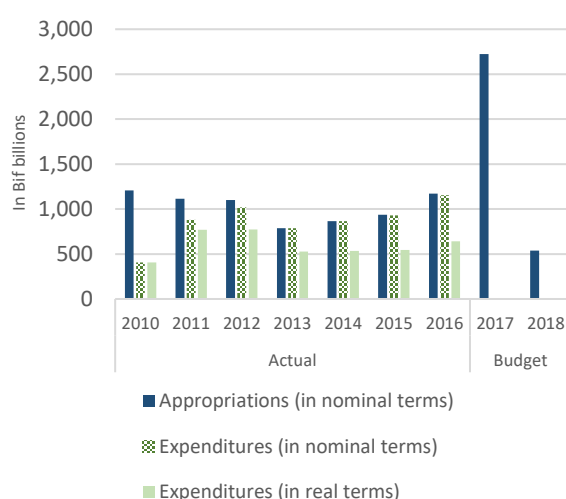
of basic education recurrent expenditures (figure 44 and 45).⁵⁷ The small remaining share of recurrent resources devoted to non-teacher salaries in basic education (on average 5 percent) is far below the suggested best practice of EFA FTI (recommending one-third of recurrent spending on primary education be allocated to non-salary spending). This raises concerns about the adequacy of school inputs at the school level. The underfunding of school inputs is also reflected in the low funding of goods and services (accounting for 1 percent of total basic education spending, declining on average in real terms between 2010 and 2016). This spending supports the purchase of textbooks, teacher training, curriculum development and school maintenance. With few resources available, spending was prioritized for textbooks and other materials (figure 46), although in real terms the spending level was just slightly higher in 2016 (BIF 0.6 billion – US\$ 0.4 million equivalent) compared to the spending level in 2010 (BIF 0.4 billion – US\$ 0.2 million equivalent). Other critical inputs, such as the school feeding and school grants, are classified under the transfers. These have been declining an average of 10 percent in real terms over the observed period.

Figure 44: Composition of Basic Education Expenditures by Category, 2010-2018



Source: MFPDE.

Figure 46: Appropriations and Spending on Textbooks and Other School Materials, 2010-2018



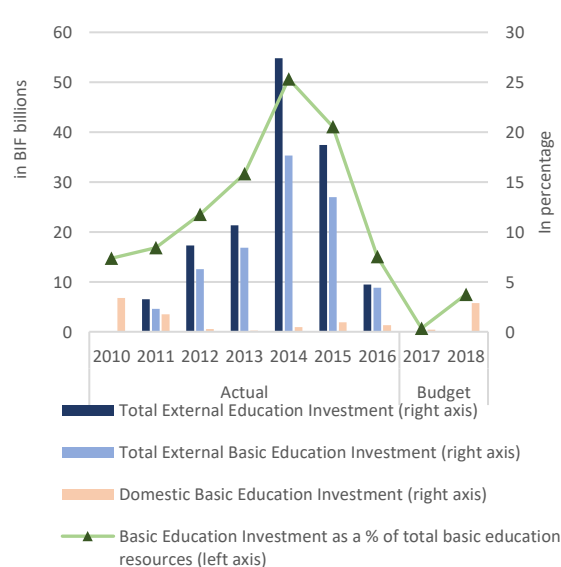
Source: MFPDE.

Figure 45: Composition of Basic Education Recurrent Expenditures by Category, 2010-2018



Source: MFPDE.

Figure 47: Composition of the Investment Budget by Source, 2010-2014



Source: MFPDE.

⁵⁷ The wages and salaries of staff in the national universities are classified under the transfers and subsidies category.

Public investment expenditures in basic education are heavily aid dependent, and have declined to the lowest level in recent budget laws, leaving the basic education sector with few resources for investment. Investment expenditures for basic education demonstrated an upswing as a share of total basic education expenditures from 7 percent in 2010 to 25 percent in 2014, but dropped in subsequent years, for example to 8 percent in 2016 (figure 47). This uneven trend was largely driven by donor aid. It reflected the sector's vulnerability to aid fluctuations and unpredictability, which was exacerbated in 2015. Basic education received the bulk of the sector's external aid (on average, 75 percent), which funded the sector's transition to nine years of basic education. As noted, the sudden suspension of budget support in 2015 had a detrimental impact on the funding of the sector's basic education reforms and frontline service delivery. All external aid was prioritized for basic education investment in 2016, but the spending level was low compared to previous years. Domestically-funded investments declined by 90 percent from BIF 6.7 billion (US\$ 5.4 million equivalent) in 2010 to BIF 1.3 billion (US\$ 0.8 million equivalent) in 2016. Although the Education Support Fund (*Fonds de soutien de l'Education*) was included in education investments for 2018, there have been almost no additional investment resources for the 2017 and 2018 budget appropriations. The purpose of the fund is to support post-basic education school materials, as well as the public schools for gifted students. However, it is not clear if resources are actually available during the 2018 fiscal year.

Budget Execution

The budget execution performance for basic education is largely characterized by underspending across most categories. From 2010-2016, the budget execution performance for basic education fluctuated. However, it does show, on average, a solid performance of only 2 percent over-execution (table 6). Compared to secondary education and total sector performance, it deviates slightly more from budget appropriations, particularly in 2010 and 2016. A closer look at budget performance by spending category shows that spending on salaries has exceeded appropriations, particularly in 2010 and 2016. This might be attributed to mid-year recruitment of contractual staff, with attendant delayed inclusion in the budget. However, the reason for the underspending on salaries between 2012 (-13 percent) and 2014 (-4 percent) is not clear, as teacher payments are typically protected from a shrinking fiscal envelope. Spending on goods and services have been mostly below appropriation levels (except in 2015). This could be partly explained by budget constraints and partly by a shift in the use of resources for other emerging priorities during the fiscal year. Spending on transfers shows a weak performance in 2010, including under- and over-execution in 2014 (- 10 percent) and 2015 (+10 percent). The latter figure is indicative of some weaknesses in the planning of school grants during these two years. The execution of the Government's investment program has been underperforming for most of the observed period. Domestically-funded investment expenditures were not only low in absolute terms, but the limited allocated resources were not fully executed. Even more concerning, despite an influx in donor aid between 2011 and 2014, more than a third of these resources were not executed.

Table 6: Basic Education - Initial versus Actual Budget by Spending Category, 2010-2016 (percentage)

	2010	2011	2012	2013	2014	2015	2016	Average 2010-16
Basic Education ¹⁾	12	2	-1	-13	-4	1	14	2
General Secondary ¹⁾	0	7	-1	-11	0	-3	9	0
Salaries	37	4	-1	-14	-5	2	15	5
Goods and Services	-58	-38	-20	-19	-16	19	-5	-19
Transfers	-56	0	0	0	10	-10	0	-8
Domestic Investment	-39	-1	-3	0	-1	1	-1	-6
External Investment		-63	-13	-44	-17	-57		-39
Total education expenditures ¹⁾	4	1	-1	-10	-3	0	9	0

Source: MFPDE.

Note: ¹⁾ Excluding external aid.

Inequities in the Affordability of Education: The Role of Households

Poor households spend half as much on public primary education compared to the richest households. Although the Government abolished school fees for primary education in 2005, students still pay some contributions at school (either in the form of an informal financial contribution or an in-kind contribution), as well as the typical private expenditures (uniforms, textbooks, and other private household expenditures).⁵⁸ Public primary education is estimated to cost US\$9 (BIF 13,000) per child for the poorest children, whereas it is US\$8 (BIF 11,500) for the richest (figure 48). Indeed, one-third of poor children and more than half of wealthy children paid a form of contribution at primary school. However, private household expenditures per child become more expensive in secondary school. The poorest children pay US\$38, and the richest children pay nearly US\$44.

Figure 48:: Private Household Expenditures per Child by Wealth Quintile, 2012-13

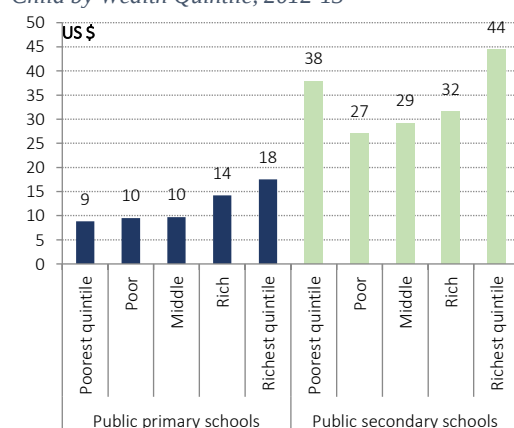
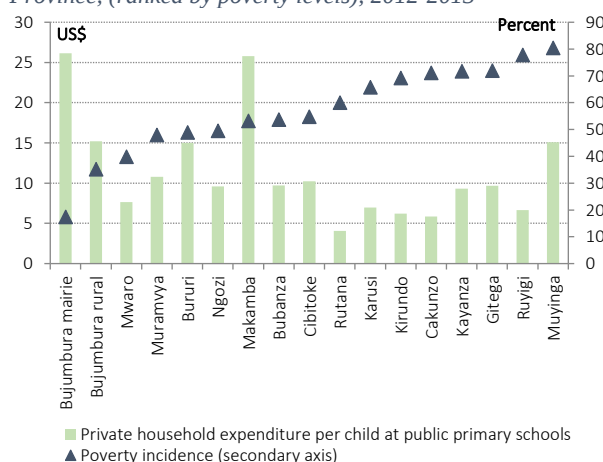


Figure 49: Private Household Expenditures per Child by Province, (ranked by poverty levels), 2012-2013



Source: Authors' estimate using ECVMB 2013.

Private household expenditures per child are unequal across provinces, and poor provinces seem to pay less than others. The Makamba and Bujumbura provinces have the highest private household expenditures per child, standing at US\$26 in 2012/13, whereas it is less than US\$10 in some other provinces (figure 49). Indeed, it seems that more children paid some contribution at school in those provinces (for instance, 79 percent of children in Makamba, and only 17 percent in Rutana).

⁵⁸ To analyze private spending in education, ECVMB data for 2012/2013 have been used. Private household expenditures are estimated using financial or in-kind contributions at school in 2012/13, as well as the costs for books, uniforms, transport or food spending by the household in 2013/14.

Furthermore, looking at the poverty rate, it appears that poor provinces pay less than others, and this correlation is significant.

Inequality in Public Resource Distribution – The Role of Government⁵⁹

Overall, public spending in education tends to favor wealthier households.⁶⁰ An average benefit analysis across wealth quintiles suggests that the poorest quintile receives 11 percent of the total public education spending, whereas the richest quintile receives 33 percent (figure 50). The distribution of public spending seems to be equitable at the primary education level. Almost all quintiles receive 20 percent of public benefits, equivalent to their share of the population — with the exception of the richest quintile (16 percent). However, the pattern for secondary and higher education is totally different. At the secondary education level, the poorest quintile only receives 6 percent of total spending, whereas it reaches 33 percent for the richest one. Furthermore, the difference becomes even greater at the higher education level (less than 1 percent versus 65 percent, respectively).

The concentration curves show clearly the level of inequality in the provision of public resources by education level (figure 51). The concentration curve for primary education lies marginally above the line of equality, meaning that the poor are slightly overrepresented, whereas secondary and higher education show inequality. Thus, additional spending in primary education is clearly pro-poor, whereas allocations to the higher levels are not.

Figure 50: Government Spending by Level of Education and Wealth Quintile, 2013 Expenditures

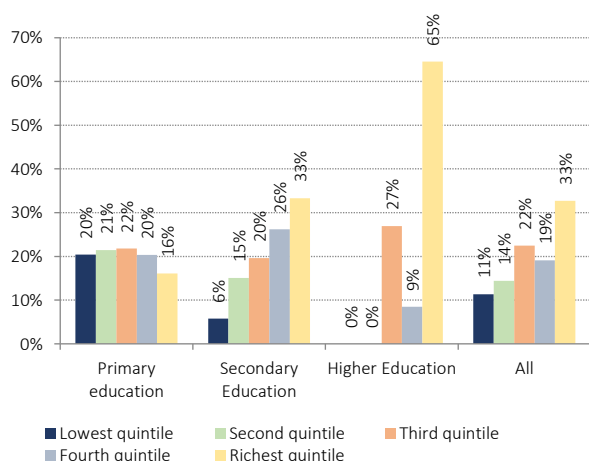
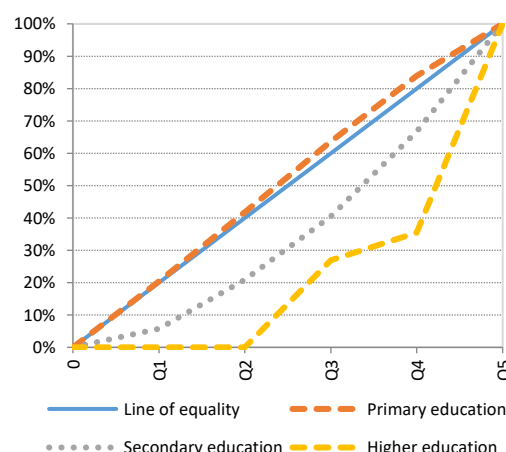


Figure 51: Concentration Curves by Education Level, 2012-2013



Source: Authors' calculations based on ECVMB 2013 and 2013 expenditures (excluding administration and investment).

Source: Authors' calculations based on ECVMB 2013 and 2013 expenditures (excluding administration and investment).

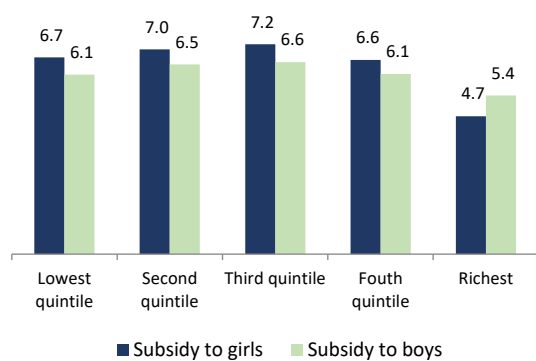
Regarding gender equity, girls benefit more than boys from government spending on basic education — except for girls from wealthier households. As illustrated in figure 52, girls from the lowest to the fourth quintile receive more Government spending than boys. This can be attributed to the higher enrollment rates of girls in basic education (see section 4.2). The trend differs only at the richest quintile, with girls benefiting from Government spending of US\$4.7 million, in contrast to boys

⁵⁹ Benefit incidence analysis has been done for this section's analysis. The analysis is focused on public schools using household survey data (enrollment in public school in 2012/13 by education level and consumption quintile), expenditure data by education level in 2013 from government (excluding administration and investment). Furthermore, 2012/13 public enrollments are used in this analysis

⁶⁰ To assess average benefits, the current government expenditures by levels on 2013 were combined with the enrollment rate from 2012/13 ECVMB.

who receive US\$5.4 million. In sum, girls benefit from, on average, 51 percent of Government recurrent expenditures on basic education.

Figure 52: Government Subsidies to Primary Education from Current Expenditures by Gender and Wealth Quintiles, 2013 Expenditures (US\$ millions)



Source: Authors' calculations based on ECVMB 2013 and 2013 expenditures (excluding administration and investment).

VI. Adequacy, Sustainability and Efficiency Issues

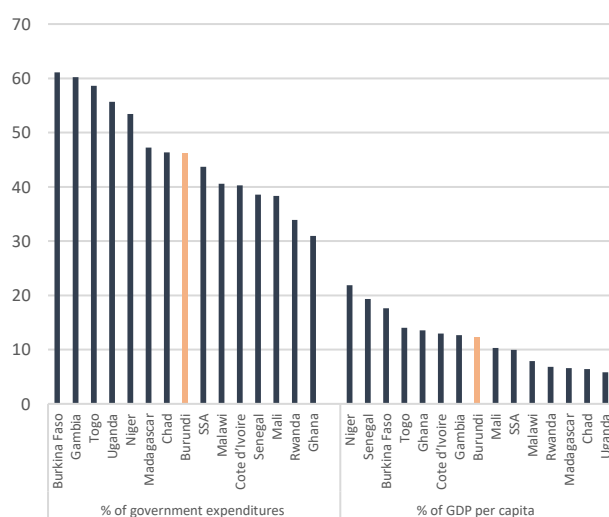
This chapter reviews the adequacy, sustainability and efficiency of the basic education sector. It first analyses the adequacy of the financial and non-monetary inputs to basic education, highlighting the impact of education inputs, such as teacher utilization (student-teacher ratio – STR), infrastructure and materials on sector outcomes. It proceeds with a discussion about the sustainability of the sector as a whole, referencing the Government’s Education Transition Plan and analyzing the human resource management and education wage bill. Finally, the chapter examines the resource utilization efficiency using the Data Envelopment Analysis (DEA) model, the drivers of internal efficiency (schools grants, delayed entry, survival and repetition) and external efficiency, focusing on labor market indicators.

6.1 Adequacy of Monetary and Non-monetary Inputs

Primary Education Spending

Burundi’s spending on primary education is just above the SSA average. As illustrated in figure 53, an international comparison shows that Burundi’s spending on primary education as a share of GDP per capita (12 percent) and as a share of Government spending (46 percent) was just above the Sub-Saharan African average (of 10 percent and 44 percent, respectively). As Burundi ranks at the bottom among its peers in terms of GDP per capita, it has spent substantially more than several other low-income countries (including Madagascar, Malawi and Niger). Burundi’s spending of external aid on basic education can be used as another indicator to examine its spending adequacy (figure 54). With around 45 percent of its total external aid spent on basic education, Burundi ranked just below the SSA average (46 percent) between 2010 and 2016. However, given the decline in donor support in recent years — and critical funding needs to carry out the basic education reform — the Government has limited options to free up fiscal space. This constraint has raised concerns about the adequacy and sustainability of basic education financing.

Figure 53: International Comparison of Average Expenditures on Primary Education, 2010-2016

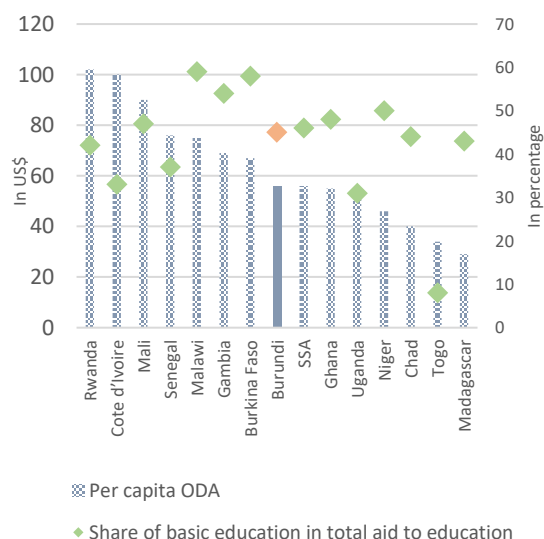


Source: WDI.

Note: Low-income countries include: Burkina Faso, Burundi, Chad, Gambia, Madagascar, Malawi, Mali, Niger, Rwanda, Senegal, Togo, and Uganda.

Lower-middle income countries include: Cote d'Ivoire and Ghana.

Figure 54: International Comparison of Basic Education's Share of Total Aid, years?

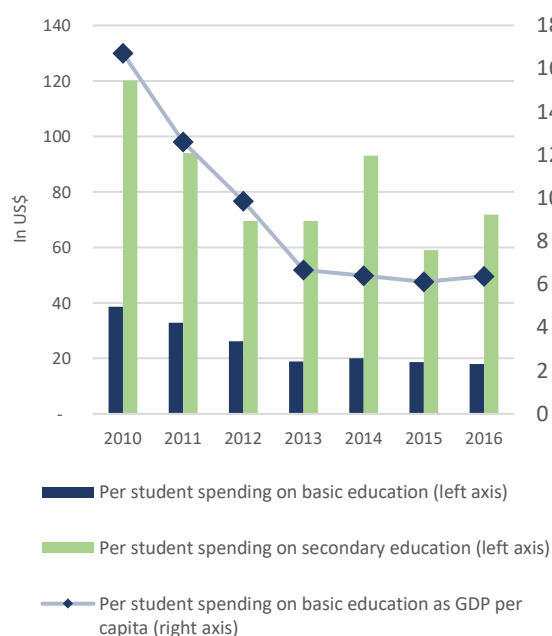


Source: UNESCO.

Student Cost Allocations

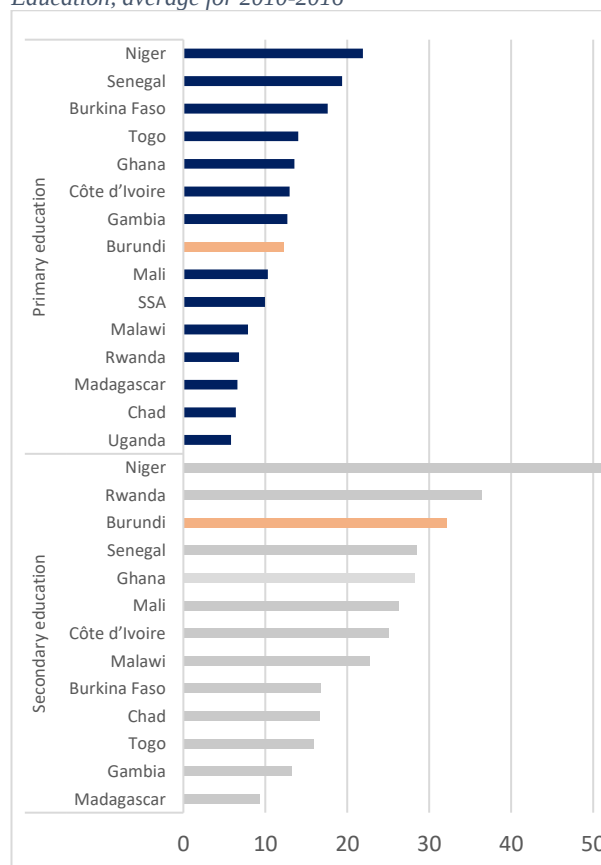
The unit cost of basic education has been declining over time, both as a share of GDP per capita and in real terms. The adequacy of basic education spending can also be measured as the cost of the required inputs. Per student spending as GDP per capita shows a downward trend from 2010-2016. The Government's real basic education spending per student dropped by more than half, that is, from US\$43 in 2010 to US\$18 in 2016 (figure 55). Given that enrollment in basic education has steadily increased over the observed period, the decline in the unit cost of basic education suggests that sector spending on basic education has not kept pace with the growth in the school-age population. By contrast, spending on secondary education per student declined by only 40 percent over the same period — and was 4 times higher than the unit cost of basic education in 2016. Although post basic education usually costs more, secondary education benefited from an increase in public resources between 2010 and 2016, whereas resources for basic education declined. Given that the poorest households benefit more from public education spending at the primary level, it implies that the public education spending system in Burundi tends to be regressive.

Figure 55: Spending per Student, average for 2010-2016



Source: MFPDE.

Figure 56: Public Expenditures per Student on Primary Education, average for 2010-2016



Source: WDI.

Note: SSA= Sub-Saharan Africa.

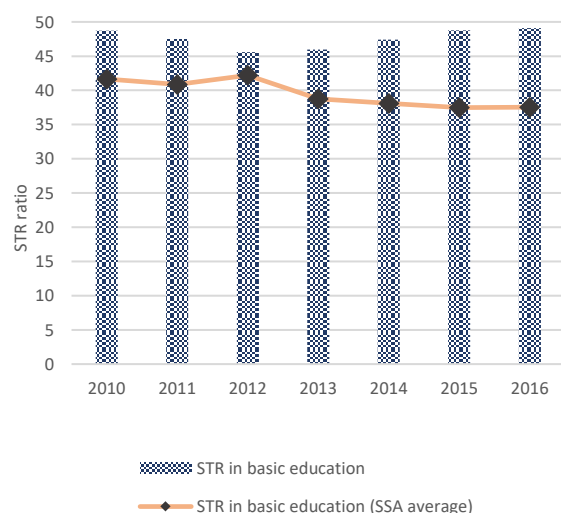
Compared to its peers, Burundi is slightly above the Sub-Saharan Africa (SSA) average. Figure 56 shows that Burundi has spent the equivalent of 12 percent of its GDP per capita on each student at the primary level compared to the SSA average of 10 percent. Burundi ranks as one of the highest countries, together with Niger and Rwanda, in terms of spending at the secondary level. While this might appear to be puzzling considering the decline in the unit cost for basic education, one explanation might be the low level of Burundi's GDP. This may have contributed to the country's above

SSA average ranking. Nevertheless, it underlines the findings that suggest that Burundi's secondary education is costly.

Teacher Utilization

Whereas the STR in basic education remained steady between 2010 and 2016, there is a significant variation in the STR across provinces. In 2016, the STR in basic education stood at 48:1 (50:1 in public schools and 45:1 in public schools *sous convention*). These ratios are in line with the Government's target of 50, as stated in the Education Strategy. However, they are still above the SSA average of 37:1 (figure 57). The ratio has remained steady as growth in student enrollment grew on par with the annual supply of teachers (on average 3 percent). Nonetheless, the STR masks large differences between provinces, and is associated with an uneven allocation of teachers to primary schools. As illustrated in figure 58, provinces such as Bururi, Cankuzo have a student-teacher ratio (STR) well below the targeted level of 50:1, whereas Muyinga and Kirundo have a ratio above the optimal level. This difference indicates that the teacher distribution is not need based. Rather, it is influenced by teacher preferences for urban and accessible locations instead of the more disadvantaged, remote areas. The Government has attempted to increase equity through teacher redeployment since 2016 (see box 2).

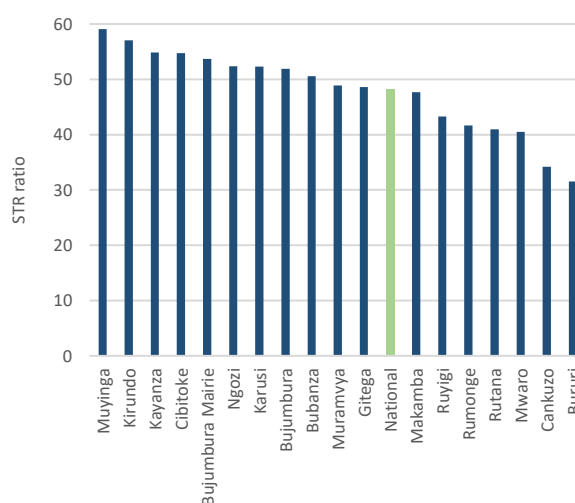
Figure 57: STR for Basic Education, 2010-2016



Source: EMIS 2016/2017.

Note: SSA= Sub-Saharan Africa; STR= student-teacher ratio.

Figure 58: Primary School Student-Teacher Ratio by Province, 2016/2017



Source: EMIS 2016/2017.

Box 2: Burundi's Policy on Teacher Redeployments

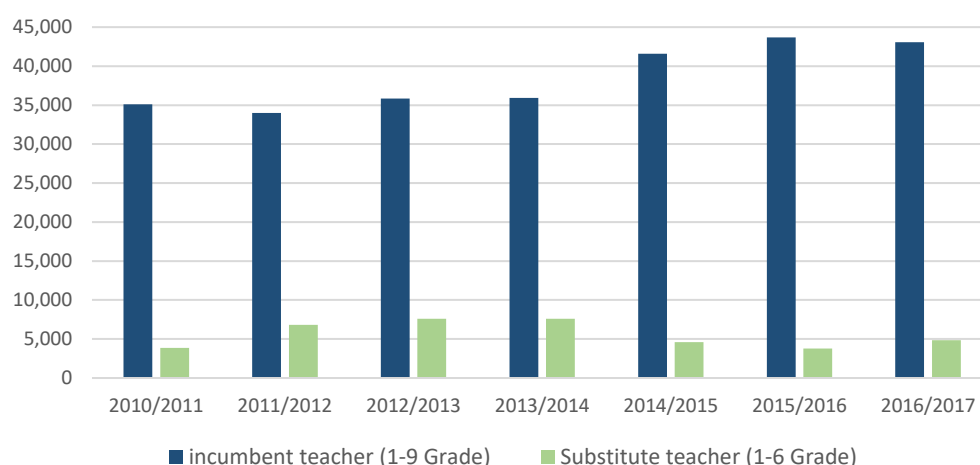
In response to the uneven distribution of teachers across Burundi — a situation exacerbated by teacher shortages and resources constraints — the MEERS initiated a redeployment of teachers in 2016 and 2017. A commission chaired by representatives of the MEERS and the teachers' unions carried out a stock taking of teachers and staff in schools. It was based on information provided by the decentralized education services and verified by the Ministry through selected visits to the field. The redeployment was then implemented out based on a set of criteria, such as class size, the availability of teachers per school, marital status and gender. The redistribution took place both across and within provinces.

The initiative led to the compulsory redeployment of 4,761 teachers, with 61 percent of the teachers working in the I-III cycles and 41 percent in the 4th cycle. Although the Government has attempted to increase equity through teacher deployment, some concerns have been raised about the effectiveness of the reform. Anecdotal evidence suggests that redeployment tended to take place in provinces that have a student teacher ratio close to 50:1, but not above — although these constitute the most underserved provinces. Several schools also reported that they have not been part of the redeployment. It is also not clear if all teachers have effectively moved to the new location or were able to transfer back to their initial school. The MEERS is currently carrying out a study to assess the impact of the policy, and will be seeking to refine its methodology.

Source: ETP 2018-2020

The STRs also show that teachers are underutilized, as evidenced by the 'wide' use of substitute teachers. As illustrated in figure 59, substitute teachers have represented on average 15 percent of all teachers between 2010/11 and 2016/17. The hiring of substitutes teachers puts an additional strain on governmental resources. In addition, the practice of utilizing substitute teachers has been abused.⁶¹ In an effort to limit the underutilization of regular teachers, the Government introduced measures to reduce double-shifts. It also sought to increase teaching hours in double-shifts. As a result, the number of substitute teachers began to decline in recent years, although it increased slightly again in 2016/17.

Figure 59: Public Primary School and Substitute Teachers for Grades 1-9, 2010/11–2016/17



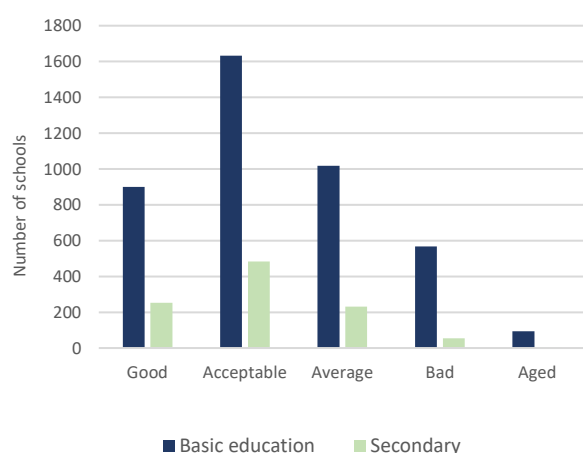
Source: EMIS 2016/17.

⁶¹ Qualitative interviews carried out during a field visit revealed that incumbent teachers tend to extend their leave and sick leave while relying on the substitute teachers. In these circumstances, both staff are paid.

Infrastructure and School Facilities

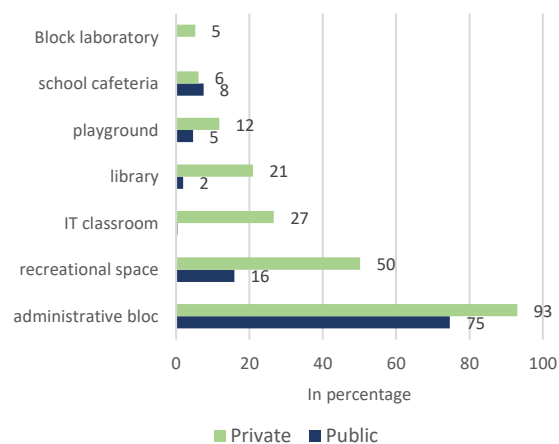
Key input indicators (classrooms, school desks, and so on) and services (water, electricity) are in shortage at public primary schools. A recent diagnostic concerning infrastructure and school equipment (MEESRS/UNICEF 2018). assessed the quality of the school infrastructure and access to basic services (water, sanitation, electricity) in Burundi's public and private preschool, primary and secondary schools. With regard to basic education, some of the main findings of the study can be summarized as follows: (i) about 60 percent of the school infrastructure in basic education is in good and acceptable shape, compared to 72 percent in secondary education (figure 60); (ii) private schools are better equipped in terms of laboratories, libraries, and computer labs — with the exception of school cafeterias, about 8 percent of all public primary schools have a school cafeteria (figure 61); (iii) school infrastructure and service indicators are much lower in public primary schools compared to private schools (table 7). According to the study, there is a deficit of almost 22,211 classrooms and 688,704 school desks in primary schools in 2018.

Figure 60: State of Primary School Infrastructure



Source: MEESRS/UNICEF 2018.

Figure 61: Availability of Building Additions



Source: MEESRS/UNICEF 2018

Table 7: Selected Indicators of School Infrastructure

	Public	Private
Students per classroom	93	31
Students per school desk	4.7	1.9
Students per latrine cabin	75	28
Access to water during the year	38	83
Functional electrical system	32	69
Sanitation installation correctly used	15	89

Source: Infrastructure Diagnostic 2018.

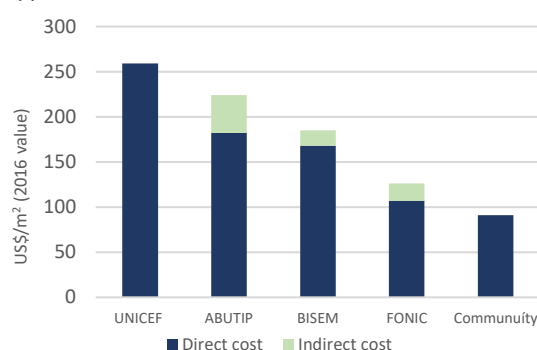
Communities have played a strong role in the construction of schools, but the maintenance of the infrastructure remains a key challenge. According to the infrastructure study (MEESRS/UNICEF 2018), the communities have participated in the financing of the construction/extension of more than half of the public schools in Burundi (figure 63).⁶² This reflects the community's strong commitment to participating in school development and construction to ensure the proper schooling of their children. However, the quality of construction is affected by the lack of technical supervision and the

⁶² According to the law n° 1/16 / of May 25, 2005 on the modalities of transfer of the competences of the state to the communes, the communes are responsible for managing the local interests of the population in its jurisdiction.

inability to meet minimum standards. According to the national infrastructure and maintenance policy, the communes are responsible for the maintenance of the infrastructure. About 74 percent of schools have a maintenance committee, but only 73 percent of these committees have a maintenance budget. Only half of these committees have a maintenance plan (MEESRS/UNICEF 2018).

In the context of limited fiscal resources, the Government faces a trade-off in quality construction and an acceptable unit cost per classroom. The quality of construction depends heavily on the approach adopted by the different actors, notably UNICEF, the Burundi Agency of Public Works (ABUTIP), the Office of School Infrastructure, Equipment and Maintenance (BISEM), FONIC and the communities involved. For instance, UNICEF workmanship is of higher quality compared to the work of the communities, which is of low quality. Accordingly, the unit costs also vary considerably, with UNICEF construction costs being the highest. Unit costs of community-built schools are only one-third of UNICEF costs (figure 62). Given the large demand for new classrooms and the limited national budget, the challenge ahead will be to increase the quality of community construction, while retaining an acceptable unit cost per classroom (World Bank 2017).

Figure 62: Unit Cost of Classrooms Built for the PSDEF, by Construction Approach



Source: World Bank 2017.

Note: PSDEF= Education Sector Plan 2012-2020.

Textbooks are also key inputs in basic education, but shortages are widespread. School textbook coverage remains very limited. Burundi primary education pupils study almost without textbooks. On average, two students share a French textbook, 3 pupils share a Kirundi textbook, and 5 pupils share a book on English or mathematics (RESEN 2016). As shown in table 8, there is considerable variation across grades in terms of the availability of textbooks in the five disciplines. For instance, there are almost no math books for students in 3rd Grade. In the 6th grade, on average there is 1 textbook for 10 students in English and Kiswahili. The shortage can be in part attributed to the determination of the number of textbooks by the central administration, as informed by the STR and available budget. However, often it does not consider the preorders by the DCEs and DPEs. As a result, textbooks distributed to the schools often do not match the demand in terms of quantity and type. In addition, many arrive several months late. Poor security in transport and storage have encouraged corrupt practices, such as the recent reported theft of textbooks that were sold on the commercial markets.⁶³

⁶³ Présidence Burundi, Communiqué de Presse de la Réunion du Conseil des Ministères du Mercredi 19 Septembre 2018.

Table 8: Availability of Textbooks by Grade

Discipline	1 st grade	2 nd grade	3 rd grade	4 th grade	5 th grade	6 th grade
Math	0.53	0.51	0.10	0.40	0.20	0.44
French	0.59	0.53	0.56	0.53	0.47	0.56
Kirundi	0.54	0.44	0.5	0.49	0.46	0.47
English	0.3	0.31	0.2	0.2	0.16	0.11
Kiswahili	0.3	0.3	0.19	0.18	0.16	0.1
Other	0.03	0.21	0.19	0.21	0.22	0.21

Source: RESEN 2016.

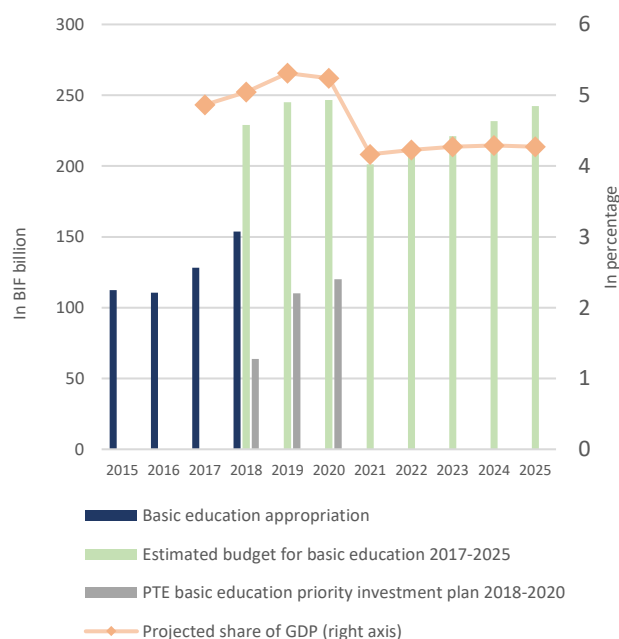
6.2 Sustainability

Education Spending Scenario: The Education Transition Plan

The ETP's short-term priority investment plan proposes a donor-driven funding framework. The ETP 2018-2020 includes two cost scenarios to foster basic education reforms initiated in 2013/14. The first scenario provides recurrent and capital projections for 2018-2020, while the second focuses on priority investments (figure 63). The ETP's priority investment plan is expected to be largely funded by donors (figure 64). The investment plan covers a carefully selected number of priority measures, but it is still far below the actual needs (for instance, the planned construction of 800 classrooms is far below the actual needs).

The ETP's medium-term outlook will largely depend on the country's fiscal space. The ETP's education scenario projects that basic education spending will be at around 4 percent of GDP between 2021 and 2025. In 2018, budget appropriations for basic education accounted for 2.5 percent of GDP. Under the present macroeconomic outlook, it seems very unlikely that fiscal space will be available to allocate public resources in accordance with sector needs.

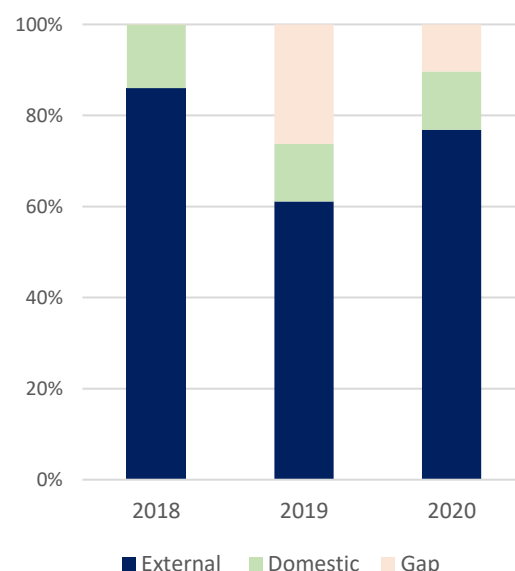
Figure 63: ETP Estimated Investment Cost for Basic Education, 2018-2024



Source: ETP 2018-2020.

Note: GDP= gross domestic product; PTE=Education Transition Plan.

Figure 64: ETP Three-year Investment Plan, 2019-2020



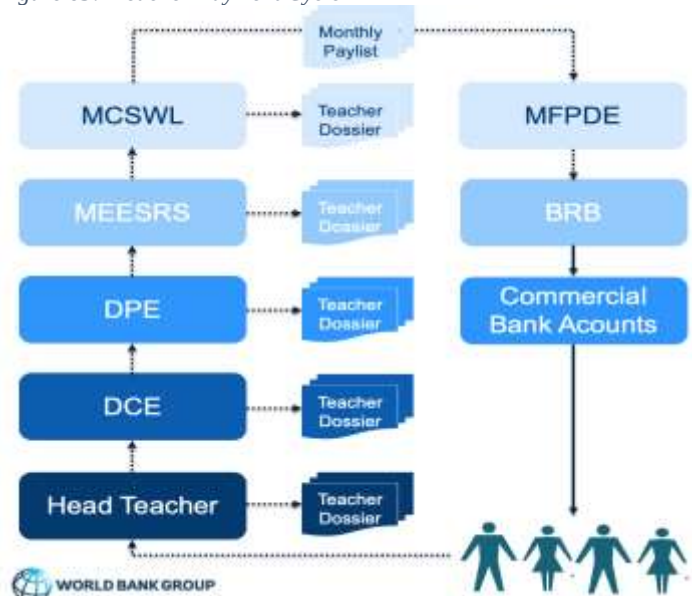
Source: ETP 2018-2020.

The ETP medium-term outlook faces some limitations. At the time of preparation in 2017, financial data was difficult to collect. The attribution of teachers to basic and secondary education also constituted a challenge, as some teachers work at both levels. Estimations about student flows to different education tracks were difficult to establish, as were dropout rates following those who had completed basic education.

Human Resource Management

The Ministry of Education currently has no electronic database for human resource (HR) data, including all teacher records; this may cause problems with the integrity of the HR records system (World Bank, 2017). Data, including information on recruitment, management, salaries, transfers, and leave, are paper-based records (with some in Excel as well). They are stored in a physical archive maintained by the Bureau of Human Resources using a facility that is in a separate physical location from the Ministry. Any changes to teacher data (new hires, promotions, deaths, and so on) commence at the school level, and are passed in writing to the DCE level. They then progress to the DPE, and then the central levels, with each level retaining its own records (figure 65). UNICEF is supporting the inclusion of a HR module in the StatEduc to manage teacher data, but this has not yet been finalized. HR data flowing from the decentralized levels to the Ministry also do not include critical information, such as birth dates and ages of teachers.

Figure 65: Teacher Payment Cycle



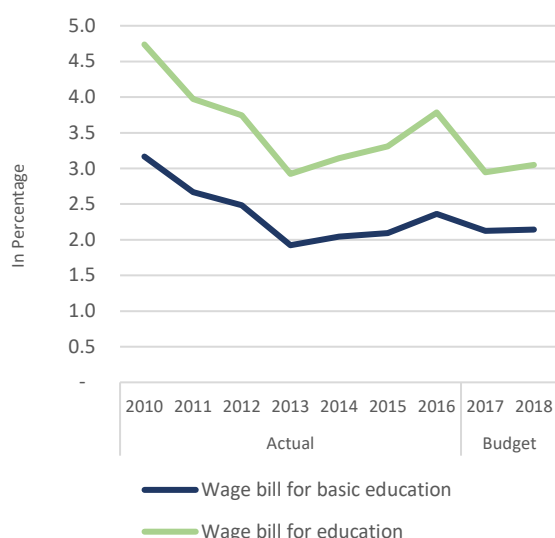
Source: Authors' representation.

Note: BRB= Bank of the Republic of Burundi; DCE=Commune Education Directorate; DPE= Provincial Education Directorate; MEESRS= Ministry of Education, Higher Education and Scientific Research; MFPDE= Ministry of Finance and Economic Development Planning; MCSWL= Ministry of Civil Service, Works and Labor.

Burundi's Wage Bill⁶⁴

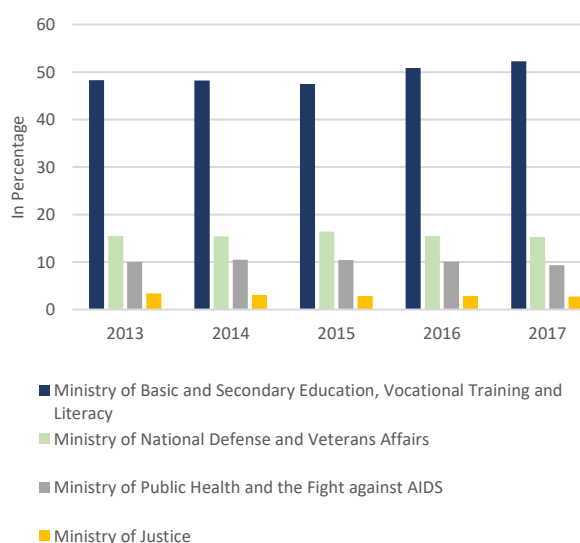
Burundi's education wage bill shows a slight downward trend in recent years, but education staff salaries continue to dominate the national wage bill — and the total share of education expenditures is one of the highest compared to its SSA peers. Burundi's education wage bill has decreased over the past 8 years. It is now estimated to be at 2.4 percent of GDP or 10 percent of the national budget (figure 66). Nevertheless, education wages dominate the Government's overall wage bill, accounting for almost the total public wage bill (figure 67). Burundi's has one of the highest shares of education expenditures as compared to its peer countries, with only few resources left for non-wage inputs (figure 68). On average, 78 percent of total recurrent spending was dedicated to staff compensation between 2010 and 2016, with non-wage recurrent spending amounting to 22 percent.

Figure 66: Education Wage Bill as a Share of GDP



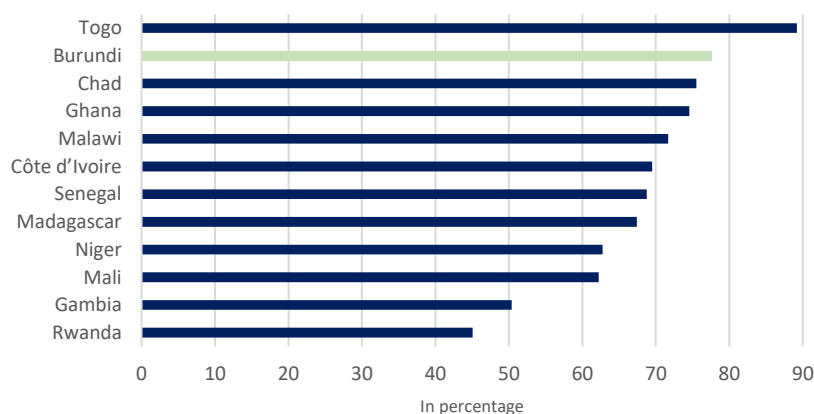
Source: MFPDE, MEERSR.

Figure 67: Government's Total Wage Bill by Selected Sector Ministries



Source: MFPDE.

Figure 68: Staff Compensation as a Percentage of Total Expenditures in Public Institutions



Source: WDI.

⁶⁴ Note this section builds on section 2.3 that assesses fiscal sustainability and focuses on the education wage bill as a critical factor for the sector's sustainable financing.

Teacher Compensation

Although salaries constitute the largest portion of the education sector budget, estimates show that staff salaries are still low in comparison with other public sector employees; some measures have been taken to improve this situation. The number of public education employees is about 73,359 in Burundi as of 2017, according to a staff survey in 2014. Around 76 percent of the total staff are teachers and 24 percent are non-teachers (that is, administrative, technical and support staff). The Ministry employs public civil servants and contract staff. Almost all of the Ministry's employees are public servants (98 percent). Information about the growth of the staff is not available. According to the MCSWL, the monthly salary of the education staff is below the public sector salary average. A rapid salary benchmarking with other sectors underscores the low level of the education salaries (table 9). For instance, a University professor receives a monthly gross salary of US\$ 155, whereas a doctor's monthly salary amounts to US\$283. In recent years, the Government has introduced a couple of measures to address the low salary pay and render teacher's pay more attractive. All education staff enter at a minimum grade D6 level, which is 3 grades above the minimum entry grade. Furthermore, the retirement age for civil servants is 60 years, whereas teachers can retire later at the age of 65. In 2017, the Government introduced an annual salary adjustment allowance for all education staff that aims to converge the education staff base salary to the average public servant salary over a 4-year period.

Table 9: Comparison of Monthly Average Salaries (in US\$)

	Base salary	Gross salary
Education		
Salary of Primary school teacher	31	66
University professor	90	155
Health		
Doctor	74	283
Medical Specialist	88	338
Mining		
General Director	1,264	
Civil Engineer	272	
Finance		
State Inspector	400	771
Inspector Principal	525	1,072

Source: Ministries of Education, Health, Mining and Finance.

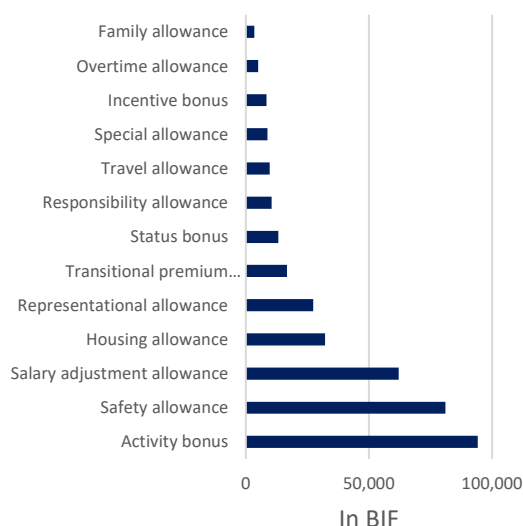
Note: Information on the net salary could not be obtained.

A plethora of bonuses and allowances undermines the effective use of awarding good performance.

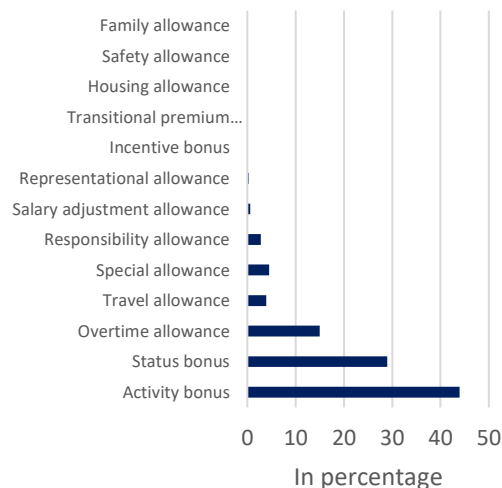
Regarding the breakdown of worker compensation, on average, the basic salaries constitute the largest share, that is, 61 percent, whereas allowances account for 39 percent. There are more than 10 different bonuses that vary in amounts and conditions. For instance, the activity bonus stands at US\$ 52 compared to the family allowance of US\$2 (figure 69). Some allowances are allocated to all staff, whereas others depend on the particular circumstances of the individual. In practice, three allowances (the activity bonus, overtime and the status bonus) constitute 90 percent of total allowances, with the remaining allowances being more negligible (figure 70). This approach to allowances blunts their usefulness in terms of achieving certain desired results, such as the deployment of teachers to remote areas, the teaching of certain subjects, and motivating certain behaviors of teachers.

Figure 69: Breakdown of Allowances, 2017

Figure 70: Type of Allowances as a Share of Total Allowances, 2017



Source: MCSWL.



Source: MCSWL.

Basic salaries are determined by education levels. The Law⁶⁵ separated the statutory pay scale (gross salary and allowances) into 17 groups by educational certificates/qualifications, and not by job responsibility or experience. To facilitate the analysis, the pay scale was classified according to nine categories from grade A (below high school qualification) to grade I (PhD of Medicine qualification). Table 10 summarizes the basic salary by grade and education level. Figure 71 presents the distribution of employees by qualifications. Accordingly, about 40 percent of the education employees has a bachelor's degree with a monthly basic salary of BIF 92,565 to 139,703 (or US\$ 51-77).

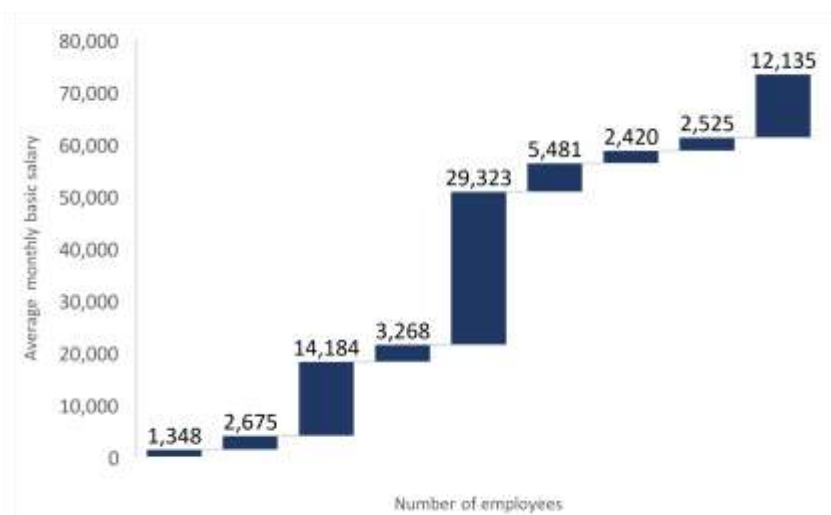
Table 10: Monthly Basic Salary by Grade and Education Level

Monthly Basic Salary (BIF)	Education Level	Grade	Number of employees
< 57,378	Below high school qualifications	A	1,348
>= 57,378 and < 72,788	High school qualifications	B	2,675
>= 72,788 and < 88,043	Baccalauréat qualifications	C	14,184
and >= 90,574 and < 92,565			
>= 88,043 and < 90,574	Baccalauréat; lacking complete Bachelor's Degree qualifications	D	3,268
>= 92,565 and < 139,703	Bachelor's Degree level qualifications	E	29,323
>= 139,703 and < 149,873	Master's Degree level qualifications	F	5,481
>= 149,873 and < 159,811	Bachelor of Medicine qualifications	G	2,420
>= 159,811 and < 170,831	Master of Medicine qualifications	H	2,525
>= 170,831	PhD of Medicine qualifications	I	12,135
Total			73,359

Source: MCSWL.

⁶⁵ Law N 1/28 as of 23 August 2006 regarding salaries and other allowances of civil servants.

Figure 71: Distribution of Employees by Qualifications



Source: MCSWL.

Salary progression is also linked to educational qualifications. Pay regression, as measured by the compression ratio — defined as the ratio of the 90th percentile of gross pay to the 10th percentile of gross pay in a particular group — varies significantly between Grade I (staff with a PhD of Medicine) having the highest and Grade B (staff with high school qualification) having the lowest pay compression ratio (table 11). Compression occurs when employees have small differences in pay regardless of experience, skills, level, or seniority. A highly compressed wage structure may reduce employee incentives to pursue a long career in the civil service by reducing the appeal of promotions, which in turn may adversely affect productivity (Lonti and Woods 2008).

Table 11: Distribution of Wages by Grade Category

Grade	Number of Employees	Gross Salary			Compression Ratio (90 th to 10 th percentile)
		10 th Percentile	50 th Percentile	90 th Percentile	
A	1,348	55,505	66,035	93,860	1.69
B	2,675	126,769	126,769	126,769	1.00
C	14,184	132,426	140,191	144,191	1.09
D	3,268	147,347	147,347	150,439	1.02
E	29,323	156,943	179,693	229,275	1.46
F	5,481	226,389	236,041	272,439	1.20
G	2,420	238,537	249,663	287,534	1.21
H	2,525	257,673	272,076	304,418	1.18
I	12,135	280,326	350,550	485,203	1.73
Total	73,359	135,864	180,522	327,376	2.41

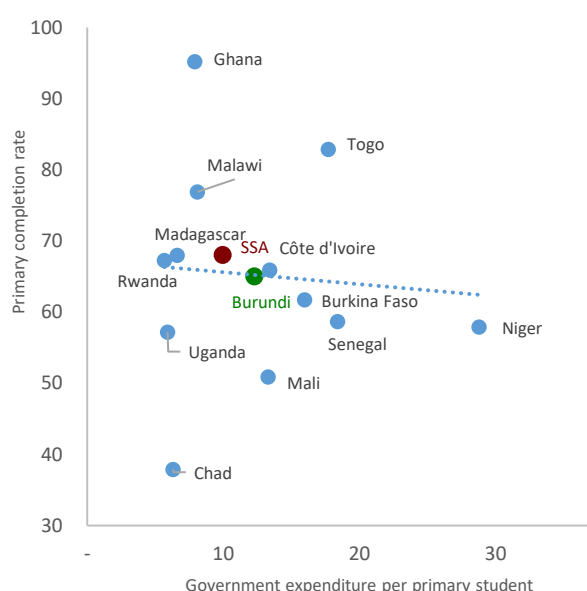
Source: MCSWL.

6.3 Efficiency of Burundi's Education System

Overall Efficiency: Linking Public Expenditures and Outcomes

An international comparison shows some limited scope for improving the country's use of education resources. Figures 72 and 73 compare basic education spending and educational outcomes in Burundi with peer countries. In the case of primary completion rates, Burundi spends slightly more than the SSA average, but has a lower primary completion rate. Several low-income countries at spending levels similar or less than Burundi (Madagascar, Malawi and Rwanda) achieve the same or better educational outcomes. Comparing spending and net enrollment rates, a few countries spend less than Burundi, but achieve a higher net enrollment rate (including Ghana, Rwanda, and Uganda). This suggests that Burundi has some room to use its resources more efficiently.

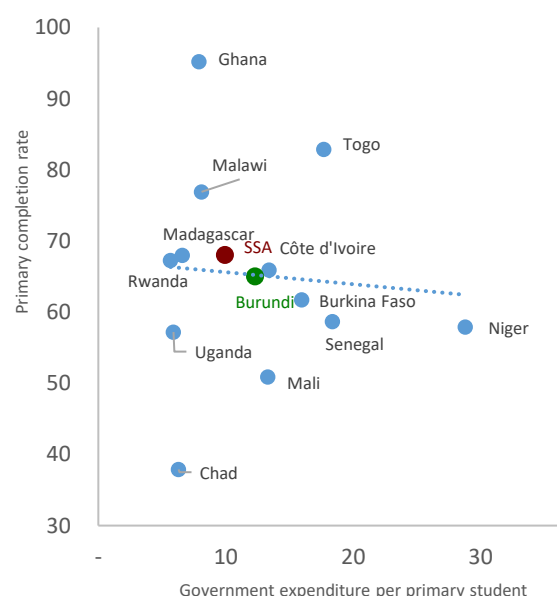
Figure 72: International Comparison of Government Spending per Primary Student and Primary Completion Rates



Source: WDI.

Note: Low-income countries include: Burkina Faso, Burundi, Chad, Gambia, Madagascar, Malawi, Mali, Niger, Rwanda, Senegal, Togo, and Uganda. Lower-middle income include: Côte d'Ivoire and Ghana.

Figure 73: International Comparison of Government Spending per Primary Student and Primary Net Enrollment Rates



Source: Institute for Statistics, UNESCO.

Note: Low-income countries include: Burkina Faso, Burundi, Chad, Gambia, Madagascar, Malawi, Mali, Niger, Rwanda, Senegal, Togo, and Uganda. Lower-middle income countries include: Côte d'Ivoire and Ghana.

Efficiency of Resource Utilization

Data Envelopment Analysis (DEA)⁶⁶ is used to assess the resource utilization efficiency by linking educational inputs to outcomes. The main purpose of the DEA model is to analyze how efficiently schools located in different provinces and communes use their resources to generate better educational outcomes. The analysis allows for the identification of best school practices leading to better education outcomes. These results could also be replicated by other school establishments. This analysis is particularly relevant in the context of Burundi, where the fiscal space is tight and the resumption of donor assistance is uncertain.

The efficiency scores are estimated at the commune level, using average school inputs/outputs from Grades 1 to 9⁶⁷. The output measures are captured by national examination scores at Grade 9, average promotion rates for Grades 1-6, Grades 7-8, and average repetition rates for Grades 1-6, and Grades 7-9. The inputs include public transfers per student, basic teacher salary⁶⁸ per student, the number of classrooms per student, and the number of teachers per student. This result suggests that the system could have saved 6 percent of inputs for the same level of outputs produced⁶⁹.

The average efficiency score at the national level stands at 94 percent, implying that the same educational outcomes could be realized using 6 percent fewer resources. In other words, the efficiency analysis results suggest that, on average, 6 percent of resources could have been saved at the public basic education level.

Efficiency scores vary across provinces and communes. For example, the Ngozi, Kirundo and Bujumbura Mairie provinces are relatively more efficient than the Rumonge, Bururi and Rutana provinces in terms of their resource use. The efficiency scores in the three higher efficiency provinces stand above 90 percent, whereas the scores range from 81 to 84 percent in the three least efficient provinces (figure 74). At the commune level, twenty-five communes out of 119 are relatively efficient. The efficient communes⁷⁰ come from 11 provinces, becoming benchmarks for the others. These results suggest that the other communes in the same province could employ similar efforts to improve efficiency. Other provinces, such as Burambi, Vugizo or Byengoro appear to be the least efficient communes, with efficiency scores ranging from 62 to 72 percent (figure 75).

Efficient communes registered significantly lower repetition rates and performed better on national examinations. The better performing communes have, on average, 5 percentage points lower repetition rates for Grades 1 to 6, and 4 percentage points lower rates for Grades 7 to 9. Promotion rates in the first three cycles of basic education also appear higher in those efficient communes. However, there is no significant difference with the other communes at the last cycle (table 12). Also, inefficient communes achieved relatively lower results on national examination scores for Grade 9 than other communes.

⁶⁶ The DEA efficiency analysis is a relative, but not absolute, efficiency analysis. It measures a relative efficiency and ranges from 0 to 100 percent, where 0 is the most inefficient unit and 100 percent is the most efficient unit. The higher the efficiency score is, the better the resource utilization.

⁶⁷ The decision-making unit (DMU) in the DEA analysis is the commune level. The model is based on the average of the inputs and outputs at the commune level from public schools for Grades 1 to 9. It excludes public schools with only cycle 4 (that is, Grades 7 to 9), which are still attached to post-fundamental schools. DEA analysis at the school level was difficult to run due to the large database.

⁶⁸ It is based on the salary of the teacher at recruitment. The amount of salary increases due to experience is not available.

⁶⁹ The DEA model used is input oriented. It tries to indicate how much the DMU will decrease input for the same level of output.

⁷⁰ This includes: Kabezi (Bujumbura), Muha (Bujumbura Mairie), Buganda, Mabayi and Rugombo (Cibitoke), Bugendana, Buraza and Ryansoro (Gitega), Gihogazi (Karusi), Gatara, Kabarore and Muhanga (Kayanza), Bugabira, Busoni, Gitobe, Kirundo and Ntega (Kirundo), Makamba (Nyanza-Lac), Mbuye and Rutegama (Muramvya), Giteranyi (Muyinga), Busiga, Marangara, Ngozi and Ruhororo (Ngozi).

Figure 74: Distribution of Efficiency Scores by Provinces

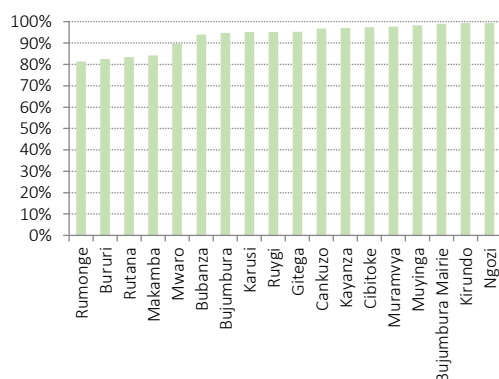
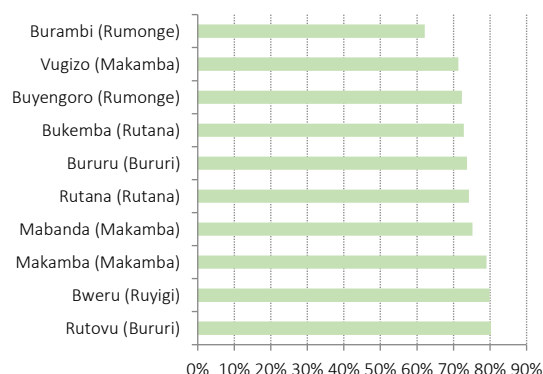


Figure 75: Ten Least Efficient Communes



Source: Authors' estimate based on EMIS, Transfers budget, and Basic Salaries of Teachers and National Examination Scores for Grade 9.

Table 12: Input and Output Indicators by Commune

	Efficient Communes	Inefficient Communes
<i>Output indicators</i>		
National Examination Score for Grade 9	52.8***	50.3***
Promotion rate Grades 1 –6	67.3***	62.5***
Promotion rate Grades 1 – 8	64.4	60.2
Repetition rate Grades 1 –6	19.2***	24.5***
Repetition rate Grades 7 9	16.7***	20.5***
<i>Input indicators</i>		
Basic teacher salary per student	31,023***	37,498***
Public transfer per student	520	536
Number of students per classroom	86:1***	71:1***
Number of students per teacher	52:1***	44:1***

Source: Based on EMIS and National Examination Scores for Grade 9.

Note: ***significant difference.

Efficiency differences might be tied to the number of hours spent in class and at student desks. The second stage analysis⁷¹ tries to identify the factors that significantly affect the efficiency of communes. These factors⁷² are related to the school environment, such as the number of school hours, students textbooks ratios, student desks, qualified teacher ratios, and ratio of students in pedagogic groups. The results show that the number of hours spent in class for Grades 7-9 has a positive contribution to efficiency (table 13). In other words, two communes may use the same resource, for example, the same number of teachers, students or classrooms, but the number of hours spent in class contributes to the difference of efficiency between them. The number of student desks also appears to increase the efficiency scores.

⁷¹ Tobit regression analysis was used, whereby the efficiency score per commune is the dependent variable.

⁷² Variables are available from the EMIS.

Table 13: Regression Analysis for Efficiency Scores

Tobit Regression	Efficiency Score
Status of public schools	0.063* (0.03)
Number of hours spent in class (Grades 7- 9)	0.017* (0.01)
Number of student desks	0.001*** (0.00)
Student-textbook ratio in Kirundi (Grades 1 2)	0.002 (0.00)
Student-textbook ratio in French (Grades 5 – 6)	0.003 (0.00)
Number of students in double-shifting (Grades 7 –9)	-0.001 (0.00)
Qualified teacher ratio	-0.000 (0.00)
Constant	0.713*** (0.24)
Sigma constant	0.079*** (0.01)
Number of communes	118

Source: EMIS 2015/16 and 2016/17.

Note: Standard errors in parentheses, * p<0.1, ** p<0.05, *** p<0.01.

The qualifications of teachers and the availability of textbooks do not seem to significantly affect efficiency differences (Table 13). According to the analysis, the qualifications of teachers are not significant factors in influencing efficiency scores. This finding corroborates the results of PASEC 2014, suggesting that learning outcomes are not correlated with the educational level of teachers. These results may be considered in a context where teacher qualifications are fairly homogeneous in Burundi (PASEC 2016). However, student-textbook ratios in Kirundi for Grades 1- 2 or in French for Grades 5- 6 are positively correlated to efficiency scores, but it is not significant.

Drivers of Internal Efficiency

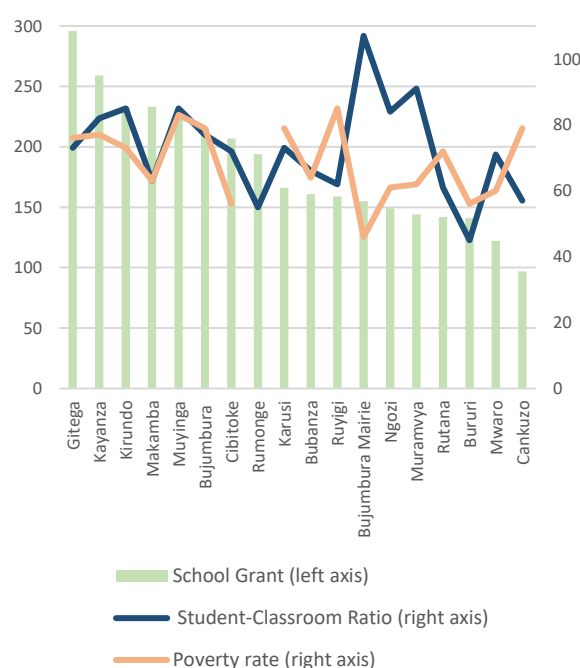
The way in which the primary school transfers system is structured and functions is a significant obstacle to efficient resource management. As such, it has a considerable impact on education outcomes.

The insufficient funding of school grants for basic education constitutes a key challenge. School grants are a critical element of the Government’s fee-free education policy. Public and public ‘*sous-convention*’ primary schools receive government grants to assist with their operational costs. The school grant amount is fixed on a simple “per student” formula. Per student appropriation for primary school is US\$0.30 cents (BIF 500) per trimester. Between 2011 and 2015, the FCE allocated an additional US\$0.60 cents (BIF 800) per-pupil annually. The FCE has primarily financed the purchase of supplies, the reproduction of textbooks and the routine maintenance of school infrastructure, thereby enhancing the school environment and the quality of education. Without the FCE additional “top up” financing, the current funding level per student appropriation is considered low. This is evidenced by reported cases of schools taking recourse to other funding sources, such as credits, borrowing from other schools or engaging in income-generating activities or “*auto-financement*” (selling products from their school gardens at the local market). A MEERS costing study showed that the existing per-student level of school funding would need to be more than doubled to meet actual school needs (FCE 2014). No provisions are foreseen to promote access and retention to schools for students with special needs, namely, orphans and the *Batwa* (the indigenous, pygmy community). Schools grants have also

been unable to address disparities between schools, as reflected in different prices in rural/remote areas versus other areas, school conditions and size. Figure 76 demonstrates that primary school grants are not distributed based on need, as should be determined by the student-classroom ratio and poverty rate.

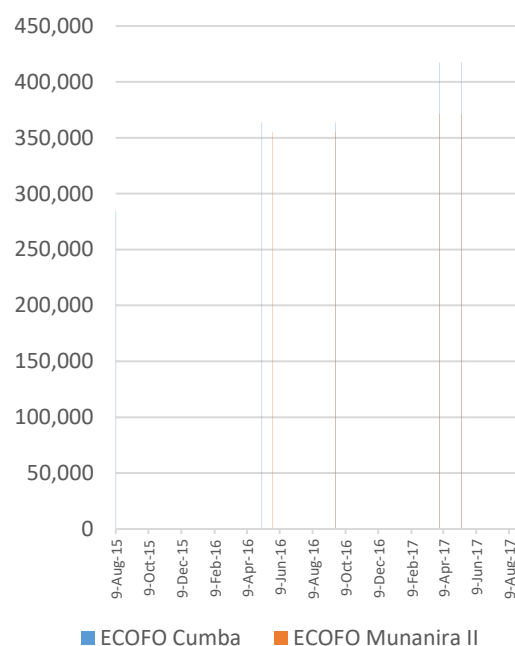
The actual transfers to schools have tended to be irregular, hampering the financial management and day-to-day functioning of schools. Figures 77 illustrates the importance of transfer irregularity. Factors that may explain these delays can be found at the central administration, such as MEERSRS's cumbersome disbursement process (with multiple verifications and approvals required by different MEERSRS departments) or the central government's cash shortfalls. However, there are also issues at the school level, such as the late fulfillment of reporting requirements or the insufficient connections between bank accounts opened at microfinance institutions and the national banking system.

Figure 76: Primary School Grants, Student-Classroom Ratios, and Poverty Rate by Province, 2015-2016



Source: EMIS 2016/17, ECVMB 2013/2014.

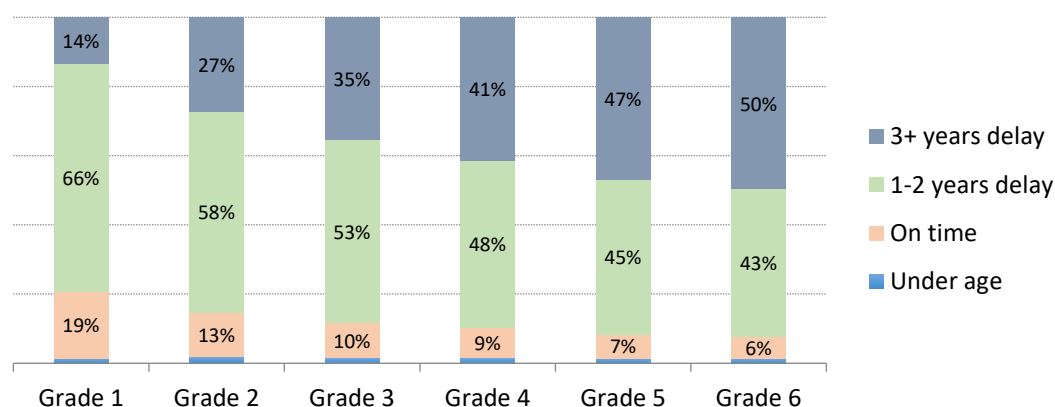
Figure 77: Timing of School Tranche Releases, Cumba and Munanira II Primary Schools, 2015-2017



Source: Cumba and Munanira II Primary Schools.
Note: ECOFO= Ecole Fondamentale or Basic School.

Delayed entry times are still high in Burundi; starting school on time increases the likelihood of completing the education cycle. Based on EMIS 2016/17, only 19 percent of children in Grade 1 have 6-year-old students, the official entry age at Grade 1 (figure 78). More than half of students are delayed by 1-2 years, suggesting that children are still entering school at age 7. Furthermore, the percentage of overage children, especially with a 3 year delay or more, increases throughout the cycle.

Figure 78: Enrollment by Grade, Age Group, and Average Time Frame, 2016/17



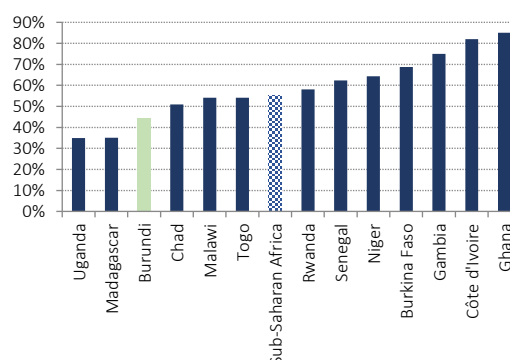
Source: Authors' estimate based on EMIS 2016/17.

The primary school survival rate is very low. Based on current repetition and dropout rates⁷³, a reconstructed cohort survival rate method estimates that only half of children stay in school until Grade 6 (table 14). For every 100 children who enter Grade 1, only 11 percent eventually reach Grade 6 without repetition. Overall, 50 percent of students are estimated to complete Grade 6, but their studies takes an average of 9.1 years. This suggests that the survival rate throughout the cycle remains a key challenge. Furthermore, it impacts negatively on the internal efficiency of the system. Compared to its peers, Burundi is among the lowest three countries with a survival rate of 44 percent (figure 79).

Table 14: Reconstructed Cohort Analysis, 2015-16/2016-17

Survival rate by grade	Percentage
Grade 2	79
Grade 3	68
Grade 4	59
Grade 5	53
Grade 6	42
Reach Grade 6 without repetition	11
Complete Grade 6	50
Average duration of study to reach Grade 6	9.1 years

Figure 79: Survival Rates, Primary School Final Grade in Sub-Saharan Africa and Peer Countries



Source: Authors' estimate based on EMIS 2015-16-2016/17 and UNESCO Statistics 2013-2015.

The school dropout rate is also high,⁷⁴ resulting in substantial costs for the government. Based on 2016 primary public expenditures⁷⁵ and the cohort analysis, the total public cost for one student completing Grade 5, without repetition, is around US\$163 (BIF 274,200), with roughly US\$32 spent per student per year. However, the cost increases to around US\$310 (BIF 523,600) if a student repeats and completes the cycle in more than 9 years.

External Efficiency

Education is highly related to greater prosperity in Burundi. In Burundi, educational levels are low, and fertility levels are high (with an average of 5.9 births per women). In addition, 6 out of 10 people

⁷³See also the Section on Repetition and Dropout Key Performance Indicators.

⁷⁴ See also the Section on Repetition and Dropout Key Performance Indicators.

⁷⁵ This includes public expenditure without investment.

live under the national poverty line. As shown in figure 80, as the educational level of the head of household increases, poverty rates decrease in Burundi. Likewise, estimates from the 2013 household survey (ECVMB) show that average annual wage earnings rise steadily with increasing educational attainment. Simply put, a higher level of education is rewarded with higher lifetime earnings (figure 81).

Figure 80: Household Poverty by Level of Education of Head of Household (%)

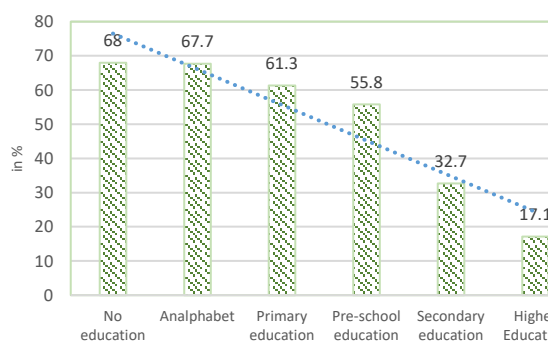
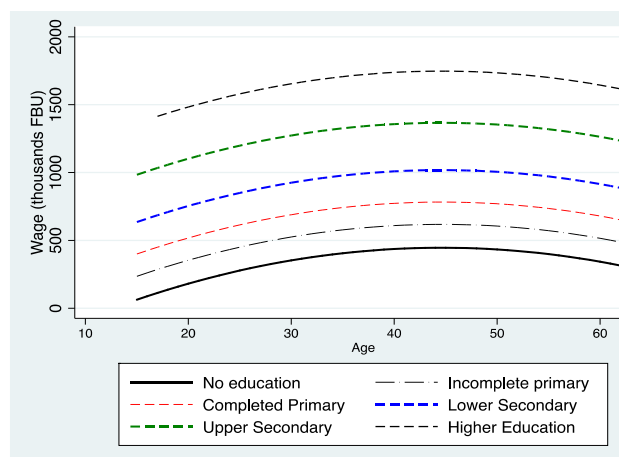


Figure 81: Annual Earning by Education Levels (in BIF)

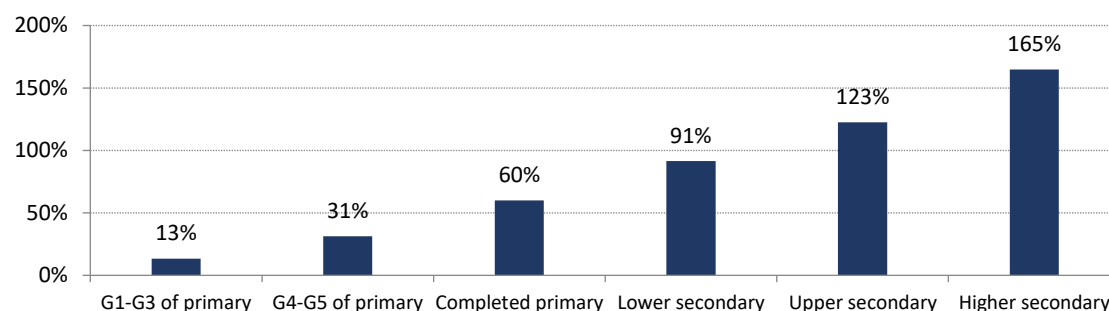


Source: UNICEF, Education Sector Budget Brief, 2017.

Source: Authors' estimate using ECVMB 2013.

Regression analysis has also shown that an additional one year of education results in about 9.8 percent higher wages in Burundi. Figure 82 shows that additional education is associated with higher earnings and household income at all educational levels. Wage workers who have only completed Grade 3 of primary education earn 13 percent more than those with no education. It rises into 31 percent for those who attained Grade 5 of primary education. The level reaches 60 percent for workers who have completed a full cycle of primary education (Grade 6). Clearly, each additional level of education is worth investing in.

Figure 82: Mincerian Regression Result: Earning Increases by Level of Education (Percentage)



Source: Authors' estimate using ECVMB 2013.

VII. Conclusions and Policy Recommendations

7.1 Conclusions

The Government has made tremendous efforts to improve education outcomes, but challenges remain. Despite the country's successful increase in access to primary education from 2005 to 2010/2011 (134 percent), recent gross enrollment rates show a slight decrease (119 in 2015/2016). In relation to comparator countries in Sub-Saharan Africa, as of 2016, Burundi's GRE stands higher than the estimated countries' average of 98 percent. Access tends to be lower in rural areas with higher poverty incidence. Household poverty and the low education levels heads of households are compounded by distance to schools in rural areas. These constitute the main factors hampering access to basic education. There is almost parity between girls and boys in the first years of primary education. Burundi is among the countries with higher grade repetition rates. Repetition rates are high in grades 1 and 2 — respectively 28 and 29 percent — and decrease slightly in grades 3 and 4. On average, comparator countries have a 10 percent repetition rate. Dropout rates are also high, especially in the first two grades of primary education. They are around 10-15 percent and the completion rate is also very low. Of 100 students starting primary education, only 12 will reach grade 6 without repetition. Notwithstanding, Burundi overperformed according to 2014 PASEC results. However, the impressive results are due to several factors, such as the language of instruction and the long-standing education curriculum. More recent comparative studies regarding learning outcomes are not available. Likewise, there is no evaluation regarding the impact of the 2015 events and the subsequent sector underfunding aggravated by the growing school population.

The education sector has been almost entirely funded by the Government (on average 93 percent), whereas the development partners have contributed on average 7 percent over the past 8 years; nonetheless, donor aid has played an important role in funding the sector's investment between 2012 and 2015. In 2016, the government spent 47 percent of public education resources on basic education, which accommodates 83 percent of total school enrollments. In contrast, the breakdown by level of education reveals that the public sector contributed almost one-fifth of public resources to tertiary education — although less than 2 percent of students enrolled in the same year. Overall, public spending on education tends to favor wealthier households, whereas poor households are slightly overrepresented in primary education. Prior to 2015, primary education received on average 75 percent of the total external aid for the sector. However, this drastically declined with the suspension of budget support. The economic classification analysis reveals that the budget does not adequately provide for non-salary costs, which are essential for achieving learning outcomes. The wage bill represents the main spending category, accounting for 79 percent of the total spending on basic education. Non-salary costs include spending on vital sector inputs such as school infrastructure, rehabilitation, school materials and day-to-day running costs. Public investment expenditures in basic education are heavily aid dependent (accounting for 92 percent in 2014), but have declined to their lowest levels in recent years. School grants are inadequate and unpredictable. The lump sum per student is insufficient and does not consider poverty levels, topography and student profiles. Until 2015, the FCE provided an additional 'top up' amount to the government's lump sum, and contributed to school financing.

Despite the government's commitment to basic education, total spending in education is insufficient, and inadequate funding of basic education inputs hampers learning achievements. Burundi's spending in primary education stands on average at 46 percent of government spending and 12 percent of GDP per capita, which is above the Sub-Saharan African average. Almost half of the country's external aid was channeled to basic education in 2014. Spending was drastically reduced from US\$43 in 2010 to US\$18 in 2016 — despite the fact that the school-age population was growing. Within a limited sector budget envelope, teachers cost takes the bulk of the sector's resources even though the number of teachers are not sufficient and teacher salaries are low compared to the

average public servant salaries. Also, teachers are not equally distributed around in the country, as evidenced by the higher STR in the urban and well-served provinces. The disparities in school infrastructure, desks, and textbooks are adversely impact basic education outcomes.

The efficiency analysis indicates that the same service can be provided with 6 percent fewer resources through optimal resource utilization; in other words, inefficiencies are potentially equal to 6 percent of the primary education budget. The average efficiency scores at the national level stand at 94 percent, with variations across provinces and communes. This implies that some schools located in certain provinces and communes have even more potential to optimize their resources for greater efficiency. Budget planning has been shifted from the bottom up to a more centralized model. Spending remains highly centralized and only 60 percent of the basic education procurement has been carried out between 2016 and 2017 because of a lack of funding, insufficient staffing and a lack of procurement expertise. Spending on goods and services has been mostly below appropriations (except in 2015), and the execution of the Government's investment program has been underperforming from 2011-2016. Finally, the education sector does not utilize a human resource management system. Rather, it uses a simple Excel database to track all education staff. It operates manually, with information flowing from the DCEs and DPEs, mostly in paper-based format.

In the short- and medium-term, there is no scope for economic growth to generate significant additional fiscal space to fund education — particularly *without* external aid returning to pre-crisis levels. In the medium-term, economic growth is projected to improve modestly to 1.9 percent in 2018 and 2.4 percent in 2019-20 — although this is still below its pre-crisis levels. Real GDP per capita growth will remain negative under this modest improvement in the growth outlook. Furthermore, substantial macroeconomic, fiscal management and exogenous risks to the outlook remain. These risks include increased foreign exchange pressures, further deterioration in financial sector stability, and exogenous climate shocks. Finally, general elections in 2020 may adversely impact macroeconomic policy, including through risky over-spending.

7.2 Policy Recommendations

The policy recommendations are informed by the findings of the basic education sector analysis, as well as the follow-up consultative workshop with sector expert representatives. The recommendations are grouped into five broad topics: (i) public financial management, (ii) sector financing, (iii) efficiency, (iv) sustainability of the wage bill, and v) data management. A policy recommendation matrix is included at the end for cross-reference.

Public Financial Management

The strengthening of budget planning is key to ensuring that scarce resources are used more efficiently and effectively. Regarding the education budget planning procedures and budget formulation, the Government may wish to reintroduce bottom-up planning. Even if resources are limited, a bottom-up planning process is important in identifying priorities based on local needs. Further, it constitutes an opportunity to align the sectoral planning process with the parallel investment planning carried out at the communal level. The Government may also wish to use the ETP to develop a sectoral MTEF. As such, planned education resources would be linked to the sector budget ceilings and the macroeconomic framework. In addition, the sectoral MTEF can serve as an important planning tool for the Ministry to improve resource allocation by prioritizing resources (instead of spreading them too thin).

Despite the Ministry's laudable efforts to ensure continuous reporting about sector performance in a difficult context, the financial and administrative reporting system needs to be rendered more effective. To enhance the quality, timeliness and use of school physical and financial reporting, it is recommended that reporting templates be introduced. Such templates would contain essential information, and enhance school financial accountability by sharing performance information among the schools. In particular, attention should be paid to better capture the attribution of teachers to basic and secondary education, the flow of students to different education tracks, as well as dropouts. These aspects are particularly important in ensuring better sector planning and the estimation of needed investments.

Capacity strengthening of the MEERS in the use of the IFMIS and procurement is also essential to improving sector performance. Although the MEERS is connected to the IFMIS, the Budget Directorate lacks the training to use the system for monitoring and reporting purposes. Being able to fully operate the IFMIS will allow the Ministry to access real-time financial information, enhance financial control of expenditure management, and inform the Ministry about the implementation performance of education programs and projects. Insufficient procurement capacities have led to poor outcomes, with a loss of 40 percent of public resources. A better equipped and staffed procurement unit will contribute to improved compliance with procurement procedures, reduce procurement costs, and improve the quality of procured goods and services.

Sector Financing

Reallocate resources from secondary education to basic education. In recent years, the distribution of public resources has tended to be biased toward secondary education, as reflected in the nominal increase in expenditures of 40 percent compared to less than 1 percent for basic education. This amounts to a per student spending four times higher than for basic education. This raises equity concerns given that basic education benefits all income groups, whereas student from the lowest quintile decreases as the level of education rises. It also raises questions about the effective use of resources in view of the low-quality schooling in the first 3 cycles of basic education. The demographic pressure of the basic education school cohort constitutes another argument to focus public resources on basic education. To address this, the Government should review secondary education resources to identify those resources that may be better spent on basic education to improve equity and effectiveness.

Mobilize resources for the education sector. Even after exploiting all efficiency gains, there is a need for additional financial resources to increase access to basic education and improve learning outcomes. The achievements of the Government's basic education sector reform have been derailed since the sudden suspension of donor aid for budget support from 2015. The resources required to follow through with the reform are very large, necessitating government and development partners to step up their efforts. Current education spending of 2.5 percent of GDP is below spending levels of 3.7 percent of GDP in 2010, which were managed in a context of lower enrollments and fewer reform needs. Thus, in the short term, given the tight fiscal space, development partners should mobilize external resources either through sector-wide budget support or through projects and programs to ensure that reform gains are not lost — and that resources are aligned with the ETP's 2018-2020 prioritized measures.⁷⁶ In the medium to long term, if fiscal space opens, Burundi could consider gradually increasing its public spending on basic education to a level sufficient to provide for better quality education.

⁷⁶ Some additional funding has been mobilized so far from the World Bank to finance the Early Grade learning Project and the GPE to support reforms in the basic education.

With the closure of the FCE, it will be important to identify a similar funding instrument capable of attracting and harmonizing donor aid; it should also be managed off-budget. The FCE has been successful as a budget funding modality. Indeed, it contributed to aid harmonization, enhanced sector planning performance, and the effective use of national procedures in support of the Government's education reforms. Following the closure of the FCE and the suspension of budget support since 2015, the Government needs to identify jointly with its development partners an alternative funding modality to mobilize external resources, while also accommodating the development partners' preferences for off-budget management. One option could be to establish a multi-donor trust fund to be managed by one donor. This would allow donors to channel aid to several key areas, such as the construction of schools (in particular, for the 1-3rd cycle of basic education), school grants, school learning materials and supplies, infrastructure maintenance, a sector M&E system, and the strengthening of deconcentrated units (that is, the DPE and DCE). Such an arrangement would also require the revitalization of sustained interaction and dialogue between the Government and development partners through regular meetings and annual sector reviews.

Efficiency

The provision of a minimum of resources should be ensured at the school level to improve student learning. Specifically, this would include funding for infrastructure (electricity, water, sanitation), and learning resources (textbooks). As such, it will be critical to ensure adequate, predictable and flexible funding to schools. The lump sum per student should be revised and tailored to accommodate differences in poverty levels, population density and topography. The Treasury management's policy and procedures should be established, perhaps through a special Treasury Committee, to ensure that during cash shortfalls, regular funding to education will continue to reach schools. The school's financial management manual needs to be revised. Also, an 'operations and maintenance' spending category should be included for the purchase of electricity and water, as well as small infrastructure works, such as the replacement of classroom windows. Finally, the availability of teaching materials should be improved and monitored. The analysis suggests that textbook availability is still a concern. To ensure an adequate provision of textbooks, it is essential to: (i) improve the central storage and security of the storage premises; (ii) consider DCE and DPE pre-orders; (iii) improve the procurement of textbooks to ensure that they reach the school before the beginning of the school year; and (iv) annually monitor their actual availability at the school level. In this regard, the school reporting could be supplemented by a precise inventory of the relevant textbooks, including those that are in sufficiently good shape and those that are consistent with the curriculum in key subjects for all grades.

Repetitions, drop-outs and delayed entries are also important sources of internal efficiency. To address these issues, the Government should seek to: (i) organize parental awareness-raising campaigns about the importance of schooling; (ii) enforce the compulsory enrollment age; and (iii) introduce automatic promotions, at least within the primary education grades (that is, the 1 to 3 grades).

Early Childhood Development (ECD) programs should be encouraged, and the cost could be offset by savings from declining grade repetition. Early learning increases readiness for primary school. It also contributes to reducing the drivers of internal inefficiency such as dropouts, repetitions and delayed entries. As the analysis shows, the cost for one completer without repetition is around US\$163 (BIF 274,200), whereas it is about double for one completer with repetition throughout the cycle. There is also significant research suggesting that longer productive lives in the labor market are highly impacted by the services available to children in their early years. The sector should improve access to early childhood care and education by: (i) making such programs more widely available and accessible, and improving school-readiness; (ii) supporting family education and policy formulation by encouraging the participation and promotion of families and communities in ECD education programs;

(iii) improving the content of early childhood programs, in particular their design and quality; and (iv) redirecting and strengthening early childhood training programs.

Spending should be progressively reoriented toward inputs that have a direct impact on education outcomes. According to the report's findings, there is a deficit of almost 22,211 classrooms in basic education in 2018. In addition, the share of double shift schools is considerable (35 percent in 2014/15). The DEA analysis clearly shows that the number of hours spent in class, particularly for Grades 7-9, contributes to efficiency. To reduce the double shifts in schools and improve learning outcomes, the construction of classrooms should be a sector priority. The commune capital grant funding (*Fond National d'Investissement Communal, FONIC*) should also be partially earmarked for the provision of primary schools or additional classrooms. Finally, considering the positive correlation between desks, textbooks and efficiency, the provision of desks and textbooks should also be prioritized.

In order to eliminate inefficiencies in the education sector, it will be crucial to reduce disparities in the deployment of teachers. As evidenced by the analysis, the student teacher ratio (STR) varies across provinces, with the urban and better-served provinces receiving more teachers — far above the optimal level of 50:1. Since 2016, some policy measures, such as teacher redeployment, have been introduced in an attempt to address the staffing imbalances. The key driver of education spending is teacher salaries, which account for more than 79 percent of the basic education budget. In this context, as the wage bill analysis show, allowances account for 39 percent of teacher salaries. There are more than 10 different allowances that vary in amount and application. To correct the geographical imbalance of teachers, the following short and long term measures are proposed: (i) restructure and rationalize the allowances to fund a financing scheme for teachers working in remote areas (i.e. introducing a distance allowance, other pay or material benefits,...), (ii) finance a scheme that supports contract teachers willing to work where schools have a teacher shortage (i.e. opportunity for contract teachers to obtain quicker a permanent teaching position,...) ; c) reviewing effectiveness of existing strategies aimed at addressing teacher shortages for wider use and (iv) decentralize the responsibility and budget for the recruitment and distribution of teachers to the inspection level to ensure great effectiveness and accountability.

Given the constrained fiscal situation in Burundi, the government needs to explore more cost-effective ways of achieving efficiency gains. The DEA analysis and the Tobit regression show that the learning environment is key to ensuring good learning outcomes. Currently, school performance varies greatly between provinces and communes. To this end, the government should facilitate the sharing of best practices among schools. For instance, a rapid assessment in selected schools indicated that 'study clubs' and 'compendiums collecting 9 grade exams of preceding years', were valuable instruments in improving education outcomes. Some inexpensive child-friendly school practices could also be easily introduced into schools, such as the disposition of the classroom desks in a circle, allowing for improved monitoring and supervision of students, as well as the identification of those student most in need.

Sustainability of the Wage Bill

Strengthening human resource management is a key policy reform necessary to improving sector sustainability and generating fiscal space for non-wage spending. As in other ministries, the MEERSR uses a simple Excel dataset to track all education staff. The dataset is managed manually and updated based on information provided by the district and provincial offices. It will be essential to finalize and operationalize a human resource management and information system (HRMIS) capable of recording comprehensive and accurate data about education employees (teacher and non-teachers). The Ministry is already working on the definition of a HR module and its inclusion in the existing StatEdu with support from UNICEF. The establishment of the system will be an opportunity to complete the

staff records with any missing and vital information, such as date of birth and age. According to the payroll data received, one staff member with the same name/surname but different employee ID receives multiple salaries even within the same department. Finally, as an interface with the HRMIS, the MCSWL's dataset and payroll system (*'la paye'*) should be established to ensure reconciliation between the staff and the payroll exercise.

Improve the quantity and quality of data available for fiscal analysis and budget formulation through the adoption of a wage bill forecasting model. As the wage bill represents the highest share of the education budget, it will be advisable to integrate wage bill forecasting and staffing data into the process of budget formation and execution, as well as the monitoring of public sector employment and compensation.

Restructure the teacher salary scales and introduce a performance-based, pay/evaluation mechanism to increase sustainability, while also making the teachers' jobs more competitive and appealing. As the analysis shows, the salary level is mainly defined by the teacher's academic qualifications. A revision of the salary scale determinants that factors in other elements, as for instance the job profile and associated responsibilities, should be pursued. The career progression policy should also be revised. For this purpose, the Ministry is considering introducing a performance-based, pay/evaluation mechanism with a revised pay policy, including the allowances system. To this end, it will be advisable to introduce such an instrument on a pilot basis before launching it across the sector.

Data Management

A well-functioning Education Management Information System (EMIS) can support the creation of sound policies, as well as more effective planning and managing of educational resources. The current EMIS is plagued by a number of shortfalls related to the coverage, timeliness, availability and reliability of data, which undermines evidence-based decision-making, policy analysis and planning. Creating a sustainable and efficient EMIS is a challenge and will require investment from the government and its development partners. Greater coordination among central and deconcentrated units will be necessary to resolve discrepancies and enhance data quality. The use of available electronic systems would also greatly reduce errors. As a first step, an in-depth assessment of EMIS data content, as well as the process of data collection and management, would be highly relevant in the effort to improve data quality.

In a limited resource setting, it becomes even more important to capture and track all sector resources for strategic planning purposes. With the closure of the FCE, most of the remaining external aid is managed off budget. To enhance the predictability and traceability of external financing, these resources need to be captured and tracked by putting in place a mechanism that will be administered by the Ministry with the support of development partners.

Policy Matrix

The policy recommendation matrix summarizes the key recommendations. The matrix is organized according to high level and system management recommendations. The matrix also highlights "quick wins" that may constitute a priority in the implementation by the MEFTP.

- a. **Quick wins (QW)** are measures with an immediate impact. They are low cost and implementation is relatively easy and immediate.
- b. **Time** includes short- (12 month), medium- (1-2 years) and long-term (2 years and more) measures.

Table 15 : Policy Matrix

Reform	Actions	Quick Wins	Time	Responsible Agency
HIGH LEVEL RECOMMENDATIONS				
Mobilize resources for the education sector	- Sector-wide budget support or projects and programs - If fiscal space opens, gradually increase public spending on basic education to a level sufficient to provide quality education - Review secondary education resources to identify resources that could be better spent on basic education - Explore creating a multi-donor trust fund to be managed by one donor - Revitalize sustained interaction and dialogue between the Government and development partners through regular meetings and annual sector reviews	QW QW	Short Long Short Short	MFPDE, MEERSR Development partners
Improve sector efficiency at the margin	- Establish a Treasury management policy and procedures - Earmark FONIC funding for the provision of primary schools or classrooms	QW	Medium Short	MFPDE, MIDC MEERSR
Strengthen human resource management	- Improve the quantity and quality of data available for fiscal analysis and budget formulation - Establish a dataset and the payroll system ‘la paye’ at the Ministry of Public Service to ensure reconciliation between the staff and the payroll exercise - Restructure the teachers’ salary scale and introduce the performance-based, pay/evaluation mechanism		Medium Medium Medium	MEERSR, MCSWL
Encourage ECD programs	- Make such programs are more widely available and accessible, and improve school-readiness - Support family education and policy formulation by encouraging the participation of families and communities - Improve the content of early childhood programs, particularly their design and quality - Redirect and strengthen early childhood training programs		Medium Medium Short Medium	MFPDE, MEERSR,
Capture external sector resources	Establish a mechanism administered by the Ministry with the support of the development partners to track all off-budget external resources		Medium	MFPDE, MEERSR, Development partners
SYSTEM MANAGEMENT RECOMMENDATIONS				
Strengthen budget planning	- Reintroduce bottom-up planning, - Use the ETP to develop a sectoral MTEF	QW	Short Short	MEERSR
Financial and administrative reporting system	- Review administrative and financial reports and introduce reporting templates - Share performance information among schools	QW QW	Short Short	MEERSR
Strengthen capacity	Training of the Budget Directorate on IFMIS and procurement		Medium	MFPDE, MEERSR
Improve efficiency at the margin	- Ensure minimum resources at the school level (revise the school’s financial management manual, revise lump sums for students,...) - Address repetitions, drop- outs and delayed entries (i.e. organize parental awareness-raising campaigns - Facilitate the sharing of best practices among schools - Restructure and rationalize the allowances and introduce a distance allowance for teachers working in remote areas - Prioritize the construction of classrooms	QW QW	Short/ Medium Short Short Medium Medium	MEERSR
Establish a well-	- Conduct an in-depth assessment of the EMIS - Improve coordination among central and deconcentrated units to resolve discrepancies and enhance data quality		Medium Medium	MEERSR

functioning EMIS	• Use available electronic systems for data collection and transfer		Medium	
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Annex 1: Regression Analysis for Out-of-School Children

Regression Analysis for Out-of-School Children aged 7-16, 2013/14

<i>Logit model</i>	Have never attended school (7-12 years)		School dropout (13-16 years)	
	Urban	Rural	Urban	Rural
Age	-0.361*** (0.08)	-0.545*** (0.04)	0.356*** (0.11)	0.464*** (0.06)
Girl	-0.197 (0.25)	0.018 (0.11)	0.098 (0.22)	-0.166 (0.13)
Has birth certificate	-1.074*** (0.27)	-0.475*** (0.12)	-0.331 (0.24)	-0.002 (0.14)
Head-of-household child	-2.618*** (0.57)	-3.050*** (0.46)	-2.815*** (0.30)	-1.288*** (0.33)
Child is a relative of the head-of-household	-3.188*** (0.72)	-2.332*** (0.47)	-2.653*** (0.34)	-1.513*** (0.37)
Head-of-household is a man	-0.259 (0.33)	0.338** (0.16)	0.163 (0.28)	-0.387** (0.16)
<i>Head-of-household education*</i>				
Primary level	-0.723** (0.29)	-0.395*** (0.12)	0.238 (0.30)	0.035 (0.14)
Secondary level	-1.309** (0.52)	-2.654** (1.04)	0.250 (0.37)	-0.226 (0.40)
Higher education	-0.628 (0.82)	0.000 (.)	0.444 (0.46)	0.536 (1.20)
<i>Household wealth quintile*</i>				
Poor	-0.796** (0.40)	-0.356** (0.14)	-0.835 (0.52)	-0.694*** (0.18)
Middle	-0.903** (0.39)	-0.575*** (0.16)	-0.763* (0.44)	-0.982*** (0.19)
Rich	-1.257*** (0.39)	-0.688*** (0.18)	-1.368*** (0.45)	-0.708*** (0.20)
Richest quintile	-1.364*** (0.43)	-1.091*** (0.26)	-1.255*** (0.41)	-0.904*** (0.24)
Number of 0-5 years	0.156 (0.14)	0.027 (0.07)	0.079 (0.13)	-0.109 (0.08)
Number of 6-14 years	-0.001 (0.10)	0.072 (0.06)	-0.144 (0.09)	-0.124** (0.06)
Number of 15-64 years	-0.114 (0.10)	-0.104* (0.06)	-0.211** (0.09)	-0.080 (0.06)
Number of > 65 years	0.098 (0.48)	-0.881*** (0.26)	-0.061 (0.37)	-0.249 (0.22)
Average time to primary schools	0.016 (0.01)	0.012*** (0.00)		
Average time to secondary schools			0.006 (0.01)	0.002 (0.00)
Attended preschool			-0.391 (0.42)	-0.678 (0.49)
Constant	5.577*** (1.16)	5.513*** (0.66)	-3.591** (1.71)	-6.133*** (1.07)
Observations	1635	4088	1085	2182

Source: Based on Household Survey ESVMB 2013.

Note: Standard errors in parentheses: * p<0.1, ** p<0.05, *** p<0.01

*Base: Head-of-household has no education – Poorest quintile.