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PUBLIC EXPENDITURE REVIEW

Revisiting the Efficiency of Public Spending to Reduce Debt and Improve Education and Health Outcomes

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Abbreviations and Acronyms

CERMI	Centro de Energias Renovaveis et Manutencao Industrial
CIT	Corporate Income Tax
CMNND	Communicable, Maternal, Neonatal, and Nutritional Disease
CPIA	Country Policy and Institutional Assessment
CPLP	Community of Portuguese Speaking Countries
DGA	Direcção-Geral da Alfândega (Directorate General for Customs)
DGASS	Direção Geral da Administração da Saúde (Directorate General for Health Administration)
DRE	Regional Directorate of Education
DRS	Direção Regional de Saude (Regional Health Directorates)
DSA	Debt Sustainability Analysis
ESP	Education Sector Plan
FDI	Foreign Direct Investment
FPEF	Fundo de Promocao do Emprego e da Formacao
GDP	Gross Domestic Product
GER	Gross Enrolment rate
IMF	International Monetary Fund
INAFOR	Institute for Technical and Vocational Training
INDE	National Institute for the Development of Education
INEP	National Institute of Studies and Scientific Research
IUP	Property Tx
IUR	Impostos Unico sobre os Rendimentos
LAN	Local Area Network
LIC	Low Income Country
MDG	Millennium Development Goal
MEF	Ministry of Economy and Finance
MICS	Multi-Indicator Cluster Survey
MMR	Maternal Mortality Ratio
MOE	Ministry of Education
MOH	Ministry of Health
MPA	Ministry of Public Administration
MSME	Medium, Small and Micro Enterprise
NBE	State Budgetary Nomenclature
NCD	Non-Communicable Diseases
NER	Net Enrollment Rate
NMR	Neonatal Mortality Rate
OOP	Out of Pocket
PALOP	Portuguese-speaking African countries
PBM	Performance-Based Management
PEFA	Public Expenditure and Financial Accountability
PER	Public Expenditure Review
PFM	Public Financial Management
PHC	Primary Health Care
PIP	Public Investment Program
PIT	Personal Income Tax
PNDS	Plano Nacional do Desenvolvimento Sanitário (National Plan for Health Improvement)
PPP	Purchasing Power Parity
ppts	Percentage Points
SOE	State-Owned Enterprise
SSA	Sub-Saharan Africa
TdC	Tribunal de Contas (Court of Auditors)
TE	Tax Expenditure
TFP	Total Factor Productivity
TVET	Technical and Vocational Education and Training
U5MR	Under-Five Mortality Rate
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WFP	World Food Program
VAT	Value-added Tax

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Executive Summary

This Public Expenditure Review (PER) was prepared by the World Bank at the request of the Ministry of Finance of Cabo Verde. With a debt-to-GDP ratio of 126 percent in 2017, Cabo Verde is the most indebted country in Sub-Saharan Africa. The country is also at a high of risk of external debt distress. As part of fiscal consolidation efforts to reduce debt, this PER identifies measures to boost fiscal revenues and improve the efficiency of public spending with emphasis on health and education. The report recommends tax policy measures to stem revenue loss from ineffective tax expenditures while strengthening revenue administration and tax compliance. There is space to reduce spending inefficiencies on goods and services, wages and salaries yielding potential fiscal savings. Investment in human capital is prioritized in Cabo Verde but there is scope to improve efficiency and outcomes. In education, reducing repetition rates and addressing human resources issues are key to avoiding waste and improving outcomes. In health, the report recommends measures to improve the allocation of resources to health units. If implemented, these measures could result in combined fiscal savings of at least 2.5 percent of GDP. Finally, continued rationalization of central government fiscal support to State-Owned Enterprises (SOEs) is required to support a gradual reduction of the debt-to-GDP ratio over the medium term.

1. **The objective of this Public Expenditure Review (PER) is to support the ongoing process of fiscal consolidation with a view to reducing the public debt burden and improve human capital outcomes.** This is the first PER undertaken by the Bank for Cabo Verde since 2009. As such, the goal is to establish a credible fiscal policy strategy that would help to keep fiscal policy sustainable including reforms to increase revenues and adjusting spending. World Bank PERs generally evaluate multiple dimensions of public spending including the effectiveness, equity and efficiency of public spending as well as fiscal sustainability. This PER focuses on efforts to improve the efficiency of public spending focusing on health and education as part of a fiscal strategy to reduce debt and improve human capital outcomes. Equity issues are also discussed in the health and education chapters.

2. **Cabo Verde's performance is compared with other relevant countries using an international benchmarking exercise.** For the PER, key indicators on public spending and outcomes for Cabo Verde are compared with structural (Bhutan, Samoa and Sao Tome and Principe) and aspirational peers (Mauritius, Seychelles, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines). Where possible, comparisons with various country groupings including small island states (SIDS), Sub-Saharan Africa (SSA) and lower middle-income countries (LMIC) are made (see Annex 1 for details)[1]. Cabo Verde is a small archipelago with a population of 540, 000 located off the coast of West Africa.

3. **The report includes five chapters.** Chapter 1 discusses the key drivers of fiscal balances and public debt in Cabo Verde and explores different options to put debt on a downward trajectory. Chapters 2 and 3 analyzes in detail the respective performances of fiscal revenues and spending over 2010 to 2017. Chapters 4 and 5 reviews public spending in the health and education sectors with emphasis on efficiency. Equity issues as also covered in Chapters 4 and 5.

Chapter 1: Debt Sustainability Analysis

[1] For cross-country comparisons, this report uses Government Financial Statistics (GFS) figures which are in some cases not fully up-to date but rely on a standard methodology. Other important sources include World Bank Group (WBG), International Monetary Fund (IMF), Eastern Caribbean Central Bank (ECCB) and Government of Cabo Verde.

4. **Public debt in Cabo Verde increased rapidly since the global economic crisis of 2008[2].** Between 2007 and 2017, public debt doubled from 62 to 126 percent of GDP, as public borrowing accelerated to stimulate the economy and to address infrastructure deficits. New foreign loans funding investment projects fueled the increase in government liabilities with external public debt rising from 37 percent to 93 percent of GDP. Domestic public debt rose from 25 percent to 33 percent of GDP over the same period. Notably, this is highest level of debt among peer countries and creates substantial vulnerabilities. While the government's financial obligations are sizable and should certainly be reduced going forward, their management benefit from continued access to official creditors and soft financing terms. The public debt portfolio is moderately exposed to currency risk, and to a lesser extent to rollover and interest rate risk.

5. **Fiscal deficits and support to SOEs (below-the-line) largely explain the evolution of the public debt-to-GDP ratio.** For the past decade, the primary deficit constituted the single most important factor driving the dynamics of the debt ratio and contributed 45 percent of GDP to the overall increase in debt. Support to SOEs, mainly for energy, transportation, and social housing, through onlending and capitalization explains 24 percent of GDP. The performance of key macroeconomic variables had a marginal impact on the debt ratio with a contribution of 2.5 percent of GDP. Movements in the exchange rate was notably pronounced in 2014-15, contributing 12 percent of GDP of the build-up in debt. Recent efforts at fiscal consolidation and a pickup in economic activities since 2016 has led to a deceleration the growth in public debt in 2016-2017. In this context, below the line support to SOEs has overtaken the primary balance has the key driver of debt.

6. **The macro-fiscal medium-term outlook remains fragile under simulations of different policy programs although deeper fiscal consolidation and SOEs reform reduces debt.** Three options are considered: (i) a *Business-As-Usual (BAU) Scenario* predicated upon a conservative recovery outlook and the continuation of the government's policies adopted since 2016; (ii) a *Fiscal Adjustment Scenario* which introduces potential savings of 2.5 percent of GDP identified in this PER; and (iii) a *Reform Scenario* including SOE and structural reforms on top of budget consolidation. Under BAU conditions the public debt will remain above 129 percent of GDP until 2020 and then decline to 125 percent of GDP by 2023. Capitalizing on fiscal saving and rationalizing support to SOEs achieves the most significant reduction in debt. In this context, the debt-to-GDP ratio decreases to 103 percent by 2023.

Chapter 2: Review of Revenues Performance

7. **Recent administrative and tax policy reforms have helped to boost revenues to pre-2008 levels.** After falling to its lowest levels in 2014, total revenues have since climbed by 5.7 percentage points to 28.6 percent of GDP in 2017. Tax revenues which expanded by 3.2 percentage points to 20.8 percent of GDP accounted for the bulk of this increase. This has been attributed to the introduction of several measures to strengthen tax administration as well as the harmonization of value-added tax (VAT) rates. New taxes, such as the tourism and ecological taxes were also introduced. Donations to assist with rehabilitation work following the 2014 volcanic eruption on Fogo Island also interrupted the trend decline in grants.

[2] Public debt refers to (i) the foreign and domestic liabilities owed by the Central Government, (ii) the external debt contracted by the Central Government on behalf of non-financial SOEs (i.e., on-lending operations), and (iii) the publicly-guaranteed debt owed by Local Governments and SOEs for which data are available.

8. **Despite recent progress, there is scope to further increase in tax revenue.** Cabo Verde's tax potential is as high as 22 percent of GDP providing opportunity for additional growth in revenues. Results from a stochastic frontier analysis also suggests that the country could collect as much as 3 percent of GDP more in taxes should they attempt to emulate the best performing peer. Reforms to tax policy and administration could generate additional revenues of 1.7 percent of GDP. This would require revising current corporate income tax (CIT) expenditures, reforming the microenterprise tax regime (REMPE), broadening the value-added tax base, streamlining tax administration to promote compliance, and unlocking the potential in property and environmental taxes.

9. **Reforms to corporate income and property tax will be most productive accounting almost 60 percent of the potential additional revenues.** Within the corporate income tax reforms should include redesigning the investment tax credit system, suppressing the international financial institution (IFI) regime, and limiting corporate income tax holidays. Rethinking ID exemptions for investment projects, eliminating little-used instruments such as the internationalization and jobs tax credit programs, restricting the Conventions on Access to Public-Domain Land, and refocusing new conventions on non-tax and non-customs incentives are also very good areas for reform. For property taxes, a comprehensive overhaul of the system to aligned taxation with the market value of properties is required. In the short term, effective taxation could be enhanced by reducing exemptions such as those related to the acquisition of properties with tourist utility status, and either moving away totally from self-assessment of property or doing more to verify self-assessments.

Chapter 3: Review of Expenditure Performance

10. **Small states, including Cabo Verde, tend to have relatively bigger governments, as measured by both average total public spending and across most expenditure categories.** In 2015, current expenditures in small states averaged about 19 percent of GDP versus 15.4 percent of GDP in other economies. In providing public services, small states have higher per capita government costs because of the indivisibility of public goods and diseconomies of scale as broad public services must be provided no matter how small the population.

11. **Spending in Cabo Verde is predominantly recurrent and is higher than structural peers**. In the last decade, current public spending approximated 25 percent of GDP, 2 percentage points above the average for structural peers and in line with the average for aspirational. Staff compensation is among the main factors which have kept spending high. The share of capital spending in total spending declined to its lowest levels, close to 3 percent of GDP in 2016. In fact, capital spending has been reduced by more than 7 percent of GDP reflecting the decision of the government to rationalize spending given the rapid build-up in debt. Unfortunately, current spending did not contribute much to consolidation efforts and is still relatively high in relation to GDP and total spending. By functional classification, spending on public services, education and social protection standout relative to peers.

12. **Resizing spending on oversized categories relative to peers could yield some fiscal savings.** Spending on goods and services and the wage bill are oversized relative to peers. This is particularly true for the education sector which is covered in Chapter 4. Rationalizing spending employment and wages by at least 1 percent, targeting select sectors including education, could produce savings of 0.16 percent of GDP. There is potential to reduce expenditures on medications, rents and maintenance as well as professional activities. At the minimum, a reduction of 1 percent could yield 0.04 percent of GDP in savings in spending on goods and services

Chapter 4: Education Spending

13. **Cabo Verde has recently developed an Education Sector Plan 2017-2021 that focuses on access to education, quality and efficiency.** Important progress on access to basic and secondary education has been made but repetition rates and performance on learning outcomes lag peers. the system is beset by exceptionally high dropout and repetition rates. At the secondary level, it takes on average 9.5 years to complete the 6-year program of study. Normalizing repetition rates could save the government up to 0.6 percent of GDP per year.

14. **The sector's financing is within the international best practice range of 4-6 percent of GDP but is mostly geared towards salaries**. Public spending on the education sector amounted to 21 percent on the budget in 2016 up from 17 percent in 2012. However, over 80 percent of total spending on education is consumed by wages while critical education inputs and investments are underfunded and underspent. This is significantly above structural and aspirational peers. Weak human resource management is the key driver of inefficiencies in the sector while equity issues increase with the level of education.

15. **Cabo Verde should maintain its current level of spending on education at about 6 percent of GDP while reallocating resources from wages to underfunded sub-sectors.** The ongoing education sector reform which includes the expansion of compulsory education to grade 8 provides an opportunity to put more focus and resources on secondary education. The declining demographic trend should provide space for the government to focus more on improving the quality of education services and student learning. To improve education performance and achieve better value, the government may want to: (i) allocate more resources to the last cycle of basic education and TVET, (ii) improve its human resources policies, (iii) increase investment and operational budgets of schools to enhance quality of education services and school learning environment, (iv) improve efficiency through enhancing decentralization management and allocation of resources, and (v) provide additional incentives to tertiary education in order to be more responsive to labor market needs.

Chapter 5: Health Spending

16. **Cabo Verde has recorded significant improvements in several key health indicators in recent years, outperforming its structural peers but lagging aspirational peers.** Cabo Verde's human development index valve of 0.654 puts the country in the medium human development category, just below the Arab States. The health index (0.815) is the main contributor to the HDI score and reflects a key accomplishment in the country's high life expectancy (73 years), which is the second highest in Africa, after Mauritius. Nevertheless, communicable and non-communicable diseases remain a challenge. The country is also vulnerable to vector-borne diseases. Spending has also not kept up with population growth as public spending on health is low in per capita terms. Government spending on health heavily favors wages and goods and services, leaving little resources to invest in the sector's infrastructure. Moreover, the sector faces weaknesses in budget execution, capacity and distribution of health workforce.

17. **There is significant variation across health districts (DS) in terms of efficiency, pointing to significant scope for improvements.** There is scope to increase efficiency of DSs by 45 percent. Out of 17 DSs, only 2 are 100 percent efficient: São Vicente and Pául. To improve the efficiency and effectiveness of resource utilization and eliminate inefficiencies in the health sector, it is crucial for health districts to make decisions based on outcomes produced and inputs used. One way to do this could be through a performance-based contracting mechanism that would allocate resources to health delegations against measurable results such as increase of different vaccinations coverage, reduction of tuberculosis incidence or other diseases.

18. **Addressing non-communicable diseases is a priority for Cabo Verde.** The country is facing an epidemiological transition, with a burden of disease now mostly related to non-communicable diseases which account for 69 percent of all deaths in the country (cardiovascular diseases, cancers, chronic respiratory diseases, diabetes are the main ones). This transition requires two main policy changes. First, there is need for increasing the investment in prevention and advocacy for healthy behaviors. Second, there is need for improving the health service delivery system towards better capacity for diagnosis and treatment of chronic diseases, strengthening primary care functions and integration of care across the different levels and providers within the health system.

19. **Strengthening human resource management is critical.** There is a high degree of concentration of healthcare providers in Sao Vincente and Santiago with remote islands and areas severely underserved. Given the shortcomings of Cabo Verde's human resources in the health sector, it will be important to: (i) recruit skilled health workers (physicians, doctors and nurses) to ensure that health care facilities meet their nationally recommended staffing norms; (ii) promote equitable distribution of health professionals across health districts, smaller and rural areas.

Conclusion: Estimated Fiscal Savings

20. **The total potential savings identified in this PER amounts to 2.5 percent of GDP.** Estimates of fiscal savings are tied mostly to the performance of Cabo Verde relative to peers and, in the case of revenues, the assessment of tax potential. In other cases, such as the personal income tax (PIT), the savings are derived from an assessment the PIT gap over the past 3 years using the effective and actual rates. The work on tax expenditure reflect detailed analysis of redundancies that could be easily eliminated across select tax types. Fiscal savings from education reflect the difference between actual and notional spending if repetition rates were controlled. In this regard, streamlining tax expenditures and PIT account for the bulk of the savings (approximately 1.7 percent of GDP). Expenditure rationalization could yield 0.2 percent of GDP through efforts to curtail spending on goods and services and salaries. Education sector spending is highly inefficient and could contribute 0.6 percent of GDP to fiscal savings through tackling the high repetition rates (Table ES1). If the recommended measures are fully implemented, the resulting fiscal savings would help the country generate a fiscal surplus of 0.5 percent of GDP by 2023. The pace of public debt reduction slightly accelerates, and the debt-to-GDP ratio decreases to 103 percent by 2023.

Table ES 1: Summary of Policy Context, Policy Actions and Potential Savings

Policy Context	Policy Action	Implementing Department	Potential Savings (as % of GDP)
Revenues			
Improve the system of tax expenditure across all tax types. Significant revenue gains and savings can be obtained through a more streamline and transparent process.	VAT- Reduction of 10% of VAT tax incentives	Ministry of Finance - Tax Administration and Customs	0.30
	CIT - Revise the legislative framework for MSMEs to bolster CIT. Redesign investment tax credit, Suppress IFI regime, Stop CIT holidays, Reform ID exemptions for investment project, Restrict Conventions on Access to Public Domain Land, Refocus new conventions on non-tax and non-customs expenditures.	Tax Administration	0.50
	Property tax -Reduce exemptions for acquisition of property with tourist utility status, monitor self-assessment system to avoid under-estimation.	Ministry of Finance - Tax Administration	0.50
	PIT- Assessing the generosity of some provisions and consolidate exceptions	Ministry of Finance - Tax Administration	0.40
Expenditure			
Reduce inefficiencies in spending on goods and services (-1%)	Reduction in expenditures on professional activities.	Ministry of Finance - Budget	0.02
	Reduction in expenditures on medications	Ministry of Finance and Ministry of Health -	0.01
	Reduction in expenditures on rents and maintenance	Ministry of Finance	0.01
Rationalize spending on salaries and remove unwanted staff positions (-1%)	Reduction of wages in public services	Ministry of Finance – Budget	0.06
	Reduction in employment in education	Ministry of Education	0.05
	Reduction of wages in education	Ministry of Education	0.05
Education			
Reduce inefficiencies and deploy measures to reduce staff cost	The government should move quickly to address the high repetition rates which is costing 0.6 percent of GDP per year.	Ministry of Education	0.60
Total			**2.50**

Chapter 1: Debt Sustainability Analysis[1]

***Summary**: Cabo Verde has experienced a rapid build-up in public debt over the past decade. Persistent fiscal imbalances and support to loss-making SOEs led to a significant public debt burden, above aspirational and structural peers. Recent efforts to mobilize new sources of revenue and rationalize spending helped to reduce fiscal imbalances and stabilize the debt-to-GDP ratio at around 126 percent of GDP in 2017. In the absence of additional fiscal and structural reforms, the outlook is for the stock of public debt to rise to 130 percent of GDP before declining slowly over the medium-term. Pursuing a decisive budget consolidation strategy—including adopting the 2.5 percent of GDP in potential savings identified in this PER—and SOE restructuring, can help narrow fiscal imbalances. The public debt is then expected to remain above 125 percent of GDP until 2020 and decrease to nearly 103 percent of GDP by 2023. Vulnerabilities and risks, however, may still undermine efforts to restore debt sustainability which could keep gross borrowing requirements close to double digit and public above 110 percent of GDP by 2023.*

The chapter is organized as follows. Section 1.1 discusses the historical drivers of public debt in Cabo Verde, while benchmarking its performance against relevant peers. Section 1.2 presents recent policy measures adopted by the new administration to contain fiscal imbalances. Section 1.3 formulates medium-term fiscal outlook under current policies, as well as under alternative policies and reforms. Section 1.4 discusses macroeconomic risks, while section 1.5 offers policy recommendations to reduce debt and fiscal risks from SOEs.

1.1 Background: Drivers of Debt in Cabo Verde

21. **Cabo Verde is noted for its significant economic and social development which has allowed the country graduate from low to middle income status in record time.** GDP per capita almost quadrupled from 1989 to 2017, raising from US$800 to US$3,000 on the back of rapid economic growth prior to 2008, with annual average rates around 6.7 percent. In the same period, the poverty rate fell from nearly 50 percent to 35 percent. The country graduated to middle-income status by 2008. The structure of the economy has also changed over time. Although Cabo Verde has always been a services-oriented economy, tourism and tourism related activities have become the dominant industry in the country. Anchored in the promotion of the country as a market for European tourists, transportation and restaurants and hotels (mostly related to tourism) recorded the highest growth rate, accounting for one fifth of the overall growth reflecting increased dynamism and development of the tourism sector. Tourism also played a catalytic role in the development of other key sectors including the construction sector.

[1] The purpose of this chapters is the assess the sustainability of public debt under different scenarios concerning success or failure to introduce reforms (particularly on taxes and SOEs), as well as under macroeconomic shocks.

22. **Cabo Verde's public debt stock is high relative to peers, and the country has recorded significant and persistent fiscal deficits for the past decade (Figure 1.1, Figure 1.2).** While many small, open economies are often characterized by significant public debt burden, Cabo Verde stands out as significantly more indebted. At the end of 2017, the country's public debt stock amounted to 126 percent of GDP, almost twice the level of structural and aspirational peers. The sizable public debt in Cabo Verde is the result of recurrent fiscal imbalances financed largely through borrowings. In fact, the country recorded the largest (average) fiscal deficits among its peers in the last decade, and it also exhibited the largest debt built-up relative to nominal GDP (Figure 1.2). Such an active deficit financing has not translated into a strong economic growth performance. Cabo Verde is among those countries with the lowest average growth rates amongst peers.

23. **The sharp build up in public debt has been driven by an acceleration in the public investment program in the aftermath of the global financial crisis[2].** Public investment, predominantly externally financed, grew sharply in the years immediately following the global crisis to average 11 percent of GDP in 2008-2013. In fact, public investment, which was spread across many sectors, peaked at over 15 percent of GDP in 2010 (see Chapter 3:). The pick-up in capital projects reflected government's effort to stimulate growth and address infrastructure bottlenecks while taking advantage of the remaining opportunities for accessing concessional financing—which were expected to phase out in view of Cabo Verde's graduation to middle-income status in 2007 (CEM, 2014). Nevertheless, the return on public investment fell by an average of 20 percent after the crisis, suggesting weaknesses in the quality of investments undertaken (SCD, 2018).

24. **The build-up in debt is also attributed to continued support to the SOEs.** There are 32 SOEs in Cabo Verde, providing essential services such as electricity, water, transportation and postal services. The weight of the sector in economy is very significant, even when measured by global and regional standards contributing 26 percent of GDP in sales relative to a regional average of 15 percent of GDP in 2016. SOEs in Cabo Verde also hold assets worth over 60 percent of GDP and debt of over 50 percent of GDP. The SOEs have been predominantly loss-making, increasingly requiring support through capitalization and on-lending operations on top of transfers and small subsidies from the budget[3]. The total debt stock for the three largest SOEs – the real estate company (IFH) which manages the social housing project *Casa para Todos* (CPT), the electricity company (ELECTRA) and the national airline company, *Transportes Aéreos de Cabo Verde* (TACV) – rebranded Cabo Verde Airlines (CVA) as of May 2018)- reached 32 percent of GDP in 2017. In additional to onlending and capitalization (below the line support), SOEs in Cabo Verde have benefited from sovereign guarantees on loans obtained, mainly from domestic banks and investors.

[2] Public debt refers to (i) the foreign and domestic liabilities owed by the central government, (ii) the external debt contracted by the central government on behalf of non-financial SOEs (i.e., on-lending operations), and (iii) the publicly-guaranteed debt owed by local governments and SOEs for which data are available.

[3] The 2018 SOE Related Fiscal Management Project include an annex detailing the recent performance of the SOE sector in Cabo Verde.

Figure 1.1 Public Debt and Fiscal Balances

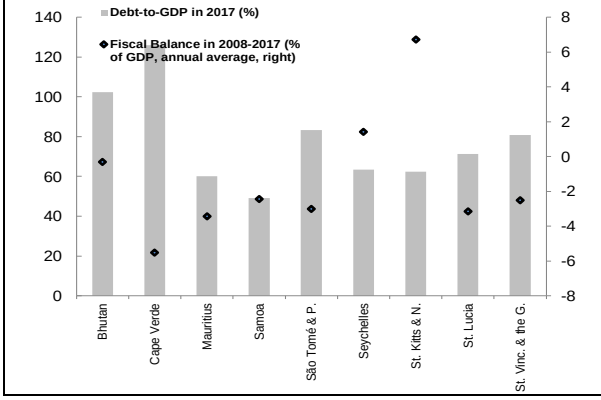
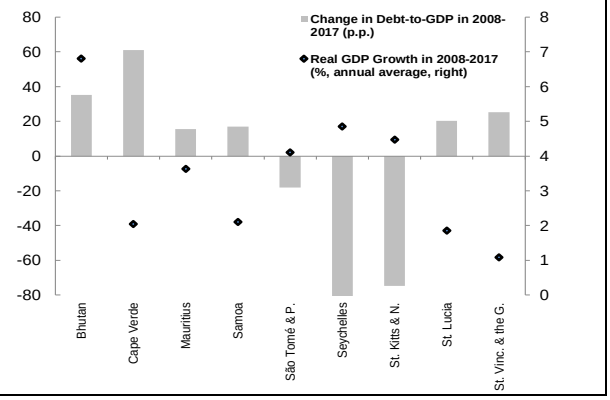


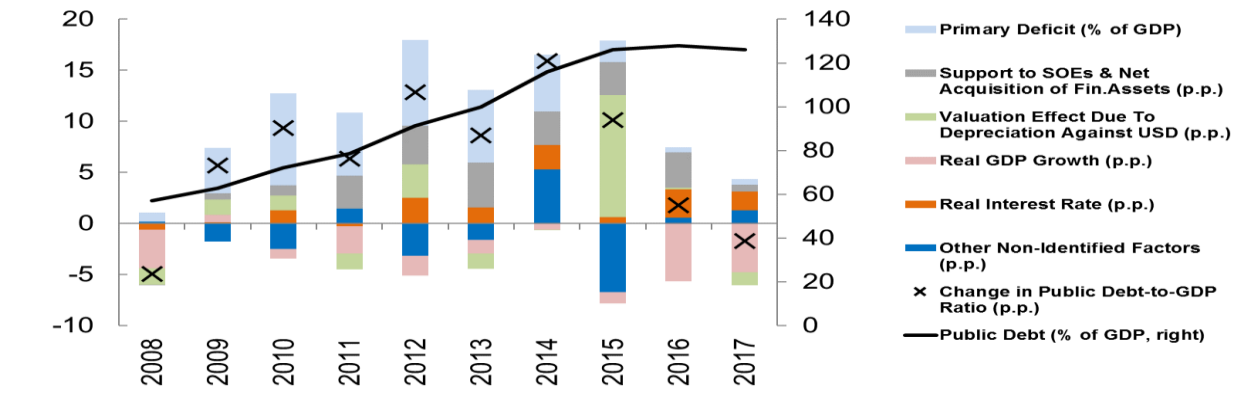
Figure 1.2 Public Debt and Economic Growth Cabo Verde and Peer Countries



Source: World Bank's World Development Indicators

25. **Between 2007 and 2017 public debt rose by 64 percentage points (p.p.) to 126 percent of GDP (Figure 1.3).** During this period, the stock of external debt increased from 37 percent of GDP to 93 percent of GDP. The increase in domestic was modest moving from 25 percent of GDP to 33 percent of GDP. Primary deficits constituted the single most important factor driving the dynamics of the debt ratio and contributed with 45 percent of GDP to the overall increase. Below-the-line support to SOEs added approximately 24 percent of GDP. The performance of key macroeconomic variables also impacted on the dynamics of the debt ratio, with a net contribution of only 2.5 percent of GDP. Slow economic growth—which averaged 2.5 percent per annum in the last decade following the global financial crisis and the recession in the European Union—contributed to a reduction of the debt ratio by 22 percent of GDP. Episodes of depreciation of the Euro against the US dollar—particularly in 2014-2015—increased the local-currency value of US dollar-denominated liabilities and thus added 12 percent GDP to the overall increase of the debt ratio. Inflation-adjusted interest cost of carrying public debt contributed with another 12 percent of GDP.

Figure 1.3 Drivers of Debt-to-GDP Ratio (% of GDP and percentage points)



Source: MOF and WBG staff

1.2 Recent Developments

26. **The new administration which took office in early 2016 intensified efforts to reduce fiscal imbalances**. With the objective of consolidating the budget and restoring sustainability of public debt, the government introduced revenue measures to mobilize new sources of income (e.g., enhanced capacity for tax administration, efforts to collect tax arrears, simplification of tax procedures), as well as expenditure measures to rationalize spending (e.g., a deep review and phasing out of the public-sector investment program). These measures consolidated gains from reforms in tax policy and administration which were adopted in 2013, including changes to VAT rates, revisions of tax codes (e.g., procedural codes, codes for VAT, personal income tax (PIT), and corporate income tax(CIT)), organization of tax offices for large tax payers, establishment of simplified tax regimes for SMEs, online self-reporting and digitalization of tax returns, among other measures. These initiatives, together with the ongoing economic recovery, helped to increase tax collection in recent years (see Chapter 2).

27. **A narrowing fiscal deficit in 2016-2017 resulted from higher revenue and contained expenditure**. The average annual revenue increased from CVE38 billion (24.7 percent of GDP) in 2012-2015 to CVE47 billion (27.5 percent of GDP) in 2016-2017, i.e., a revenue gain of almost CVE9 billion in nominal terms (Figure 4). Indirect and direct taxes accounted for one-half and one-quarter of the revenue gains, respectively. Grants also increased due to the final disbursements under the Millennium Challenge Corporation support and the exceptional assistance from donors to cope with weather-related disasters. Total spending remained broadly stable. The average annual expenditure was CVE52 billion (32.7 percent of GDP) in 2016-2017 compared against CVE50 billion (30.7 percent of GDP) in 2012-2015, i.e., an increase of CVE2 billion in nominal terms. In particular, the government rationalized the public-sector investment program and discontinued ongoing projects, thus bringing drown the average annual capital expenditure from CVE13.3 billion in 2012-2015 to CVE7.6 billion in 2016-2017. Such a sizable adjustment, together with a freeze in acquisition of good and services, helped offset increases in other operational expenses. In 2017, the Government introduced a freeze on certain operational expenses to control execution when it observed revenue shortfalls relative to the revenue forecasts embedded in the budget. With rising total revenue and broadly stable total expenditure, the average annual fiscal deficit contracted to CVE5 billion to (3.1 percent of GDP) in 2016-2017 from CVE12 billion (8 percent of GDP) in 2012-2015.

28. **The administration also started to rationalize (below-the-line) support to SOEs, which continued to be funded with central government borrowings**. In an incipient effort towards SOE reform, the government reduced capitalization and on-lending operations. Thus, the annual average flows associated to (below-the-line) support to SOEs decreased from nearly CVE6 billion (4 percent of GDP) in 2012-2015 to CVE3.5 billion in 2016-2017 (2.1 percent of GDP) (Figure 1.4).

29. **The government's policy was intended inspire growth-friendly fiscal consolidation**. The government sought to consolidate public finances, on the one hand, and on the other, macroeconomic stabilization to mitigate the potentially contractionary effects on economic activity, income, and employment, to be expected from austerity measures. Notably, improved external economic conditions, higher tourist arrivals, and reforms encouraging private-sector investment, attenuated the costs of such a trade-off. Thus, despite rising taxes and declining public investment, the economy expanded at an average annual rate of 4.3 percent in 2016-2017, compared to an average growth of 1.4 percent in 2012-2015. Government expenditure—an important component of aggregate demand that often represents nearly a third of the nominal GDP—was fairly stable in nominal terms, and thus may have prevented the fiscal policy from exerting deleterious pro-cyclical effects in the short-run.

30. **In a context of fiscal consolidation, moderation of (below-the-line) support to SOEs, and economic recovery, the growth in public debt decelerated in 2016-2017.** Fiscal austerity and economic recovery have significantly contributed to lessen the gross borrowing requirements - resulting from fiscal deficits, amortization payments of maturing liabilities, (below-the-line) support to SOE, and investment in financial assets. As a consequence, the total public debt increased by just 9 percent of GDP in the last two years, raising from CVE200 billion at end-2015 to CVE218 billion at end-2017. Relative to GDP, the public debt has remained broadly stable in the range of 126-128 percent of GDP.

31. **The public debt portfolio largely comprises foreign, concessional loans and domestic government securities placed among local banks and institutional investors (Figure 1.5).** External debt of the central government and local government represents 73 percent of the total public debt, and includes loans from multilateral institutions, bilateral creditors, and commercial debt. Guarantees on foreign loans contracted directly by TACV constitute 1 percent of the total public debt. Domestic debt of the central government and local governments account for the remaining 26 percent of the total public debt and is largely through Treasury bonds. While the stock of public debt is high, the flows of debt service are manageable due to the concessionality of foreign loans. Amortization payments averaged 4.7 percent of GDP in 2015-2017, equivalent to one-sixth of total revenue.

32. **The public debt portfolio is moderately exposed to currency risk, and to a lesser extent to rollover and interest rate risk**. Several foreign loans are denominated either in US dollar or in Special Drawing Rights (SDR) - where US dollar is an important share of the currency basket - and hence possible fluctuations in the Euro/US dollar parity create currency risk. The concessional nature of most foreign loans implies a narrow exposure to rollover and interest rate risk. Most loans to Cabo Verde have maturities over 25 years with and carries fixed, low interest rates. According to the 2018 IMF Article IV Staff Report, external debts have, on average, a 9-year grace period, a 25-year maturity, and a 1.2 percent interest rate. Domestic government securities are denominated in local currency, issued at medium- to long-term maturities, and carrying fixed, low interest rates. Domestic debts have, on average, a 5-year maturity and a 5.1 percent interest rate. Treasury bonds are issued with maturities between 5 to 9 years, and the Treasury bills with less-than-one-year maturity are negligible in size. In addition, these securities are largely held by a few local banks and the National Social Security Institute—satisfying investors' liquidity management and institutional investment needs—and traded in a stable, albeit concentrated, market. Thus, the domestic debt also has a limited exposure to rollover and interest rate risk.

Figure 1.4 Fiscal Adjustment in 2016-2017 (Annual Averages, CVE Million)

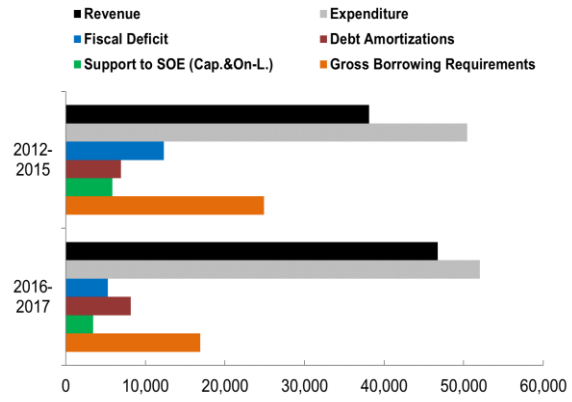
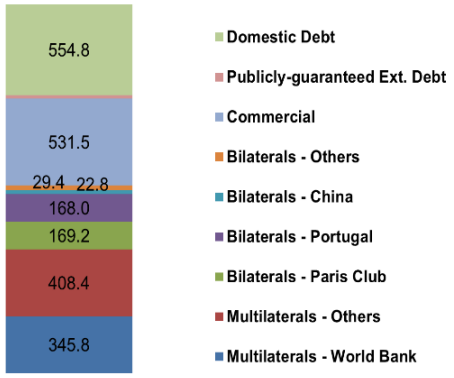


Figure 1.5 Public Debt Structure (US$ Million)



Source: Ministry of Finance and World Bank estimates

1.3 Medium-Term Outlook and Scenarios

33. **This section elaborates a macro-fiscal framework for 2018-2023 and a Debt Sustainability Analysis (DSA) to evaluate the performance of fiscal balances and debt under alternative policy programs.** Three scenarios are considered. The *Business-As-Usual (BAU) Scenario* is predicated upon a conservative recovery outlook and the continuation of the government's policies adopted since 2016. Assuming a more decisive budget consolidation be adopted, a *Fiscal Adjustment Scenario* introduces the potential savings of 2.5 percent of GDP identified in this PER. Finally, considering SOE and structural reforms on top of budget consolidation, the *Reform Scenario* is predicated on a stronger growth outlook and narrowing fiscal imbalances. Macro-fiscal projections covering the period 2018-2023 for the three scenarios are presented in Table 1.1. Annex 2 describe the basic DSA model used in this section and Annex 4 present more detail macro projections.

Table 1.1 Medium-Term Outlooks for 2018-2023 Under Alternative Policy Programs

	Historical			Business-as-Usual Scenario						Fiscal Reform Scenario						Fiscal & SOE Reform Scenario					
Variables	2015	2016	2017	2018	2019	2020	2021	2022	2023	2018	2019	2020	2021	2022	2023	2018	2019	2020	2021	2022	2023
GDP at current prices (CVE million)	158,700	165,800	173,400	184,900	195,565	206,438	218,131	231,393	245,462	184,900	195,565	206,438	218,131	231,393	245,462	184,900	196,881	209,626	224,268	240,191	254,795
Revenue	26.9	26.6	28.5	29.3	28.5	29.0	28.5	28.5	28.5	29.3	28.5	30.7	30.2	30.2	30.2	29.3	28.5	30.7	30.2	30.2	30.2
Expenditure	31.6	29.7	31.7	32.3	32.7	32.0	30.9	30.9	30.9	32.3	32.7	31.2	30.0	30.0	29.9	32.3	32.7	31.2	29.9	29.8	29.7
Overall Balance	-4.7	-3.0	-3.2	-3.0	-4.2	-3.0	-2.4	-2.4	-2.4	-3.0	-4.2	-0.5	0.2	0.2	0.3	-3.0	-4.2	-0.5	0.3	0.4	0.5
Gross Borrowing Requirements	12.4	11.3	8.7	11.6	10.1	9.2	9.9	10.3	15.0	11.6	10.1	6.7	7.3	7.7	12.3	11.6	12.1	4.9	4.9	4.2	8.6
Overall Balance (+ indicates deficit)	4.7	3.0	3.2	3.0	4.2	3.0	2.4	2.4	2.4	3.0	4.2	0.5	-0.2	-0.2	-0.3	3.0	4.2	0.5	-0.3	-0.4	-0.5
Amortizations Payments	4.5	4.8	4.8	3.4	2.7	2.9	4.3	4.7	9.4	3.4	2.7	2.9	4.3	4.7	9.4	3.4	2.7	2.9	4.2	4.5	9.0
Support to SOEs (Cap. & On-Lend.)	3.2	3.4	0.7	5.2	3.2	3.2	3.2	3.2	3.2	5.2	3.2	3.2	3.2	3.2	3.2	5.2	5.2	1.5	0.9	0.0	0.0
Public Debt	126.0	127.8	126.1	129.8	130.1	129.5	128.1	126.4	124.7	129.8	130.1	127.0	123.2	119.1	115.2	129.8	131.3	125.3	117.8	109.6	102.9
Domestic Debt	29.0	31.7	33.1	34.9	36.9	38.4	39.3	40.1	38.0	34.9	36.9	37.4	37.3	37.2	34.2	34.9	37.5	37.0	35.5	33.8	29.7
External Debt	97.0	96.1	93.0	94.8	93.2	91.0	88.8	86.2	86.8	94.8	93.2	89.5	85.9	81.9	81.0	94.8	93.8	88.3	82.3	75.8	73.2

Notes:

(1) Real exchange rate defined as the CVE/Euro bilateral exchange rate times the ratio between int'l prices and domestic GDP deflator.

(2) Includes domestic debt issued for deficit fiancing and accumulation of government deposits and other financial assets.

Source: World Bank projections.

34. **Given current unchanged policies, the revenue and expenditure levels achieved by the new administration are expected to be maintained, as well as the below-the-line financing support to SOEs.** Revenues stabilize at 28.5 percent of GDP while expenditures slightly decline from 32.3 percent of GDP in 2018 to 30.9 percent by 2023 (**Error! Reference source not found.** and **Error! Reference source not found.**). Grants are expected to decline in view of Cabo Verde's graduation to middle-income country status in 2008 and the closure of the Millennium Challenge Corporation (MCC) program in 2017. Capital expenditure is likely to remain around 4 percent of GDP, and thus significantly below the levels observed in 2008-2013 when investment expenses averaged 11 percent of GDP. Overall, the fiscal deficit averages 3.0 percent of GDP in 2018-2023. In the absence of decisive efforts towards SOE restructuring, the financial policies to support loss-making companies through capitalization and on-lending operations are expected to remain in place. Based on historical trends, it is assumed that the attendant funding needs amount to 3.2 percent per annum over the medium-term.

35. **Persistent budget deficits and support to SOEs will imply significant gross borrowings requirements and contribute to the accumulation of public debt in the medium-term**. Gross borrowing requirements reflect funding needs resulting from fiscal deficits, (below-the-line) financial assistance to SOEs, and amortization payments of maturing liabilities. Due to sizable deficits and support to SOEs, the projected gross borrowing requirements average 10.2 percent of GDP in 2018-2022—the level observed in 2016-2017 (**Error! Reference source not found.**). This implies the government must be able to secure significant amounts of funding via public debt. In particular, a bundling of maturing liabilities looms by 2023, when amortization payments are expected to peak at nearly 9 percent of GDP. Such large debt-service obligations are the direct consequence of the issuances of domestic securities in 2018-2019.

36. **Government's policies will continue seeking a mix of domestic and external funding sources**. The debt management strategy to be pursued in 2018-2023 intends to cover 60 percent of the gross borrowing requirements through external sources and the remaining 40 percent with domestic sources. External, foreign currency-denominated loans are assumed to have (on average) a 15-year maturity, a 5-year grace period, and an interest rate of 1 percent per year. Besides, the domestic, local currency-denominated securities are assumed to have (on average) a 5-year maturity and an interest rate of 5 percent. These financing terms are in line with those observed in recent years and reflect that the concessional windows provided by the multi-lateral agencies will gradually close to Cabo Verde over the medium-term. Semi-concessional funding is expected to continue. In addition, the government aims to diversify its creditor base and has targeted other foreign creditors such as China and Arab funds. Domestic borrowing aims to contribute to the development of local capital markets including increasing liquidity and reducing borrowing costs. According to the Public Debt Law approved in 2018, annual domestic indebtedness must remain within a formal ceiling equivalent to 3 percent of GDP to avoid excessive demand for funds by the central government and financial crowding out effects on the private sector.[4]

Figure 1.6 BAU Scenario Revenue (CVE Million and % of GDP)

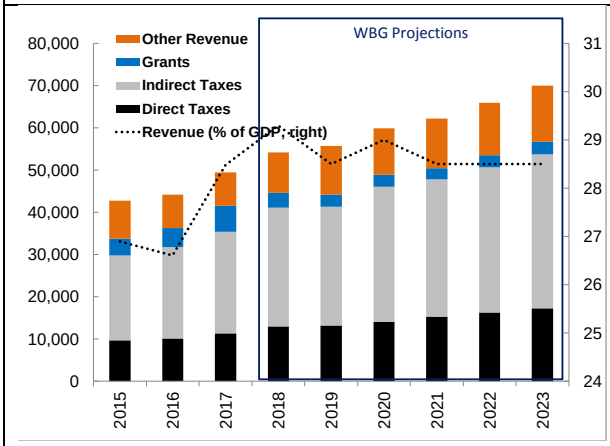


Figure 1.7 BAU Scenario Expenditure (CVE Million and % of GDP)

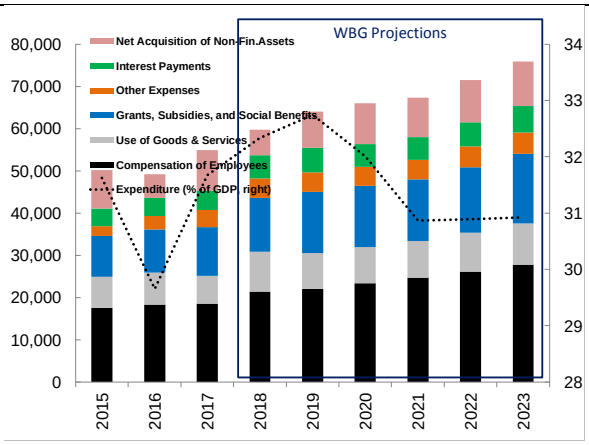


Figure 1.8 BAU Scenario Gross Borrowing Requirements (CVE Million and % of GDP)

Figure 1.9 BAU Scenario Public Debt (CVE Million and % of GDP)

[4] Willingness of creditors and investors to continue providing financing is essential for accomplishing the government's debt management strategy. Gross borrowing requirements are already significant in Cabo Verde and this is expected to continue under the Business-As-Usual Scenario. The extent of these requirements constitutes a challenge for the debt management strategy and exposes the government to liquidity risks. Hence, the willingness of creditors and investors to continue providing funding on reasonable terms—in particular, a sustained flow of foreign loans extended by multilateral and bilateral agencies, and a sustained appetite for government securities placed in the domestic financial market—are essential to meet all funding needs. If a liquidity stress materializes, the government may have to accelerate fiscal consolidation and rationalize financial assistance to SOEs.

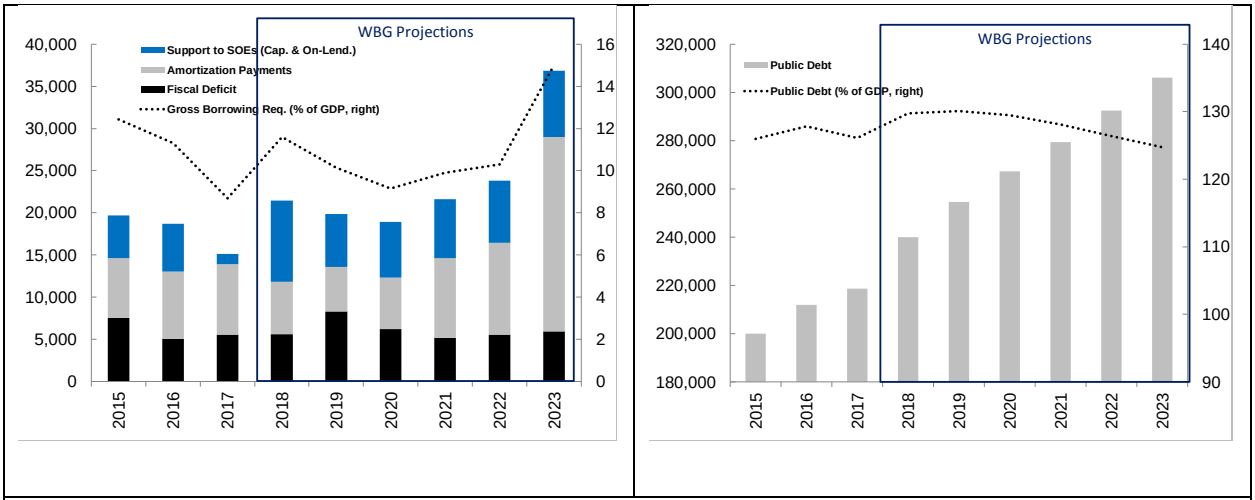
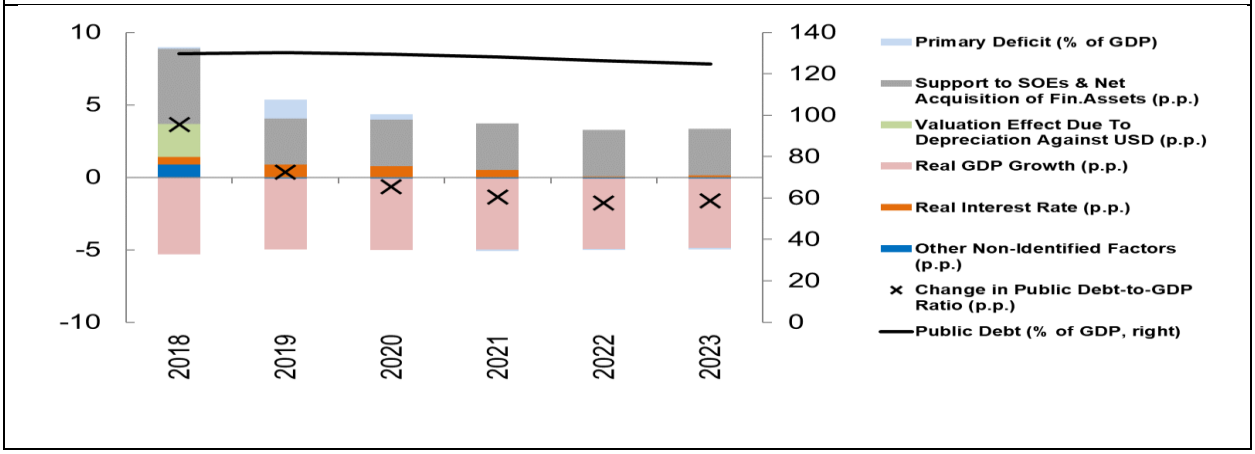


Figure 1.10 BAU Scenario. Drivers of Debt-to-GDP Ratio (% of GDP and percentage points)



Source: MOF and WBG projections

37. **Public debt continues at a high level in the medium-term, while fiscal and financial policies fail to achieve a reduction in the debt-to-GDP ratio (Figure 1.9).** In the BAU Scenario, the lack of significant fiscal adjustment and rationalization of (below-the-line) support to SOEs prevents the government from achieving gains in terms of debt sustainability. The public debt will remain above 125 percent of GDP until 2023, with virtually no reduction relative to its current level (see Table 1 in Annex 4). The vulnerabilities and risks associated to Cabo Verde's government debt will therefore continue unabated.

38. **Current unchanged policies will offset any positive contribution of macroeconomic performance to the dynamics of the public debt-to-GDP ratio over the medium term (**Error! Reference source not found.**)**. Throughout the period 2018-2023, the debt-to-GDP ratio declines by just 1.4 percentage points in cumulative terms. Notably, the contribution of macroeconomic variables (i.e., real GDP growth, real interest rate, and real exchange rate) to the debt dynamics is significant: jointly, these variables would reduce the debt-to-GDP ratio by 24.5 percentage points. However, persistent fiscal imbalances largely offset such potential gains with primary deficits and support to SOEs adding 1.5 percent and 21.2 percent. to the debt ratio. This suggests that fiscal sustainability in Cabo Verde cannot be restored solely on the back of economic growth, and thus the adoption of fiscal policies and structural reforms is essential. The remainder of this section explores two alternative policy programs and their implications.

Fiscal Adjustment Scenario for 2018-2023

39. **Adoption of revenue and expenditure measures identified in Chapters 2, 3 and 4 can deliver significant fiscal savings.** Even if a relatively favorable economic outlook unfolds over the medium-term, the current fiscal policies are expected to cause significant gross borrowings requirements and fuel the accumulation of public debt. Hence, new measures should be introduced to generate fiscal savings. In particular, the measures summarized in Table ES1—which relate to tax reforms and spending efficiencies in the health and education sectors—could bring about 1.7 percent of GDP in additional revenues and 0.8 ppercent of GDP in lower expenses, if adopted starting in 2020. With the adoption of these measures, the funding needs facing the central government will be reduced and the public debt-to-GDP ratio will eventually decline towards a more sustainable path.

40. **Tax reforms and current expenditure controls are necessary to strengthen public finances and narrow fiscal imbalances.** Tax reforms described in Chapter 2 may be essential for a fiscal consolidation strategy going forward, and include rationalization of tax exemptions, broadening of tax bases, and enhanced tax administration. If adopted, central government's revenues are projected to increase to 30.2 percent of GDP in 2020-2023—compared to an average of 27.5 percent of GDP reached in 2016-2017—with major gains in taxes on income and VAT. Expenditure reforms discussed in Chapters 3 and 4 can also be pursued as an integral part of the fiscal adjustment. If adopted, current expenditure is anticipated to decrease from 29 percent of GDP in 2018 to 25.6 percent by 2023—slightly below the average level of 26.2 percent of GDP observed in 2016-2017. A drive towards fiscal consolidation is also likely to maintain capital expenditure at around 4 percent of GDP, i.e., the modest levels achieved in recent years.

41. **A fiscal adjustment strategy would reduce funding needs and achieve a notable reduction in the level of public debt (**Error! Reference source not found. **and** Error! Reference source not found.**).** Successful introduction of revenue and expenditure measures would lead to a balanced budget by 2021 that is sustained afterwards. Furthermore, the annual gross borrowing requirements average 8.7 percent of GDP in 2018-2022—i.e., a reduction of 1.5 percentage points. of GDP relative to the Business-As-Usual Scenario where budget deficits persist over the medium-term. While public debt continues at a high level around 130 percent of GDP in 2018-2019, it eventually declines reaching 115 percent of GDP by 2023, a reduction of 10 percent of GDP relative to the Business-As-Usual Scenario. By putting the debt ratio on a declining path, a fiscal adjustment strategy is expected to improve debt sustainability and mitigate vulnerabilities and risks stemming from Cabo Verde's government liabilities.

Reform Scenario for 2018-2023

42. **A comprehensive structural reform program including SOE restructuring and fiscal adjustment can accelerate economic growth and strengthen public finances.** The government's structural reform agenda and fiscal strategy going forward should seek to promote private investment and consolidate public finances. The government has already expressed its intention to stimulate private-sector investment in selected sectors including tourism, energy, and transport. The approach involves deploying measures to strengthen the business climate, boost foreign direct investments (FDI), and facilitating greater access to finance. Private sector investment, domestic and foreign, is expected to replace public sector investment as the engine of growth in the next few years. In parallel, rationalization of the SOEs sector including the privatizing CVA, maritime transport concession and improving the operational performance of the Electra could boost growth potential and reduce the funding needs facing the government. While SOE reforms may imply one-off expenses in the short-term—e.g., expenses in the process of privatizing CVA and handling the company's liabilities amounting to an estimated 6 percent of GDP—the financial assistance to the sector will be significantly reduced in the medium-term. The fiscal adjustment strategy discussed in the previous sub-section, in turn, would restore a balanced budget and further contribute to achieving a sustainable public debt.

43. **Structural reforms, including SOE restructuring, contributes to accelerate the recovery of economic activity in the medium term.** Given the positive effects of structural reforms on productivity, connectivity and logistics, and incentives for private investment, the real GDP growth is expected to average 4.7 percent per year in 2018-2023, compared against 4.0 percent under the Business-As-Usual Scenario. GDP deflator inflation would be maintained around a range between 1.5 percent to 2.0 percent per annum in so far as faster economic growth stems from reforms and not just stimulus to aggregate demand.

44. **Tax reforms, expenditure controls, and restructuring of SOEs, can jointly reduce fiscal imbalances and funding needs**. Projected revenues and expenditures are broadly similar to the Fiscal Adjustment Scenario, and thus a fiscal balance is achieved by 2021. Because of SOE reforms, financial support to these companies through capitalization and onlending operations is expected to be gradually phased out, dropping from 5.2 percent of GDP per year in 2018-2019 to just 0.9 percent in 2021 compared against a sustained level of 3.2 percent of GDP in the Business-As-Usual Scenario. This projection incorporates one-off expenses that may be incurred in privatizing CVA and may presumably be funded through issuances of public debt in 2018-2019. Eventually, narrowing fiscal imbalances and reduced support to SOEs will largely compress the gross borrowing requirements which average 7.5 percent of GDP in 2018-2022, or 2.7 percent of GDP below the level anticipated in the Business-As-Usual Scenario.

45. **Lower borrowings in the next few years help contain the spike in debt-service obligations envisaged for 2023 (**Figure 1.13**)**. In anticipation of significant liquidity needs in the medium-term, financial policies should seek to pay down the debt on top of the fiscal policies aimed at consolidating the budget. This could include deploying off-budget inflows from reforms to IFH – increased revenues from the sale of homes - towards a retiring debt.

46. **Public debt sustainability will be significantly enhanced by a joint program of fiscal consolidation and structural reforms**. In the Reform Scenario, fiscal and financial policies enable an unprecedented reduction in the debt-to-GDP ratio from 130 percent in 2018-2019 to 103 percent by 2023 (Figure 1.14). It should be emphasized, however, that the country's public debt may gradually return to a sustainable downward path provided that the economic and policy conditions assumed in the Reform Scenario hold. The next section explores macroeconomic vulnerabilities and risks that may undermine efforts to restore debt sustainability.

Figure 1.11 Fiscal Adjustment Scenario Gross Borrowing Requirements (CVE Mn and % of GDP)

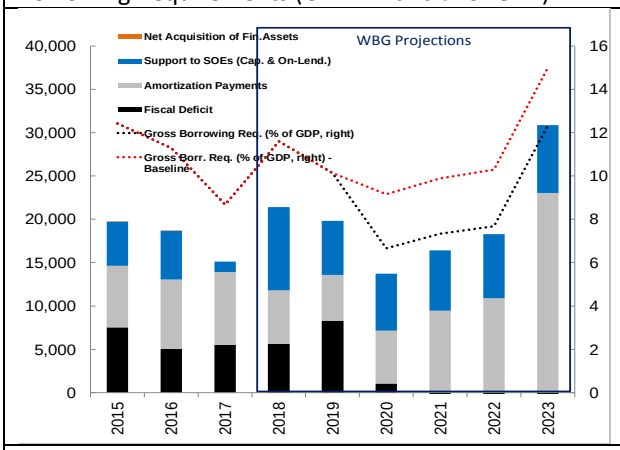


Figure 1.12 Fiscal Adjustment Scenario Fiscal Deficit & Public Debt (% of GDP)

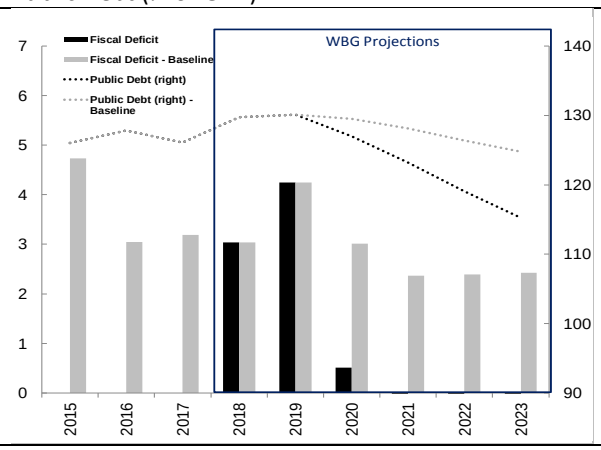


Figure 1.13 Reform Scenario Gross Borrowing Requirements (CVE Million and % of GDP)

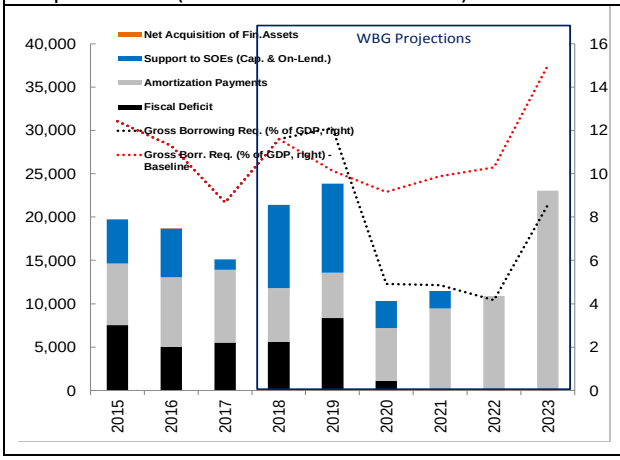
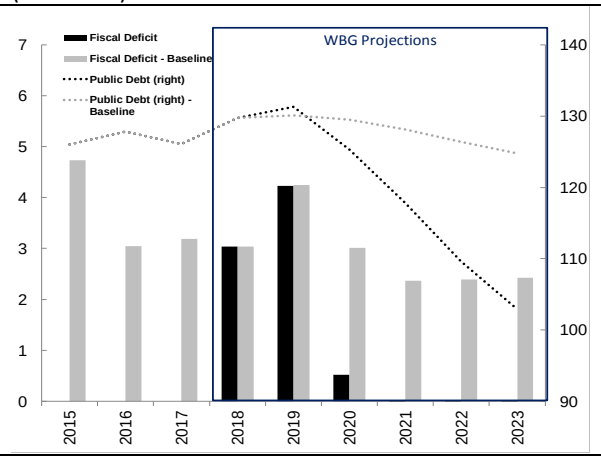


Figure 1.14 Reform Scenario Fiscal Deficit & Public Debt (% of GDP)



Source: MOF and World Bank estimates and forecast

1.4 Macroeconomic Vulnerabilities and Risks

47. **Cabo Verde's outlook is susceptible to downside risks**. Projections and results discussed in the previous section are predicated on a moderate recovery of economic activity under the Business-As-Usual and Fiscal Adjustment Scenarios, and a somewhat faster recovery under the Reform Scenario. It is then warranted to assess fiscal and debt performance subject to different macroeconomic vulnerabilities and risks. To complement the analysis of medium-term scenarios, this section formulates alternative scenarios where shocks to macroeconomic variables materialize and thus have major effects on public finances in the next few years.

48. **A sustained recovery in domestic economic activity and financial stability are imperatives for achieving the government's fiscal and financial policies going forward.** Sound macroeconomic prospects can help to increase fiscal revenues and assure new financing at reasonable terms. Cabo Verde's small open economy, nevertheless, is subject to external and domestic shocks that, if materialize, would generate outcomes that deviate from those in the medium-term macroeconomic outlooks discussed above. To evaluate the effect on debt sustainability of adverse shocks, stochastic simulations with different paths for Cabo Verde's real GDP growth, domestic real interest rate, and CVE/Euro bilateral real exchange rate are undertaken. Specifically, the Vector Auto-Regressive (VAR) model presented in Annex 3 is used to run stochastic simulations driven by shocks that are consistent with the historical dynamic interactions between economic growth, domestic financial conditions, and competitiveness[5]. The different paths thus calculated describe the macroeconomic and public-finance performance that may occur if unforeseen adverse events eventually materialize[6].

[5] The VAR model provides an estimate of the (time-invariant) covariance matrix of the shocks (disturbances) hitting the three variables indicated in the main text. In any given simulation and year, shocks to the three variables are drawn from a multivariate Gaussian distribution—characterized by the VAR residuals' covariance matrix—and added to the variables' expected (baseline) path. Thus, for any given variable, all the simulations generate different paths that are centered around the variable's expected (baseline) path throughout the projection horizon. Next, the simulations compute the paths for all the fiscal and debt variables relevant for our analysis, most notably the public debt stock and the gross borrowing requirements. The resulting empirical distributions are depicted in fan charts.

[6] Stochastic simulations help to quantify and analyze the uncertainties and risks around the medium-term outlook.

49. **If current policies were to continue over the medium-term, adverse macroeconomic and financial circumstances may lead to very high, unsustainable levels of public debts.** Given current fiscal and financial policies contemplated in the Business-As-Usual Scenario, the realization of extremely adverse circumstances affecting economic growth, real interest rates, and the real exchange rate can push Cabo Verde's public debt upwards, reaching an upper bound of 140 percent of GDP in 2019 and 138 percent of GDP by 2023, compared to the corresponding figures of 130 percent and 125 percent expected in the absence of shocks (**Error! Reference source not found.**). For less extreme (and thus more likely) events, there is a 25 percent probability that the public debt stock will exceed 129 percent of GDP in 2023[7]. Gross borrowing requirements are also impacted by macroeconomic and financial shocks. Under extremely adverse (albeit highly unlikely) circumstances, those requirements might reach an upper bound of 10.7 percent of GDP in 2019 and 16 percent of GDP in 2023—i.e., nearly 1 percent of GDP above the levels expected under the Business-As-Usual Scenario (**Error! Reference source not found.**). Results obtained using stochastic simulations suggest the extent of fiscal risks is significant as adverse shocks can lead to high levels of public debt and gross borrowing requirements. Policies should build 'resilience' and help the economy mitigate the impact of unexpected shocks prior to their (potential) realization[8].

50. **The structural reform agenda coupled with fiscal consolidation can help not only to restore a sustainable debt path but also to narrow exposure to fiscal risks.** As highlighted in the Reform Scenario, consolidating the budget and phasing out the (below-the-line) support to public enterprises can significantly reduce the funding needs facing the central government and slow the pace of debt accumulation. Fiscal adjustment and elimination of SOE capitalization and on-lending operations not only accelerate the reduction of public debt—as discussed above—but it also narrows the possible deviations induced by adverse macroeconomic shocks. If adverse shocks materialize in the Reform Scenario, Cabo Verde's public debt could reach an upper bound of 138 percent of GDP in 2019 and 113 percent of GDP by 2023, compared to the corresponding figures of 131 percent and 103 percent expected in the absence of shocks (**Error! Reference source not found.**). For less extreme (and thus more likely) events, there is a 25 percent probability that the public debt stock will exceed 106 percent of GDP in 2023. Gross borrowing requirements, which are basically limited to amortization payments once capitalization and on-lending operations are phased out, are barely affected by shocks (**Error! Reference source not found.**). Intuitively, with lower exposure to the SOEs sector, the possible shocks to domestic real interest rate and real exchange rate would have a smaller impact on the interest bill and the valuation of foreign currency-denominated liabilities. This, in turn, improves the fiscal position, further shifts down the debt path, and narrows the dispersion of possible outcomes.

[7] Technically, there is a 25 percent probability of experiencing unfavorable macroeconomic and financial shocks in 2019-2023 that will eventually raise the public debt-to-GDP ratio above the levels indicated in the main text in the year 2023.

[8] Conceptually, the impact depends of shocks, their associated probability distribution, and the exposure of the economy and public finances to those shocks. For a small open economy as Cabo Verde, the size and probability of shocks are typically exogenous and cannot be controlled.

Figure 1.15 BAU Scenario with Stochastic Simulations Gross Borrowing Requirements (% of GDP)

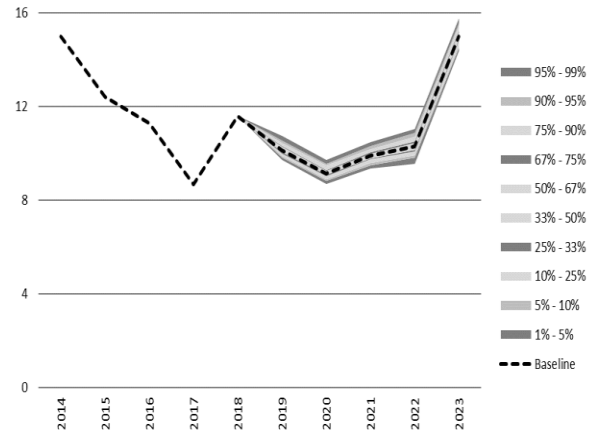
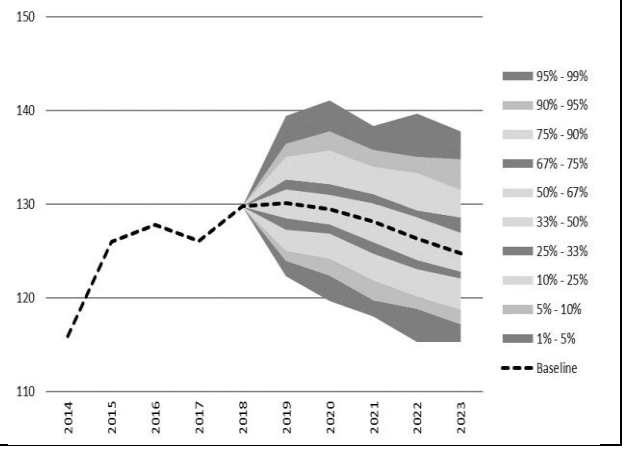


Figure 1.16 BAU Scenario with Stochastic Simulations Public Debt (% of GDP)



Source: MOF and World Bank projections

Figure 1.17 Reform Scenario with Stochastic Simulations Gross Borrowing Requirements (% of GDP)

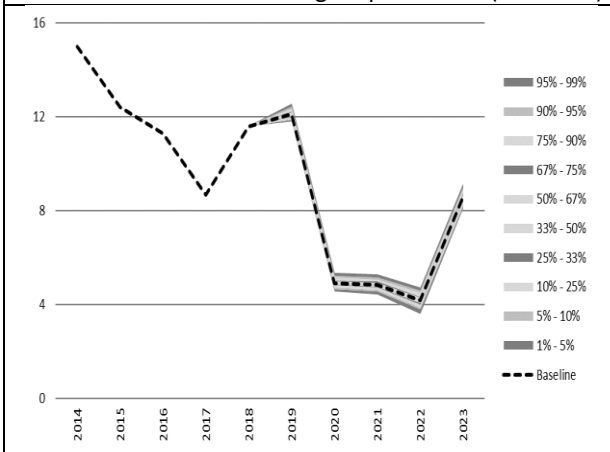
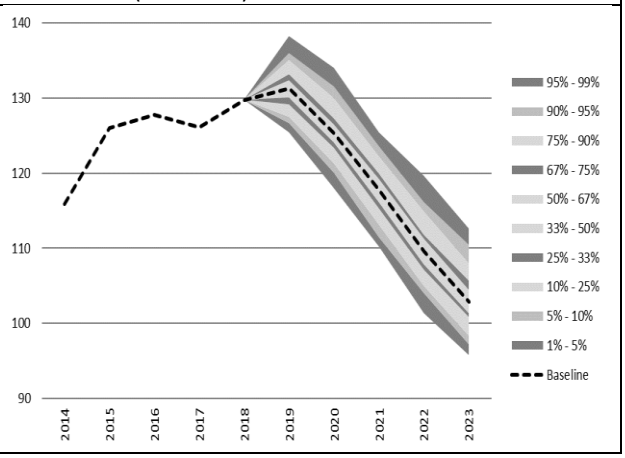


Figure 1.18 Reform Scenario with Stochastic Simulations Public Debt (% of GDP)



Source: MOF and WBG calculations

1.5 Conclusion and Recommendations

51. **Cabo Verde's fiscal imbalances and recurrent support to loss-making SOEs led to a significant public debt burden**. Public debt has almost doubled in the last decade and currently exceeds 126 percent of GDP. Notably, this is highest level of debt among peer countries and creates substantial vulnerabilities. While the Government's financial obligations are sizable and should certainly be reduced going forward, their management benefits from continued access to official creditors and soft financing terms. The public debt portfolio is moderately exposed to currency risk, and to a lesser extent to rollover and interest rate risk.

52. **The government's policies and reforms aim at restoring sustainability of public finances**. Since early 2016, efforts to mobilize new sources of revenue and rationalize spending have helped to reduce fiscal imbalances and stabilize the debt-to-GDP ratio. The government's structural reform agenda—which encompasses changes in tax legislation and rationalization of the SOE sector—is expected to further boost the ongoing economic recovery and strengthen the fiscal position. In addition, the government's debt management strategy aims to diversify sources of funding and avoid crowding out financing for the private sector. Fiscal consolidation and phasing out capitalization and on-lending operations are imperative to restore debt sustainability.

53. **In our Reform Scenario, the public debt continues at a high level in 2018-2019 and commences to decline in the medium-term**. The evolution of the public debt-to-GDP ratio over the medium term will be driven by the economic recovery, fiscal consolidation, and declining support to SOEs. The public debt is expected to remain above 126 percent of GDP until 2020 and at best decline to 103 percent of GDP by 2023. Vulnerabilities and risks, however, may still undermine efforts to restore debt sustainability.

54. **Cabo Verde's outlook is not exempt from policy challenges, financial vulnerabilities, and macroeconomic risks.** The Reform Scenario hinges upon four factors: (i) a successful implementation of fiscal policies, particularly concerning efforts to boost revenues; (ii) a successful implementation of structural reforms and financial policies, notably the rationalization of the state's involvement in the SOE sector in terms of ownership and financing; (iii) access to sufficient new financing to meet the gross borrowing requirements, including a smooth rollover of maturing liabilities; and (iv) the absence of adverse macroeconomic shocks that are not foreseen but can yet materialize.

55. **In the absence of fiscal consolidation and declining support to SOEs, significant gross borrowing requirements and high levels of public debt will persist**. In the Business-As-Usual Scenario, failure to implement tax reform and policies to enhance operational and financial performance of public enterprises, would prevent Cabo Verde from restoring a sustainable debt trajectory and reducing liquidity risks. Gross borrowing requirements would peak at nearly 15 percent of GDP in 2023 and exceed 10 percent of GDP in 2019-2022, while the public debt-to-GDP would approximate 125 percent by 2023.

56. **Adjusting the fiscal positions and rationalizing (below-the-line) support to SOEs can contribute to compressing gross borrowing requirements, reduce exposure to liquidity risks, and restore a sustainable debt path**. Speeding up SOE reform can significantly compress the funding needs facing the Central Government and slow down the pace of debt accumulation. Assuming capitalization and on-lending operations are curtailed altogether, the gross borrowing requirements may fall below 5 percent of GDP in 2020-2022 and the debt-to-GDP ratio decrease to 103 percent by 2023. In the absence of capitalization and on-lending operations, in 2023 the public debt-to-GDP ratio would decline to 106 percent with a 25 percent probability.

Chapter 2: Review of Revenue Mobilization

***Summary**: Cabo Verde is collecting less revenues than its peers although recent reforms helped to reduce the tax gap. This is the result of several interconnected factors including an inefficient tax policy, high vulnerability to external shocks, and a complex tax system. There is need to deepen the on-going tax policy and administration reforms including efforts to broaden the tax base, rationalize CIT tax expenditures, reduce complexity of PIT, and revising the MSME framework. These measures could yield at the minimum 1.7 percent of GDP in fiscal savings.*

The chapter is organized as followed. Section 2.1 analyzes the latest trends and composition of revenues in Cabo Verde. Section 2.2 assesses the efficiency of revenue collection, benchmarking Cabo Verde to structural and aspirational peers. Section 2.3 provides policy recommendations to improve revenue mobilization and mitigate its volatility.

2.1 Trends and Composition of Revenues

57. **Cabo Verde has undertaken several reforms to boost revenues over the past two decades.** The first major reform was in 1995 with the unification of taxes on income into a single income tax, the *Imposto Único sobre os Rendimentos* (IUR). The IUR, which is progressive, has since been amended several times. In 2004, taxes on imports were also consolidated, replacing 64 taxes with just 7. Also, in 2004, the 10–60 percent consumption tax was replaced by a value-added tax (VAT) of 15 percent, which is levied on all goods and services, whether imported or domestic. A preferential rate of 6 percent was initially levied on the tourism sector, but this was increased to 15 percent in 2013. Enacted with the VAT was a special tax on luxury consumption, *Imposto sobre Consumos Especiais* (ICE). In the last five years several smaller reforms of the VAT, corporate income tax (CIT), and personal income tax (PIT) have been directed to rationalizing exemptions and strengthening the tax code. Today, the taxes most important to Cabo Verde are the income taxes, the VAT, excise taxes, customs duties, and a comprehensive property tax (IUP) (Table 2.1).

58. **Recent reforms have succeeded in boosting tax collections to counter lower grant receipts.** After peaking at 28.7 percent of GDP in 2008, total revenues fell to a low of 22.9 percent in 2014 reflecting the slowdown in grants and the impact of the global recession on the economy (Figure 2.1). Grants slowed because of the country's graduation to middle-income status in 2007. Tax collection, both direct and indirect, which account for an average of 72.6 percent of total revenues, also fell to their lowest levels in 2014 coinciding with the sharp slowdown in economic growth between 2008 and 2015 (**Error! Reference source not found.**). Reductions in CIT and PIT standard rates significantly exacerbated this trend. Tax collection has recovered since 2014, reflecting several fiscal reforms implemented by the government. Grants also picked to recover as Cabo Verde received additional donor support to recover from the 2014 volcanic eruption on Fogo island and the support under the MCC project. In this context, total revenues increased by 5.7 percent of GDP between 2014 and 2017.

59. **Lower grant receipts also coincided with the European debt crisis.** In 2006, external support accounted for almost 20 percent of total revenues but has since fallen to 7.8 percent in 2014 (its lowest point), and then increased slightly to 12.4 percent in 2017. European countries significantly cut their external support to Cabo Verde in the aftermath of the debt crisis. The decline is largely attributable to lower contribution from Portugal, Spain and the Netherlands. In 2017, 44 percent of grants were for budget support while 56 percent were directly allocated to project.

60. **Non-tax revenues, especially the sale of public goods and services, has increased steadily over the past decade.** In 2017, 70 percent of non-tax revenue came from the sale of public goods and services such as administrative services and collection of fees related to public order. The sale of public goods and services has doubled over the last 10 years, increasing from 1.5 to 3 percent of GDP. About 10 percent corresponded to leasing revenue from various transport infrastructures.

Table 2.1 Revenue Composition and Trends (% of GDP)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total revenues (1+2+3)	**28.1**	**28.7**	**27.6**	**28.6**	**25.6**	**24.4**	**24.5**	**22.9**	**26.9**	**26.9**	**28.5**
1. Tax revenues	**21.5**	**21.9**	**18.8**	**19.0**	**20.0**	**18.4**	**18.3**	**17.6**	**19.3**	**19.8**	**20.8**
Direct Taxes	**6.3**	**6.3**	**5.9**	**5.7**	**5.9**	**5.7**	**5.6**	**5.0**	**6.1**	**6.1**	**6.5**
Personal Income	3.7	3.6	3.3	3.4	3.3	3.3	3.1	3.2	3.4	3.8	4.1
Corporate Income	2.6	2.7	2.7	2.3	2.6	2.4	2.5	1.8	2.7	2.3	2.4
Indirect Taxes	**13.9**	**14.4**	**12.2**	**12.7**	**13.6**	**12.1**	**12.2**	**12.0**	**12.7**	**13.1**	**13.9**
Taxes on goods and services	9.3	9.9	8.2	8.7	9.4	8.3	8.5	8.3	8.8	9.0	9.7
VAT	8.1	8.7	7.2	7.6	7.8	6.9	6.8	6.6	7.1	7.2	7.7
Excise	1.0	1.0	0.8	0.9	1.2	1.0	1.1	1.0	0.9	0.9	1.1
Tourism	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.4	0.4	0.5
Ecological	0.2	0.2	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Taxes on international trade	4.6	4.5	4.0	4.1	4.2	3.8	3.7	3.7	3.8	4.1	4.2
Other taxes	**1.3**	**1.1**	**0.7**	**0.5**	**0.6**	**0.5**	**0.5**	**0.5**	**0.4**	**0.3**	**0.3**
Stamp duties	1.2	1.1	0.7	0.5	0.6	0.4	0.4	0.4	0.4	0.3	0.3
Social security	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Grants	**4.4**	**4.6**	**5.5**	**6.8**	**2.9**	**2.8**	**2.6**	**1.8**	**2.5**	**2.7**	**3.5**
3. Non-tax revenues	**2.2**	**2.2**	**3.2**	**2.9**	**2.7**	**3.2**	**3.6**	**3.5**	**5.1**	**4.4**	**4.2**
Sales of public goods and services	1.5	1.4	2.3	2.2	2.1	2.6	2.5	2.6	2.9	3.0	3.0
Leasing revenues	0.5	0.4	0.7	0.2	0.2	0.3	0.3	0.1	0.6	0.7	0.6
Others	0.3	0.4	0.3	0.4	0.3	0.4	0.8	0.8	1.6	0.7	0.6

Source: MOF

Figure 2.1 Total Revenues-to-GDP Ratio Compared to Revenues in 2017 (% of GDP)

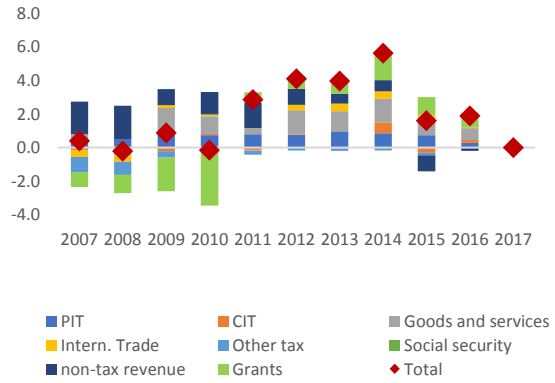
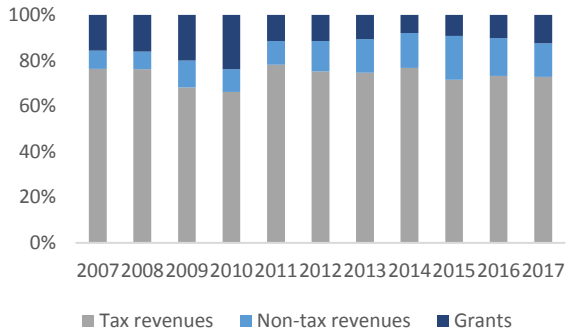


Figure 2.2 Share of total revenues, 2007–17 (Percent)



Source: MOF.

61. **Although tax collection remains highly dependent on indirect tax revenue, recent reforms have boosted VAT and CIT tax collection.** Indirect taxes account for about two-thirds of total tax revenue in 2017, with VAT and international trade tax contributing 37 percent and 20 percent of total tax revenues. VAT tax collection started to increase in 2015 as the result of the harmonization of VAT tax rates in 2013 (particularly in the tourism sector) but also continuous efforts to strengthen tax administration, digitalize VAT payments and combat tax evasion. Furthermore, the government in 2013 introduced the tourism tax, but its contribution remains marginal (about 2 percent of tax revenues). Similarly, the ecological tax contributed only 2 percent of tax revenues in 2017, compared to 1 percent in 2007. Though low, the contribution from excise taxes went up from 4.7 to 5.4 percent. Direct taxes are also important. PIT contributed 19.6 percent of total tax revenues and CIT 11.7 percent in 2017 (**Error! Reference source not found.**). In the last decade, CIT revenue remains stable at around 2.5 percent of GDP. PIT revenues increased from 3.7 to 4.1 percent of GDP, reflecting new PIT and CIT tax codes but also introduction of a specific framework for small and micro enterprises in 2014 (**Error! Reference source not found.**). Property taxes represent less than 0.1 percent of total revenues.

Figure 2.3 Composition of Tax Revenues, 2007–17 (Percent)

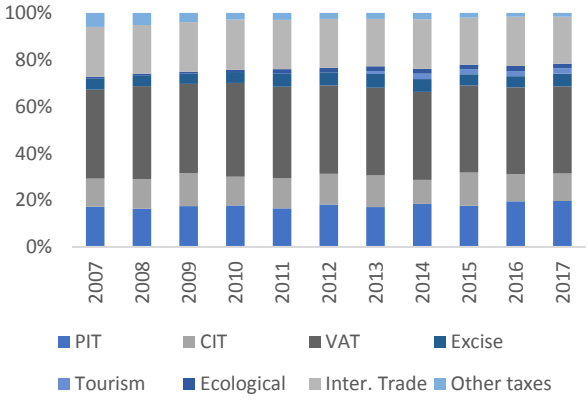
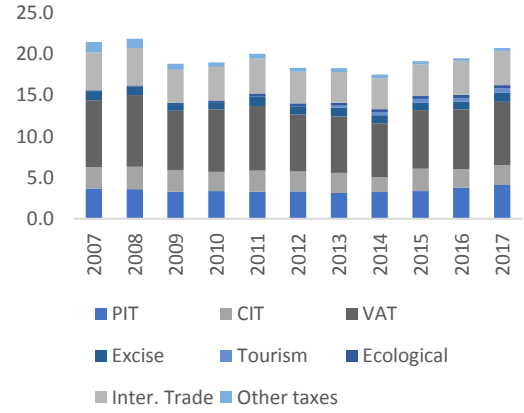


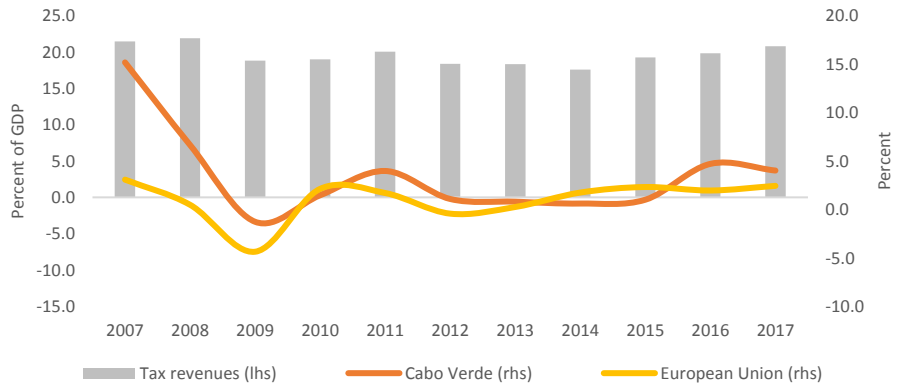
Figure 2.4 Tax Revenues to GDP



Source: MOF.

62. **Tax revenues have been very sensitive to economic cycles in Europe as well as tax policy changes.** Notably, during the last global and European debt crisis tax revenues fell from 21.8 percent in 2008 to 18.8 percent of GDP in 2009 (**Error! Reference source not found.**). The impact of the economic slowdown in 2008/2009 on tax collection was exacerbated by CIT and PIT rate reductions. Similarly, tax collection strongly recovered since 2013 thanks to tax measures implemented to strengthen VAT and CIT tax collection. Volatility across the distinct categories of revenues is also high. Tax revenues recorded a standard deviation of 1.8 between 2006 and 2016. The VAT is the most volatile with a standard deviation is 1.3 compared to 0.7 for PIT and 0.8 for CIT.

Figure 2.5 Tax Revenues and GDP growth



Source: WDI

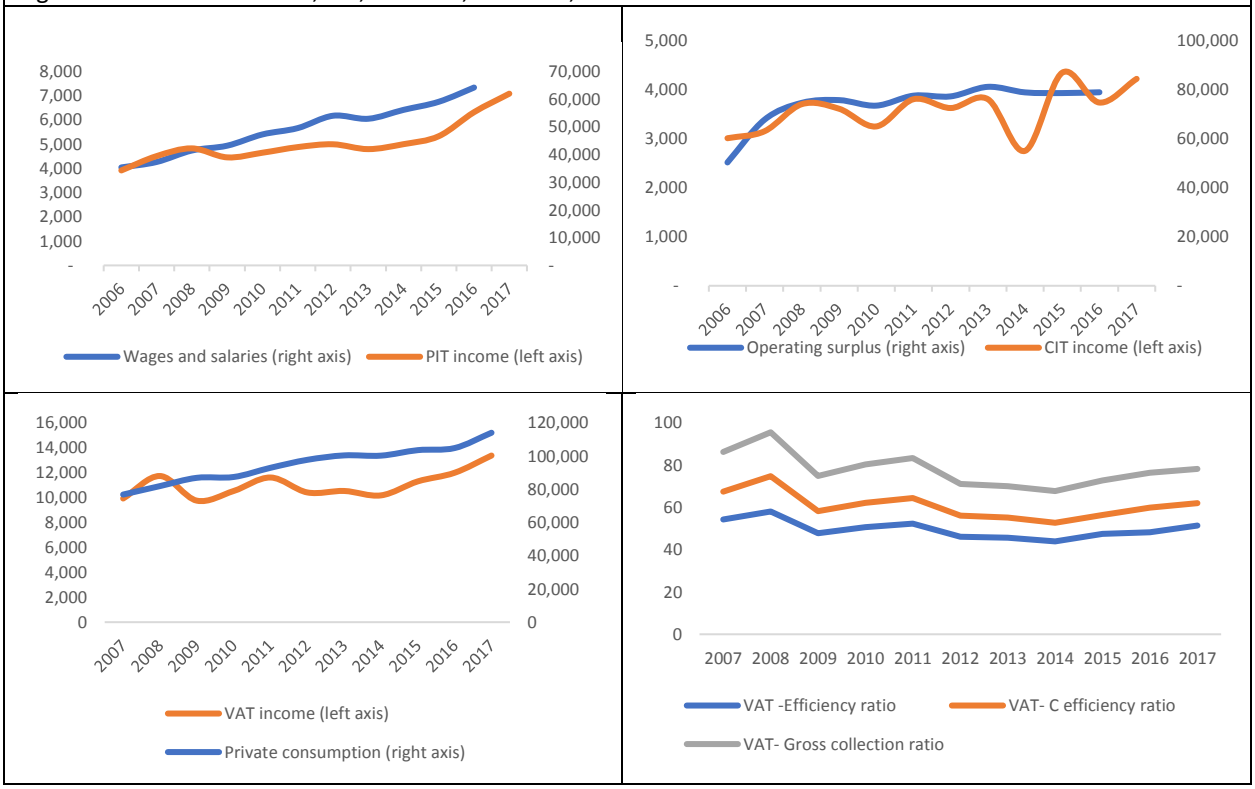
63. **The lackluster revenue performance over the past decade is also explained by the narrowing of the tax base due to increased tax avoidance and several tax exemptions.** The crisis in the European Union - the country's main trade and investment partner – adversely affected the tax base for corporations in Cabo Verde. However, while profits and private consumption started to recover in 2012 revenues from the main taxes unperformed relative to expectations. The only exception was for CIT in 2015, when the authorities switched to intra-year payments in parallel with ex-post collection for 2014 and settlement of tax arrears. The shortfall in expected revenues may be explained by discretionary policy changes and increased tax avoidance. Notably, the VAT C-efficiency fell from about 65 percent in 2007–11 to 57.7 percent in 2014—17[9]. This happened in a context of the same or an even higher tax rate, pointing to enforcement problems and a gradual narrowing of the VAT tax base[10] (Figure 2.6). CIT collection represented only 20 percent of the theoretical tax base until the introduction of the MSME regime in 2014 when it increased to 40 percent (Figure 2.6). Similarly, actual PIT collection is estimated at 50 percent of theoretical tax collection, indicating a high degree of tax evasion and under-reporting. According to the 2015 Continuous Multi-Objective Survey, more than 60 percent of informal units do not want to register and 71.5 percent do not want to pay taxes[11].

[9] "C-efficiency" is VAT revenue divided by the product of the standard rate and aggregate private consumption. For a VAT with no exemptions, a single rate, and full compliance, C-efficiency would be 100 percent.

[10] The VAT rate was temporarily increased by 0.5 percent in 2016

[11] The informal sector employs 10.5 percent of the working-age population and accounts for 12 percent of nonagricultural GDP.

Figure 2.6 Tax Bases for PIT, CIT, and VAT, 2006–16, Millions of Escudos



Source: INE, MOF.

Tax Rates

64. **Adjustments to tax rates affected tax collection.** The performance in CIT revenues coincided with a drop in the CIT rate in 2009 from 35 to 25 percent and the introduction of the micro enterprise tax, which lowered the rate for micro and small enterprises to 4 percent. PIT rates were also reduced in 2009 in the aftermath of the global crisis. However, PIT rates were increased in 2016 boosting revenue. Except for 2016 when the rate was temporarily increased to 15.5 percent for that year, the VAT has been 15 percent since it was introduced in 2005 (Table 2.2)[12]. Prior to 2005 the sales tax underperformed severely compared to the level that total consumption would suggest. The positive turnaround in VAT revenue did not occur until 2016, when the standard rate went up and several administrative reforms were introduced, among them a special regime for settling tax debts and simplification and digitalization of procedures and services[13].

[12] There has been no change in the main exemptions: medical services, education, social support and vocational training, banking and financial transactions, insurance and reinsurance, and imports of certain good. Some changes to the taxable basis, however, were introduced in relation to telecommunication services and energy.

[13] These included electronic declaration on VAT, electronic return and payment reduction of declarations for SMEs.

Table 2.2 Nominal Tax Policy Rates in Cabo Verde, 2006–17, Percent

	2006	2008	2009	2012	2014	2015	2016	2017
CIT	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0
Standard rate					*4.0*	4.0	4.0	4.0
Reduced rate								
PIT								
Lowest Rate	15.0	15.0	11.67	11.67	11.67	11.67	16.5	16.5
	20.0	20.0	15.56	15.56	15.56	15.56	23.1	23.1
	27.5	27.5	21.39	21.39	21.39	21.39	27.5	27.5
Top rate	35.0	35.0	27.22	27.22	27.2	27.22		
	45.0	45.0	35.0	35.0	35.0	35.0		
VAT rate								
Standard rate	15.0	15.0	15.0	15.0	15.0	15.0	15.5	15.0
Reduced rate	6.0	6.0	6.0	6.0				

Source : PKF Guide 2015, 2016, PwC online information, Sistema Fiscal de Cabo Verde, 2013.

65. **Low tax buoyancy in Cabo Verde reflects low responsiveness to economic trends, suggesting inefficiencies in tax collection [14].** Low tax buoyancy in Cabo Verde reflects both the weakness of the tax bases and the revenue collection inefficiency introduced by past tax changes. It is estimated that for every 1 percentage point increase in real GDP, total tax revenue will climb by only 0.8 percentage point. CIT and PIT is also below unity, approximating 0.7 percentage point and 0.8 percentage point, respectively. VAT is the most responsive to changes in income with revenue rising by 0.9 percentage point for every 1 percentage point increase in real GDP grows.

Use of Tax Expenditures[15]

66. **The extensive use of tax expenditures has resulted in a costly and distortionary tax regime.** The cost of tax expenditures (TEs) is estimated at 4.5 percent of GDP in 2016 (Table 2.3). Despite difficulty in comparing TE estimates prepared in 2013 by the World Bank with the most recent estimates - they cover a somewhat different range of tax expenditures with neither providing a full picture on the breadth of TEs in Cabo Verde-, the cost of TEs has not changed much[16]. TEs went up from 3.9 percent of GDP (about 36.3 percent of tax revenues) in 2015 to 4.5 percent (almost 39.3 percent of tax revenues) in 2016. Yet, even these numbers are probably an underestimation of the real cost of TEs, which could amount to about 3 percent of GDP for VAT, about 2 percent for CIT, and 1 percent in import duties (ID). Overall, the tourism sector has been the largest beneficiary of tax expenditures. In 2016 it accounted for US$29 million in TEs (40 percent of total tax expenditures). In addition, the financial sector, construction, and some manufacturing activities are beneficiaries of the tax expenditures system. TEs are a considerable threat to the integrity of the tax system because they create loopholes in legislation, make the system very complex and nontransparent, and may lead to distortions in economic activity. The result is an unfair tax regime.

[14] Tax buoyancy is defined as the change in tax revenue (actual net receipts) in a given year, divided by the change in the tax base, and measured in real terms to avoid a bias towards 1 that may have been caused by using nominal values in calculation.

[15] Tax expenditures are subsidies delivered through the tax code as deductions, exclusions, and other tax preferences (tax incentives) derived using the revenue forgone methodology.

[16] Country Economic Memorandum (2013) and World Bank Note in Investment Incentives (2016).

Table 2.3 Cost of Tax Expenditures

	2009	2010	2015	2016
Import duties (ID)	1.2	1.2	1.1	1.5
Corporate income tax (IURPC)	0.5	0.5	1.7	1.4
Special consumption tax (ICE)	0.1	0.2	NA	NA
Value-added tax (VAT)	3.2	4.5	1.2	1.6
Total	5.0	6.4	3.9	4.5

Source: Data for 2009-10: CV Country Economic Memorandum, 2013; data for 2015-16: "Investment Incentives in Cabo Verde," 2018. Note: The estimates for 2015-16 focuses on investment tax exemptions (but it includes VAT collected at customs). PIT exemptions are not included. Estimates for 2009-10 focus on VAT (include both domestic and VAT collected at the customs) but has only partial estimation for TE in CIT.

67. **The most important tax expenditures for investment and production are in the CIT and ID regimes.** The ID benefits are exemptions or tax discounts granted for imports of goods not produced in Cabo Verde. They are granted mainly to producers but also to some individuals and institutions. These exemptions, which are difficult to monitor, create a significant risk of domestic resale of exempted goods. They are also not effective in reducing the corporate tax burden (World Bank 2018). CIT tax expenditures consist of exemptions, tax reductions, reduced rates, deductions from the tax base, and reduction of the tax on distributed profits. The main ones are tax credits for investment and jobs; "conventions" (CIT holidays and import duty exemptions negotiated project-by-project); the international financial institutions (IFI) tax regime; the international business center (CIN); and the micro and small enterprises program. Many incentives offered overlap (e.g., the preferential CIT rates under IFI/ CIN and the investment tax credit); some are simply not good practice; and EU rules, such as conventions, may be negotiated project-by-project.

68. **VAT tax expenditures are costly as they grant exemptions and special rates for a long list of goods and entities, in particular goods with administrated prices (including energy, water, fuel, communication).** Most VAT exemptions are for merit goods and services (medical services, education, social assistance, and cultural and sporting activities). The list also includes food; some public services (e.g., postal, garbage collection, and funeral services); financial services difficult to tax (banking and other financial transactions, insurance); not-for-profit institutions; building construction; and goods imported for governments agencies such as motorized vehicles. There are also reductions in the VAT incidence basis for goods and services with administered prices. Because the VAT tax expenditures are costly, they can be used to either address externalities or deal with redistribution. The effective implementation and operation of different VAT regimes also imply burdensome processes.

69. **Tax expenditures are not only costly, they also erode the tax base, significantly complicate tax administration, and heighten discretion in policy making because the process of granting tax concessions is often quite arbitrary.** Recent studies of tax expenditures in the Caribbean region (Chai and Goyal 2008; Cubbedu et al. 2008) conclude that although tax expenditures have some effect on foreign direct investment, the impact is far less significant than would be improving the economic and institutional environment, particularly the quality of institutions, upgrading infrastructure, making regulatory arrangements transparent, lowering energy costs, and promoting flexibility in labor markets. Moreover, based on survey data from a Vale Columbia Center (2013) study, tax expenditures have little importance to investors, who consider incentives relatively irrelevant to investment decisions.

MSME Framework

70. **The current tax framework for Micro and Small Enterprises (MSMEs) may have undermined tax collection, encouraging tax avoidance.** The *Regime Especial das Micro e Pequenas Empresas* **(**REMPE) framework has allowed MSMEs to benefit from very low effective tax rates. The system was designed to encourage formalization and increase competitiveness of MSMEs with the introduction of different tax treatment (differentiate tax rate and ability to use tax incentives) for firms given based on legal form and size (Box 2.1). In contrast to its objectives, early evidence suggests that it has undermined tax collection (through tax avoidance), introduced horizontal inequality and some efficiency losses. Since MSMEs offered large tax incentives to small firms it has encouraged firms to remain small in terms of turnover and the number of employees. Indeed, the number of small enterprises increased by 29 percent whereas the number of medium-enterprises (that are taxed under general regime) shrunk by 14 percent between 2014 and 2016. The lack of neutrality often leads to economic inefficiency losses (e.g. small firms often are less productive), tax avoidance and forgone revenues. In addition, avoidance of taxation was introduced by including self-employed (including liberal and high skilled professions) into the regime, which often leads to individuals establishing multiple microenterprises owned and controlled by connected persons.

Box 2.1 Simplified Regime for MSMEs in Cabo Verde

The Simplified Regime for Micro and Small Enterprise (*Regime Especial das Micro e Pequenas Empresas* – REMPE), introduced in 2014 with the objective of increasing competitiveness and formalization of micro and small enterprises.

REMPE is simplified tax regime that replaced corporate and personal tax on income, VAT, fire tax and contribution for social security by the Special Unified Tax (SUT) – 4 percent on the turnover. It also offers the 30 percent discount of SUT during 2 years for micro enterprises, the 30 percent discount in the first year and 20 percent in the second year of the SUT for small businesses. It applies to enterprise that employ up to five employees and has a gross annual turnover not exceeding 5,000,000.00 CVE (micro-enterprise). It is also applicable to business unit employing between six and ten employees and having a gross annual turnover of more than 5,000,000 CVE and less than 10,000,000 CVE. Initially, this regime excluded liberal professional and importers, but this was revoked in 2016. Taxpayers in this regime are not required to maintain organized accounting for tax purposes.

Source: Law 70/VIII/2014

2.2 Benchmarking Analysis of Revenues

71. **Cabo Verde is lagging in terms of revenue mobilization.** With an average of 26.3 percent of GDP, Cabo Verde collects less revenues than the 28.3 percent of GDP recorded by aspirational peers (Figure 2.7). Seychelles and St. Kitts and Nevis are the only countries among aspirational peers where total revenues account for more than 30 percent of GDP. In 2014–17, tax collection in Cabo Verde accounted 19 percent of GDP, which was above structural peers (16.7 percent of GDP) and below aspirational peers (22.3 percent of GDP)[17]. Tax revenue accounted for about 70 percent of total revenues in Cabo Verde but close to 90 percent for St. Lucia, St. Vincent and Grenadines, and Mauritius. The country also receives less grants than Bhutan and STP and collects less in non-tax revenues than some aspirational peers (Figure 2.8). There are, however significant disparities in non-tax revenue than among peers.

[17] Mauritius, Seychelles, St. Lucia, St. Kitts and Nevis, and St. Vincent and the Grenadines.

72. **The tax mix in Cabo Verde is broadly positive but tax on trade is slightly oversized relative to peers.** The tax structure in Cabo Verde is dominated by indirect taxes, which represent 67 percent of total taxes revenues compared to an average of 57 percent for structural peers. However, for St. Lucia, Samoa, and St. Kitts and Nevis, 75 percent of total taxes come from indirect sources. The share of revenues from goods and services is similar across the countries, but inflows from international trade is higher in Cabo Verde which suggests that there is still scope for further trade liberalization[18]. Cabo Verde's ecological tax brings 0.4 percent of GDP, below Mauritius (2.5 percent of GDP), and offers a potential source of expanded revenue. As Cabo Verde is generating substantially more in PIT revenues, its direct taxes account for 25 percent of total taxes, marginally above the aspirational peer average of 23.7 percent (Figure 2.10). Cabo Verde collects less in "other taxes" than aspiration peers, which average 6.9 percent of total tax revenue. In Cabo Verde and Sao Tome and Principe, other taxes correspond to stamp duties while in Seychelles or Mauritius it refers to licenses for infrastructure or special levy on banks (Figure 2.9).

Figure 2.7 Average Total and Tax Revenue, 2014–17 (Percent of GDP)

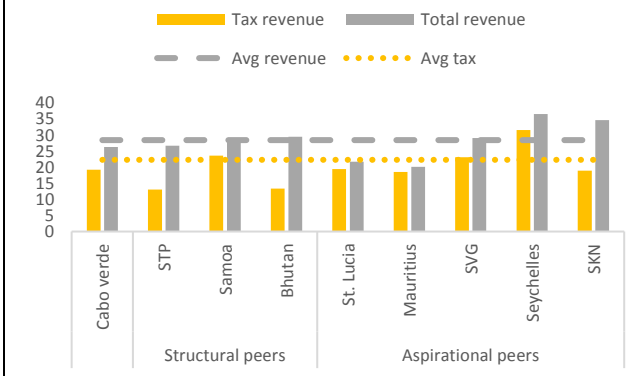


Figure 2.8 Components of Total Revenue (Percent)

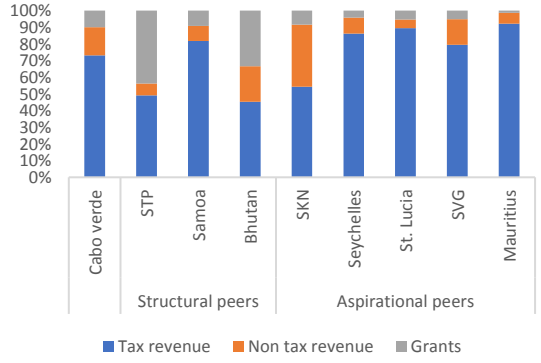


Figure 2.9 : Revenue Composition, Averages, 2014–17, (Percent of GDP)

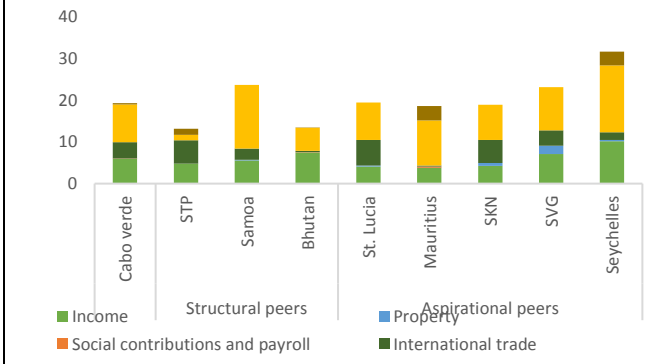
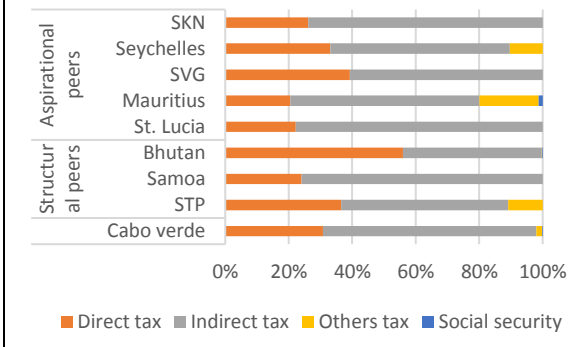


Figure 2.10 Tax Revenue Composition (Percent)



Source: IMF GFS and Article IV (2016,2017,2018); MoF.

[18] Globalization and the changing world of work continue to have profound impacts on the distribution of income and the ability of tax systems to promote stronger and more inclusive growth. OECD research has found that taxes on income (PIT and CIT) are associated with lower economic growth (Akgun, Bartolini and Cournède, 2017). OECD research has highlighted the need to shift the tax mix away from income taxes towards taxes that have less negative impacts on economic growth, including taxes on property and on consumption, while also noting the importance of environmental taxes for internalizing external costs related to health, climate, and the environment.

73. **Property tax revenues in Cabo Verde is relatively insignificant due to low effective rate, narrow tax base and potential under-reporting.** Cabo Verde has a comprehensive property tax which is levied on ownership as well as transfer of ownership (Nhabinde 2009). The real estate tax rate is set at 1.5 percent of the taxable value as of the previous year and is paid on annual basis. The taxable value is only part of the total value as declared by the owner, which makes the effective tax rate very low. The basis of the system, self-declaration of property value, is thus open to abuse. The effective rate—the tax as a percentage of actual market rather than declared value—is likely to be very low (McCluskey 2017). The property tax law also exempts, among others, properties of pensioners, those acquired with "tourist utility status" for construction of tourist-related improvements, and property acquired exclusively for industrial purposes. Cabo Verde could significantly enhance its property tax collection (currently close to 0.1 percent of GDP) as St. Kitts and Nevis and St. Vincent and the Grenadines collect on average 0.7 and 2 percent of GDP, respectively.

Tax Capacity and Policy

74. **The benchmark analysis found that tax revenues in Cabo Verde is lower than aspirational peers but does not consider its tax capacity.** The analysis provides useful insights into how Cabo Verde compares to small island countries at a similar stage of development and to countries that Cabo Verde looks up to, but it does not fully correct for country-specific characteristics that might explain its tax revenue performance. Tax capacity depends on a country's specific characteristics including: economic (degree of development, openness to external partners, sectoral structure, size and structure of firms); political (choices and preferences of the society); institutional (the effectiveness of government, the efficiency of tax administration, labor market institutions and types of contracts); and even geographic (long and leaky borders, extent of territory, population density). This section will use an econometric approach that takes these differences into account to estimate Cabo Verde's tax capacity (Annex 6).

75. **Cabo Verde's tax performance is not at its tax capacity.** Results from econometric analysis suggest that its tax potential was 20–22 percent of GDP (average in 2013–15) providing some scope to enhance tax revenue. Based on stochastic frontier analysis, Cabo Verde could increase its tax revenues by about 3 percentage points of GDP if it could collect the amount of tax revenues mobilized by the best-performing peer, one with structural characteristics and institutional development similar to that of Cabo Verde[19]. Average peer collections are below the peer maximum with a tax gap of about 1 percent 2015 - the difference between actual and potential tax collection based on average peer potential. For Cabo Verde, indirect taxes, especially VAT, have the most potential (Figure 2.11 -14). The VAT accounted for 70 percent of the 2013-15 gap. There is also some scope, though much smaller, for raising more from income taxes. In some peer countries, actual tax receipts are larger than would be predicted, so their scope for raising revenues is limited. For example, Seychelles is a country where the tax ratio is already high (Figure 2.15).

[19] This is based on stochastic frontier analysis that compares a country to the frontier in the sample. Tax frontier analysis is an extension of the standard regression model of frontier analysis and it estimates maximum output—in this case maximum tax revenue—that a country can achieve given a set of inputs (characteristics) compared to the frontier in the sample. The tax variation also explicitly models the inefficiency associated with country-specific characteristics that prevents achievement of maximum tax revenues.

Figure 2.11 Tax Potential, Cabo Verde, Percent of GDP

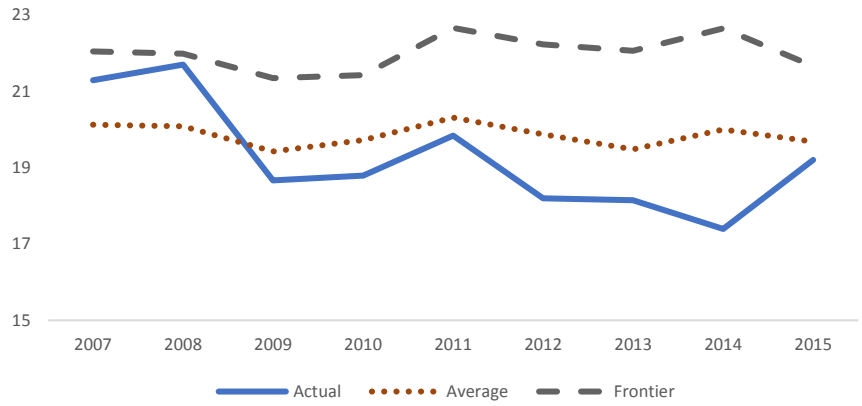


Figure 2.12 PIT Tax Potential, Percent of GDP

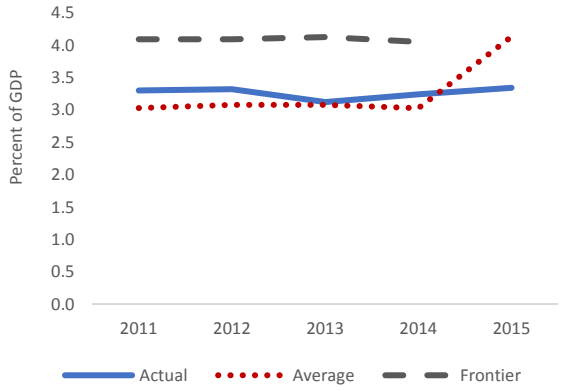


Figure 2.13 CIT Tax Potential, Percent of GDP

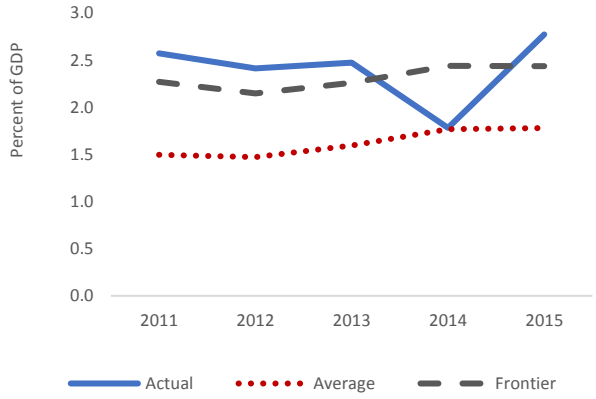


Figure 2.14 VAT Tax Potential, Percent of GDP

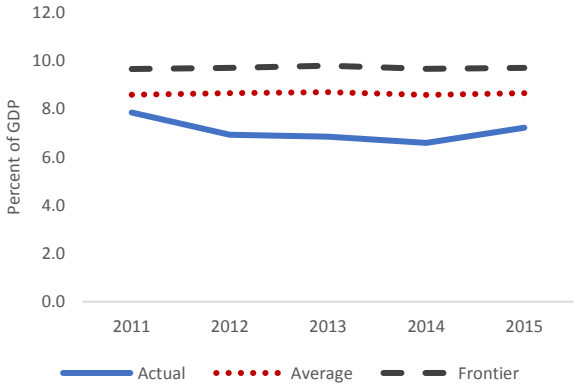
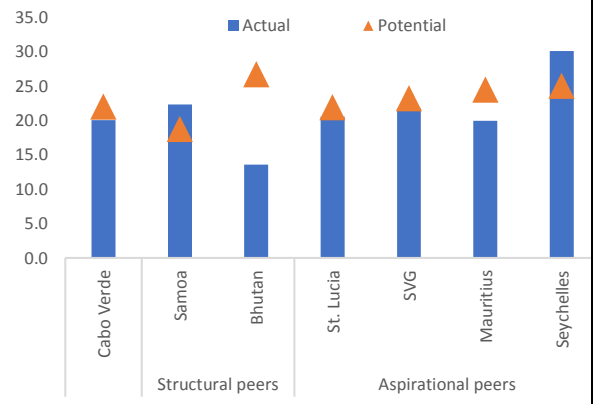


Figure 2.15 Benchmark Tax Gaps, Percent of GDP



Source: IMF GFS, OECD. Note: The Frontier line shows the maximum revenue generated by a country with the same institutional development as Cabo Verde.

76. **Tax rates in Cabo Verde are broadly in line with peers, although some tax rates are higher.** Its CIT rate is the second lowest and **there** is a special rate for micro-enterprises. Small business tax regimes are often used in low- and low-to-middle-income countries in recognition of compliance problems for small and micro businesses. Cabo Verde micro enterprise regime seem to be an exception in its peer group. Only a few peers for Cabo Verde (e.g., St. Lucia) have a genuine turnover-based presumptive tax regime with minimal accounting requirements for small businesses. Cabo Verde's PIT rates are comparable to rates prevailing in other countries but higher than the average, despite the 2015 reform that lowered rates and reduced their number. The standard VAT rate is in line with peer countries as the government increased its VAT tourism-related activities from 6 to 15 percent (Table 2.4). However, some goods and services have their own specific rates, which results in a high variance (e.g. diesel, fuel. Petroleum, telecommunication services and electricity).

Table 2.4 Tax Rates in Peer Countries, 2016–17, Percent

Country	CIT	PIT		VAT / Sales Tax rate	Reduced VAT (Hotels and Restaurants)
		Lowest	Highest		
Cabo Verde	**25**	**16.5**	**27.5**	**15**	**15**
Mauritius	15	-	15	15	15
Samoa	27		27	15	15
São Tomé and Príncipe	25	0%	25	140[20]	N/A
Seychelles	33	-	15	15	15
St. Kitts & Nevis	33	N/A	N/A	17	10
St. Lucia	30	10	30	15	10
St. Vincent & Grenadines.	32.5	10	32.5	15	11

Source: MOF. Note: 2017 rates for Cabo Verde, 2016 for the rest.

77. **Declining VAT efficiency reflects compliance issues and tax base erosion.** Tax efficiency— which is an **appropriate** gauge of collection efforts – shows that only Mauritius and St. Kitts have lower VAT efficiency than Cabo Verde and its C-efficiency is below the best- performing peers**.** For every 1 percentage point of VAT rate, the country collects 0.5 percent of GDP and its C-efficiency is close to 60 percent, which means that 40 percent of the tax base (total consumption) is not taxed[21]. Meanwhile, in best-performing Seychelles, more than 80 percent of consumption is taxed (Figure 2.18) [22]. The trend is also not favorable. Over the last decade, C-efficiency and VAT revenues have declined from 67.4 to 61.9 in 2017 percent without any major changes to a standard rate, which implies either increasing base erosion or intensified compliance problems. The current low VAT efficiency in Cabo Verde may stem from the numerous VAT exemptions, differentiated rates, and the high VAT threshold. VAT exemptions at customs amounted to 1.5 percent of GDP in 2016, and total VAT exemption reached 3 percent.

[20] Maximum Sales Tax Rate.

[21] VAT efficiency (productivity) = VAT revenues as percent of GDP divided by the standard VAT rate. The C-efficiency ratio is the ratio of VAT collection to final consumption times VAT standard rate.

[22] Increasing the VAT-efficiency to the level of Seychelles could add about 3.2 percent to GDP.

78. **CIT and PIT productivity are on par with peers, but the efficiency analysis is constrained by data availability.** Although below those of Mauritius and Seychelles, Capo Verde's CIT efficiency is close to the average for peers[23]**.** Every 1 percent of the rate makes it possible to collect 0.1 percent of GDP on enterprise revenues. However, Mauritius has much higher CIT efficiency with a much lower tax rate (Figure 2.16) because in Cabo Verde an estimated 1.5 percent of GDP is lost to exemptions. Cabo Verde's PIT efficiency is relatively good. For every 1 percent of the rate, Cabo Verde collects 0.15 percent of GDP from individuals. Only Seychelles collects more (0.29 percent of GDP), although the Seychelles maximum PIT rate of 15 percent is much lower than Cabo Verde's maximum of 27 percent (Figure 2.17). Clearly, the Seychelles system is very productive. There is little information on the magnitude of PIT TEs despite the vast web of deductions and rebates available[24]. The complexity of the system deters voluntary compliance and raises the cost of enforcement**.**

79. **Though the magnitude of tax expenditures in Cabo Verde is similar to Caribbean tourism-dependent economies, it nevertheless constitutes a serious revenue loss.** Figure 2.19 shows how the country's aggregate TEs compare internationally for countries where recent data are available. Compared to this group, a mix or low-, medium- and high-income countries, Cabo Verde's TEs appear high.[25] However, they are not so high when compared with tourism-dependent Caribbean island economies, where tax expenditures are a core element of tax structure. Recent studies (Norregard et al. 2015; IMF 2015)[26] estimate that revenue forgone for the main taxes (VAT, import duties, excises, and the CIT) amounts to 4.0–6.5 percent of GDP in Antigua and Barbuda, Dominica, and St. Kitts and Nevis. The rate is above 7 percent in Grenada, St. Lucia, and St. Vincent and the Grenadines and nearly 10 percent in Jamaica.

[23] Defined as CIT/PIT tax collection as percent of GDP divided by the applicable tax rate

[24] There are specific deductions for each category of income, using as criteria the costs or charges necessary to attain them. Thus, spending on health and education, pensions, housing rents, interest on housing debt, construction and improvement of real estate, health and personal accident and some life insurance premiums, the amounts invested annually in government bonds and contributions to social security or single social tax for the taxable person or their dependents may all be deducted from taxable income.

[25] Caution is required in making international comparisons of tax expenditures because the methodology and quality of data used in estimations by each country may differ considerably.

[26] IMF FAD tax incentives and property taxation in the ECCU (John Norregaard and al., January 2015); IMF-FAD. Jamaica. Report on revenue administration gap analysis program-the GCT tax gap (February 2015)

Figure 2.16 CIT Efficiency, 2017

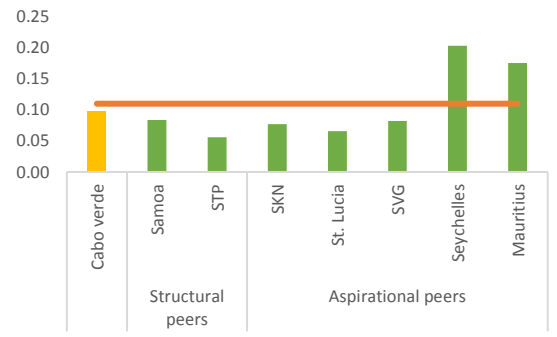


Figure 2.17 PIT Efficiency:27, 2017

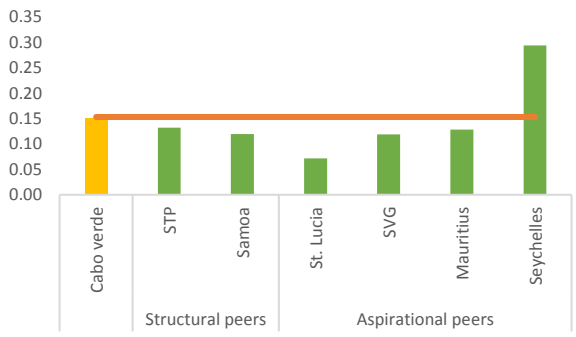


Figure 2.18 VAT Efficiency, 2017

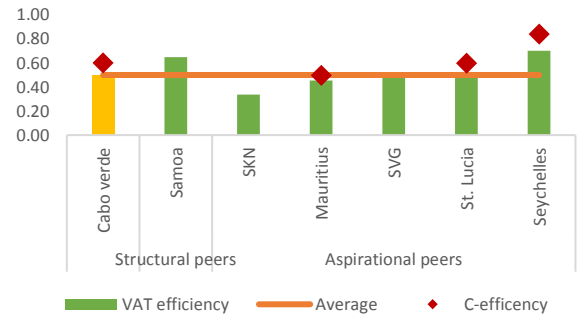
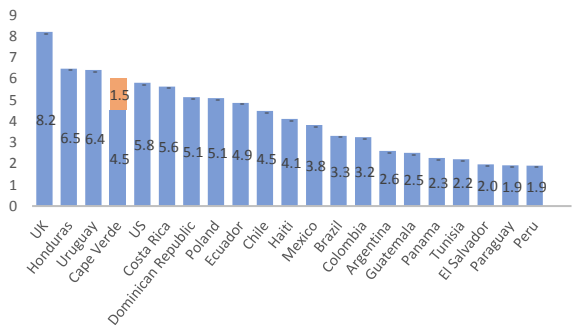


Figure 2.19 Tax Expenditures, Comparator Countries, Percent of GDP*28



Source: Investment TE in Cabo Verde, 2018, Polish MOF, IMF 2013. ECOPA, ECOPA 2012 OECD 2010. Data is for 2007 for US and UK, 2011 for Haiti, 2012 for other countries, 2014 for Poland and 2016 for Cabo Verde.

Vulnerability to External Shocks

80. **Revenues is usually more volatile in small-island countries than in other developing countries,** primarily because their narrow tax bases and undiversified economies make them vulnerable to exogenous shocks such as changes in the terms of trade or tourism flows and natural disasters (IMF 2015)[29] (**Error! Reference source not found.**, **Error! Reference source not found.**). Most small countries also find it difficult to build up public savings to buffer excess volatility. The problem is particularly severe in non-industrialized economies where tax-base volatility is higher than in industrial economies and where fragile political institutions lead to short-sighted policies (Talvi and Végh, 2000).

[27] Based on the average of PIT rates for Cabo Verde.

[28] ECOPA, (2012) Data is for 2007 for US and UK, 2011 for Haiti, 2012 for other countries, 2014 for Poland and 2016 for Cabo Verde.

[29] IMF paper Strengthening Fiscal Frameworks and Improving the Spending Mix in Small States

81. **Due to limited strategies to mitigate volatility, tax revenue in Cabo are more volatile than in other small-island tourism-based economies.** Compared to its peers, total revenue volatility in Cabo Verde is 3 times lower (2.8 vs. an average of 8.3 for the overall sample). Even compared to tourism-based economies generally, Cabo Verde's revenues also seem less volatile. Higher revenue volatility in tourism-based economies often comes from changes in trade flows, which, controlling for GDP, cover tourism, remittances, and grants. The country's standard deviation of detrended tax revenues[30] is close to 2 while the average for peers and tourism-based economies are 1.5 or less. Its revenue volatility seems to come predominantly from VAT and CIT.

Figure 2.20 Total Revenue Volatility, 2006–16
Standard deviation

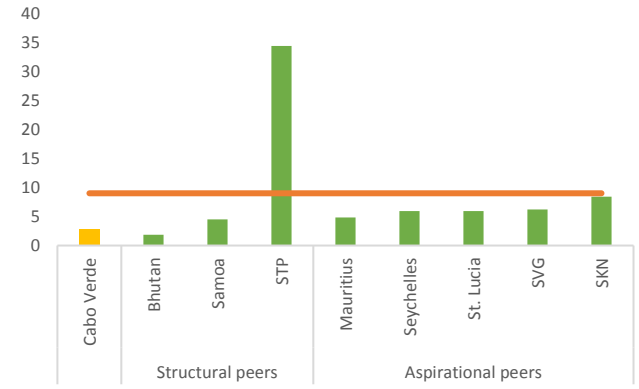
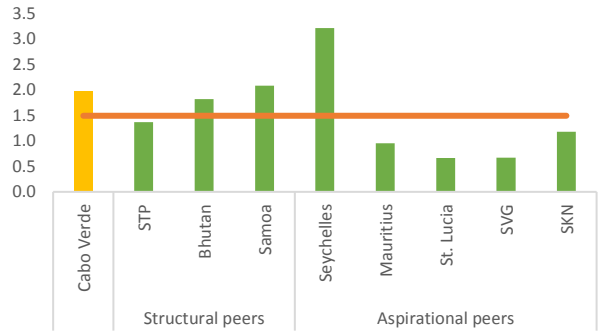


Figure 2.21 Tax Revenue Volatility, 2006–16
Standard deviation



Source: GFS data.

[30] Data are from IMF GFS database and Article IV report. We used a Hodrick-Prescott filter to detrend total and tax revenues as a percent of GDP and then calculated the average standard deviation.

Box 2.2 Tourism and the Cabo Verde Economy.

Like many other small -island developing states, Cabo Verde depends heavily on tourism and remittances (Figure B 2.1). This subjects it to two mutually reinforcing types of concentration risk, related to

- Goods and services: Tourism directly accounts for more than 40 percent of GDP, provides almost 40 percent of formal employment, and attracts 70 percent of foreign direct investment (FDI; Figure B 2.2). Over the past five years, the country has averaged more than 500,000 visitors annually and tourism receipts accounts for more than 50 percent of total exports.
- *Markets*: Over 75 percent of tourists originate in Europe. In particular. about 30 percent in the United Kingdom, 10-15 percent in Germany, 10 percent in Belgium and the Netherlands, and 10 percent in Portugal.

This concentration makes Cabo Verde vulnerable to shocks affecting European countries, which depress tax revenues from CIT, PIT, and VAT (tourist consumption of goods and services, wages paid by companies operating in the sector, and the profit and investments of firms within the sector).

Cabo Verde also receives remittances amounting to 13 percent of GDP, which may affect VAT tax collection through final consumption.

Figure B 2.1 Tourism Receipts, Number of Arrivals and Tax Revenues, Year-on-Year Percent change

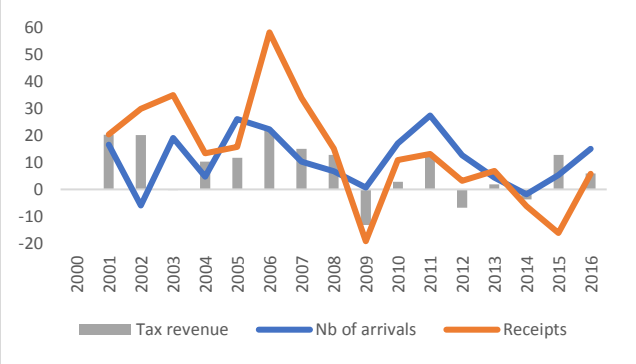
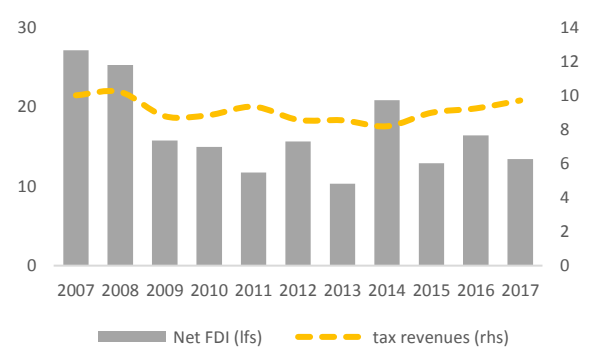


Figure B 2.2 FDI and Tax Revenues Percent of GDP



Source: WDI, MoF.

Complexity and Compliance

82. **Cross-country comparisons suggest a close relationship between the tax revenue-to-GDP ratio, the business climate, and government effectiveness** (Figure 2.23). In developing countries tax revenue collection depends heavily on government efficiency. Thus, voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption are all important factors in determining tax revenues. Though Cabo Verde is strong in democratic institutions, rule of law, and control of corruption, the government is considered less effective relative to peers with a ranking of 56.7 out of 100, below Samoa, Bhutan, and Mauritius. Moreover, unlike other small-island countries like Mauritius, Seychelles, and Samoa, over the past 10 years Cabo Verde has struggled to make its government more effective (Figure 2.22). At 75th out of 190 countries in the latest Doing Business ranking, Cabo Verde ranked below the peer average of 70.

83. **The complexity of the Cabo Verde tax system affects its ranking on the World Bank Doing Business Paying Taxes Index.** It ranked 79 out of 189 countries on ease of paying taxes while Mauritius and Seychelles were in the top 30. Cabo Verde's position was low because of time spent paying taxes (180 hours a year compared to an average of 174 for peer countries and only 85 in Seychelles). It also takes Cabo Verde entrepreneurs 30 payments a year to cover their taxes compared to only 8 in Mauritius (Figure 2.22). The total tax rate seems to be less of the issue: Cabo Verde has a relatively low tax burden. Cabo Verde is very slow in processing VAT refunds: 35 weeks, compared to the global average of 27.8 weeks, 25 in the peer group, and less than 16 in Samoa and Seychelles (Figure 2.24, Figure 2.25).

84. **Complexity reduces tax compliance as it is associated with higher tax evasion.** Highly complicated tax systems are associated with high evasion. Firms in economies with higher rankings on ease of paying taxes tend to perceive both tax rates and tax administration as less of an obstacle (WB enterprise survey). High tax compliance costs are associated with larger informal sectors and more corruption. According to Schneider (2018), in Cabo Verde the weight of the hidden (cash) economy is 33–35 percent, making it one of the economies with the highest shadow at 66 out of 91 economies. For all its Caribbean aspirational peers, the cash economy[31] accounts for less than 30 percent. Only structural peers and Seychelles are above 50 percent. That is why the government has implemented several measures to combat tax fraud and evasion, such as (i) fomenting automatization of income tax collection, electronic invoicing and digital tax declarations; (ii) updating tax payer´s register among others.

Figure 2.22 Government Effectiveness, Percent

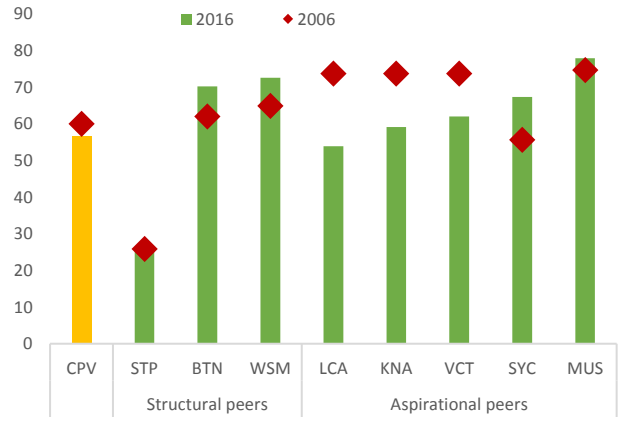


Figure 2.24 Doing Business Rankings on Paying Taxes

Figure 2.23 Business Climate and Tax Revenues

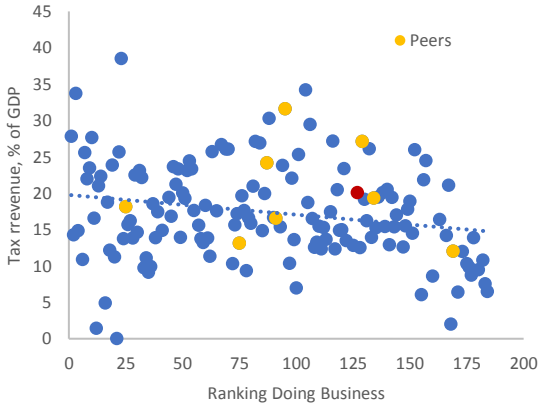
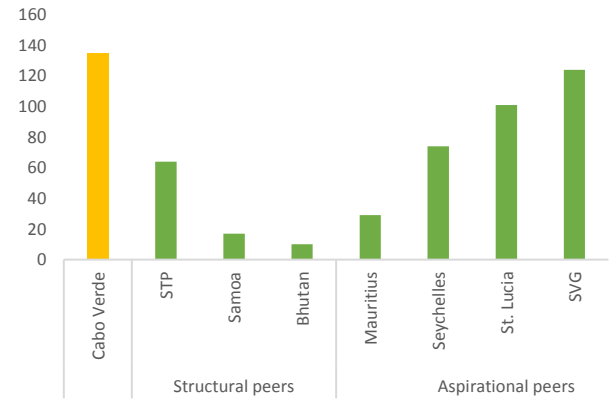
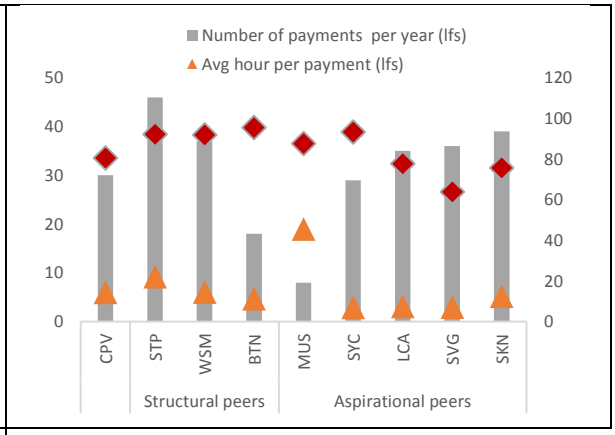


Figure 2.25 Payment Numbers and Average Hours for Paying Taxes

[31] Measured by M1/M2. The larger the shadow economy, the more cash will be used.





Source: World Governance Indicators, Doing Business

2.3 Recommendations to Improve Revenue Mobilization

85. **Given Cabo Verde's characteristics, it could raise revenues by up to 3 percent of GDP if tax policy and tax administration were further reformed.** Although the government has made significant effort to increase revenue mobilization, there is still scope for a more efficient revenue collection, that would increase effective tax rate without increasing nominal tax rates. Its average CIT and VAT productivity are below those of similar economies and bringing them up to benchmark levels could yield that additional revenue. To do this will require revising current CIT tax expenditures, reforming the microenterprise tax regime (REMPE), broadening the VAT base, unlocking the potential in property and tourism taxes together with streamlining tax administration to promote compliance.

Reforming the Tax Policy

86. **There is a scope for important broadening of the tax base in Cabo Verde.** Authorities could **broaden** the VAT base by eliminating unnecessary exemptions. The social considerations that motivated many items not currently being subject to the VAT can be better achieved by well-targeted social transfers. A reduction of 10 percent of VAT tax expenditures would bring additional revenue, amounting around 0.3 percent of GDP. In the case of CIT, the latest study of investment incentives[32] offers useful guidance on how to streamline tax expenditures to slash costs without much increasing of the effective tax burden. Among the most productive reforms would be redesigning the investment tax credit, suppressing the IFI regime, and limiting CIT holidays. Rethinking ID exemptions for investment projects, eliminating little-used instruments such as the internationalization and jobs tax credit programs, restricting the Conventions on Access to Public-Domain Land, and refocusing new conventions on non-tax and non-customs incentives are also very good areas for reform. Although this is currently underway, these reforms could bring at least 0.5 percent of GDP of additional revenue.

[32] World Bank Note in Investment Incentives (2016)

87. **The complexity of the PIT should be reduced to raise effectiveness.** This includes, for example, assessing the generosity of some PIT provisions including basic allowances and general tax credits. Tax deductions and rebates do not necessarily increase equity but do raise administrative and compliance costs and create loopholes for tax evasion. Consolidating exceptions could both simplify personal taxation and bring in more revenues. If we apply PIT historical effective tax rate to wages and salaries income (as a proxy for PIT tax base), PIT revenue would have been on average 0.4 percent of GDP higher in the past 3 years.

88. **The Government should improve the design of the REMPE framework and ensure it complies with best practices (Box 2.3). Cabo Verde** may consider an assessment of the REMPE system using a checklist on presumptive tax system proposed by the Bank (Annex 7). There are three key elements of REMPE that require reforms: Number and kind of taxes replaced by the presumptive tax, the threshold of the system (vis-a-vis the VAT registration threshold), tax rate and available tax expenditures.

89. **The Government could also further reform taxation of tourism sector.** The current tourism head tax is set at 2 euros per person over 16 years old per night but there is scope to allow the rate to vary by the standard of accommodation (e.g. star rating of the hotel or resort). Furthermore, air passenger duty and departure taxes could be introduced on departing from, or arriving to, an airport. Air passenger duty and departure taxes should be distinguished from airport charges that are effectively fees charged to recover the cost of providing facilities and services for civil aviation, such as the use of an airport[33]. Departure taxes/fees are payment to government based on passenger departure, excluding charges related to the provision of a specific service (such as security or safety charges) or based on usage of the airport. They are included in the air ticket price. Departure tax rates can vary significantly by airport within a country, and are often distinguished by the length of journey, destination but also class comfort of the seat. Rates for this tax vary among countries. In the EU, for instance to passengers departing from Austrian airports are charged €7 for short haul, €15 for medium haul and €35 for long haul. Croatia has the lowest fixed rate for both domestic and international flights at below €1.50 per passenger. For instance, St. Lucia reintroduced a US$35 airport departure tax for foreign visitors in 2017 while countries like Tanzania introduced Tourism Business License fees for both foreign and local operators in 2017.

[33] Effective January 2019, the government introduced a Airport Security Fee (TSA) at entry to be collected on both domestic and international flights. For domestic, it remains at 150 CVE and is charged at the time of ticketing. TSA for international flights is set at 3400 CVE (30.83 Euros or 40 US$ or 30 Libra) and is charged when registering on the online electronic platform (www.ease.gov.cv).

Box 2.3 Guiding Principles for Well-Designed Presumptive System

It would be important to reassess the micro enterprise tax regime in Cabo Verde against the best practices of good design of presumptive tax regime and introduce corrections to address design and challenges and improve its implementation. The main guiding principles for well-designed presumptive system (World bank, 2007) include:

1. Efforts to broaden the tax net should be limited to businesses operating above the subsistence level. Micro businesses at the subsistence level should be tax exempt for (i) poverty reduction reasons, and (ii) a disproportion in the relationship between potential revenue collection and administration, plus compliance costs. For micro businesses above the subsistence level (mainly owner-operated small businesses in the retail sector), a simple lump-sum patent generally is the most cost-efficient approach. For small businesses above the micro level, several alternative approaches to presumptive taxation are available;
2. Key objective of a presumptive system is compliance simplification and not tax burden reduction. The tax burden under the presumptive system should roughly equal the tax burden under the standard regime to avoid discouraging businesses to grow and migrate from the presumptive into the standard regime. Ideally presumptive taxes should not only substitute income tax but replace a broader range of direct and indirect central and possibly also local taxes. An exception applies to social security contributions and employee income withholding taxes.
3. A presumptive system should include incentives to promote maintaining simplified books and records (in particular a cash book). Such incentive could be in the form of a rate reduction, more flexible payment options, and loss carry forward opportunities.
4. Retroactive taxation for businesses that move from the informal into the formal economy should be avoided.

Source: World Bank (2017)

Strengthening Revenue Administration and Easing Compliance Processes

90. **Revenue administration in general, and in particular the compliance processes require considerable attention.** Given its low efficiency, improving VAT compliance would have a sustainable positive impact on revenues. Thus, tackling VAT compliance risks, such as non-filers or under-reporting, and delivering services tailored to taxpayer needs is very important.

91. **Further improvement in tax administration is necessary**. Cabo Verde's Doing Business ranking suggests a need for such reforms as streamlining taxpayer service to reduce costs and red tape to make filing tax declarations and paying taxes more transparent, and intensifying collections to reduce arrears and speed up refunds. Given the magnitude of the country's shadow economy and unregistered activities, it is very important to put in place a system for identifying under-reporting (e.g., by cross-matching taxpayer information with third-party data) and monitoring compliance gaps to see where action is needed. Additionally, international tax rules desperately need to be modernized. Proper application of international tax rules should both give businesses more clarity and minimize tax avoidance.

92. **Build up management of public finances to raise tax revenues**. Monitoring and management of tax expenditures could be improved by putting in place a TE reporting system and addressing data quality, such as consistency between customs and CDI data. Introducing a rules-based approach to granting incentives and integrating TE budgeting into the annual budget process could be important steps for the country. The authorities might also consider capping TEs to embed fiscal discipline of the current tax reforms and limit the use of tax expenditures.

Mitigating Tax Revenue Volatility

93. **To reduce the volatility of tax revenue, policymakers have two types of options that are not mutually exclusive:** (1) They can revise the revenue system itself to make it less volatile. (2) They can adopt budgeting strategies that manage volatility. The first option would rebalance the current tax structure toward taxes less likely to be, unlike tourism receipts, a source of volatility. The second would set revenues aside in a reserve during economic expansions when revenue accelerates, to be used to preserve program spending during revenue slow-downs and smooth out spending over time. Two possible policy actions emerge from the proposed options:

- ***Increase effective taxation of property*.** Comprehensive property tax reform, adjusting all the main aspects of the property tax, would aligned taxation with the market value of property. In the short term, effective taxation could be enhanced by reducing exemptions like that for acquisition of properties with tourist utility status, and either moving away totally from self-assessment of property values or doing more to verify self-assessments, perhaps by calling in experts (though that could raise the cost of collection). Exemptions are costly and may distort resource allocation. Self-assessment, which is easily underestimated, violates the principle of fairness because people with comparable properties will not necessarily pay comparable taxes. And since lower-value properties are generally less likely to be underestimated than higher-value properties, self- assessment is regressive (taxes are relatively higher on lower-value properties). An enhanced taxation of property could increase revenue by 0.5 percent of GDP.
- ***Establish a Budget Stabilization Account (BSA)*.** To tackle the challenges associated with the volatility of revenues, several countries have introduced stabilization funds in which they set aside a certain percentage of revenues to be saved until needed to stabilize the economy. Similarly, Cabo Verde could establish a BSA and adopt a fiscal rule for how much to deposit in the BSA and when BSA funds could be withdrawn. For instance, each year 3 percent of revenues could be set aside until the BSA balance reaches a certain amount, with provisions for suspensions and withdrawals.

Table 2.5 Estimated Revenue Impact of Proposed Tax Measures, Percent of GDP

Revenue measures	Status	Percent of GDP
VAT		0.3
- Review unnecessary tax exemptions: no VAT for imported government vehicles	On-going	
- Reduction of 10% of tax expenditures		0.3
Corporate Income Tax		0.5
- Revise the legislative framework for MSMEs	On-going	
- Redesign investment tax credit Suppress IFI regime, Stop CIT holidays, Reform ID exemptions for investment project, Restrict Conventions on Access to Public Domain Land, Refocus new conventions on non-tax and non-customs incentives	On-going.	

Personal Income Tax		0.4
- Assessing the generosity of some PIT provisions and consolidate exceptions		
Property tax		0.5
- Reduce exemptions for acquisition of property with tourist utility status, monitor self-assessment system to avoid under-estimation		

Chapter 3: Review of Expenditure Performance

Summary: *Spending in Cabo Verde is predominantly recurrent and is higher than structural peers. In the last decade, current public spending approximated 25 percent of GDP, 2 percentage points above the average for structural peers and in line with the average for aspirational. Wages and salaries is among the main factors which have kept spending high. Capital spending has been cut by more than 7 percent of GDP in recent years reflecting the decision of the government to rationalize spending given the rapid build-up in debt. Unfortunately, current spending did not contribute much to consolidation efforts and is still relatively high in relation to GDP and total spending. By functional classification, spending on public services, education and social protection standout relative to peers. There is potential to increase spending efficiency in education. Some adjustments to spending goods and services (such as medications, rents and maintenance as well as professional activities) are feasible. A reduction in wage bill especially education could also bring useful savings.*

The chapter is organized as follows. It begins with the benchmarking analysis comparing Cabo Verde with structural and aspirational peers. Section 3.2 follows with an analysis of public spending and its major drivers according to economic, functional, and administrative classification, including through international benchmarking. Emphasis is given to spending on wages and salaries, goods and services and public investments. Section 3.3 closes with policy recommendations to improve the efficiency of public spending.

3.1 Benchmarking Analysis of Spending

94. **Small states, including Cabo Verde, tend to have bigger governments than larger countries, as measured by both average total spending and most expenditure categories.** In 2015, current expenditures in small states averaged about 19 percent of GDP versus 15.4 percent in other economies. In providing public services, small states also have higher per capita government costs because of the indivisibility of public goods and diseconomies of scale -broad public services must be provided no matter how small the population. In addition, the distance from markets for small island states raises their transportation costs for imports. Thus, the relationship between the country size and current spending is U-shaped (Figure 3.1). Given the spending rigidity of the small states this section benchmarks Cabo Verde against countries with similar characteristics[34].

95. **Recurrent government spending in Cabo Verde is much higher than in structural peers**. In the last **decade**, current public spending in Cabo Verde approximated 25 percent of GDP, 2 percentage points above the average for structural peers and in line with the average for aspirational peers (though Seychelles and St Kitts and Nevis spent much more) (Figure 3.2). Due to recent increases, Cabo Verde today has one of the highest rates of current spending in the whole peer group by about 7 percent of GDP compared to structural peers and 1.5 percent compared to aspirational peers. Current spending by structural peers has been somewhat lower than in aspirational peers, reflecting the relationship between per capita income and demand for public services (Wagner's law).

[34] The peers were selected based on similar economic characteristics in terms of income level, international tourism receipts, population, and debt level (see Annex 1: Definition of Peer Countries)

96. **Structural peers have had much higher capital spending that Cabo Verde in recent years.** For the last decade, Cabo Verde has been somewhere between having: (i) higher current but lower capital spending relative to structural benchmark countries; and, (ii) similar level of current spending but higher capital spending that aspiration peers. In the last three years, as a result of the fast growth of current spending - which outpaced spending growth in peer countries - Cabo Verde became a leader in current spending and a laggard in capital spending when averages for both groups are considered (Figure 3.3).

97. **Current spending in Cabo Verde accounted for more 90 percent of total spending in 2016.** This is **significantly** above the 55 percent recorded by structural peers but slightly ahead of the 86 percent in aspirational peers. Despite major infrastructure needs, the share of capital spending in total spending is small, close to 3 percent of GDP in 2016, below most structural and aspirational peers except for Mauritius and St. Lucia, and below the averages for low-income countries and small states. In the last decade capital spending was cut by more than 7 percent of GDP reflecting the decision of the government to rationalize spending given the rapid build-up in debt. Unfortunately, current spending did not contribute much to consolidation efforts and is s till relatively high in relation to GDP and total spending.

98. **Cabo Verde spends much more on public sector wages than peers but much less on goods and services (Figure 3.4).** In the last decade, Cabo Verde was spending 3 percent of GDP more (11 percent of GDP vs 8 percent of GDP) than structural peers and about 1 percent more than the aspirational group (of which only St Vincent and Grenadines at 12 percent of GDP spent more). In 2016, the situation was similar: Cabo Verde's spending on its wage bill as a percent of GDP was one of the highest in the peer group. Meanwhile, it was spending less on goods and services, below the average for both structural and aspirational peers. Another feature of Cabo Verde's spending mix was lower spending on subsidies compared to both peer groups, though the full picture of Cabo Verde support to SOEs cannot be completed simply by looking at subsidies because the country has also been providing support through on-lending and capitalizations. Spending on social benefits is below aspiration peers but above structural peers.

99. **By functional classification, spending on public services, education and social protection standout relative to peers** (Figure 3.5)**.** General public services - administration of the State, including the cost of legislative and executive entities - account for about 30.5 percent of the state budget, above the average for selected peers. As a percentage of GDP, spending on public services in Cabo Verde is above both Bhutan and Mauritius but below Seychelles. Spending on health and education, with a combined share close to 30 percent, also account for a significant portion of the Cabo Verde budget. In particular, Cabo Verde ranks among the highest spending peer countries (such as Bhutan, Sao Tome Principe and St. Vincent Grenadines) both in terms of share of the budget and GDP. The country's spending on economic affairs—subsidies to such sectors as transport, communication, agriculture, fuel and energy—is close to the average for peers. How much is spent in these areas depends on many factors, in particular the structure of sector regulation and the relative size of SOEs. Finally, spending on social protection is relatively low, below that of aspirational peers.

100. **Government spending in Cabo Verde pursues allocation rather than redistribution goals (Figure 3.6).** About 45 percent of Cabo Verde's spending goes to programs that improve the allocation of resources (education, healthcare R&D, economic services), which is close to aspirational peers but below Bhutan. Programs that pursue redistribution objectives takes much less government resources in Cabo Verde than in aspirational peers, both as a percent of GDP and as a share of spending. There is, however, no specific pattern among peers regarding spending on programs that pursue basic functions of the State or pursue pure public goods (such as defense, public order and general administrative costs, such as the costs of the court system). In the Cabo Verde, this spending is relatively high (about 10 percent of GDP, 30 percent of total spending), even above Bhutan and Mauritius.

Figure 3.1 Current Spending and Population, 2015*

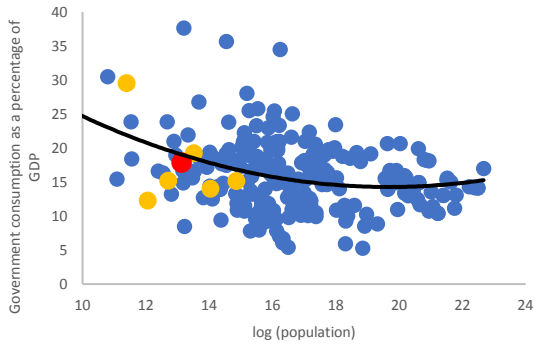


Figure 3.2 Current Government Expenditures, (Percent of GDP)

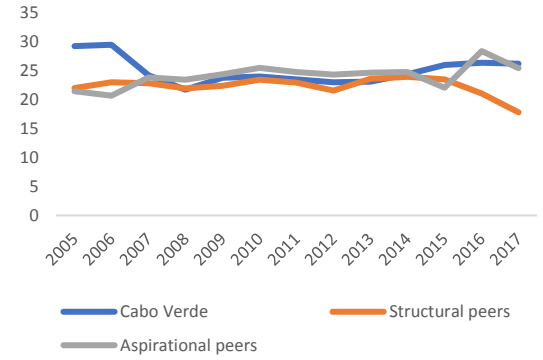


Figure 3.3 Spending, Average 2005–17, Percent of GDP

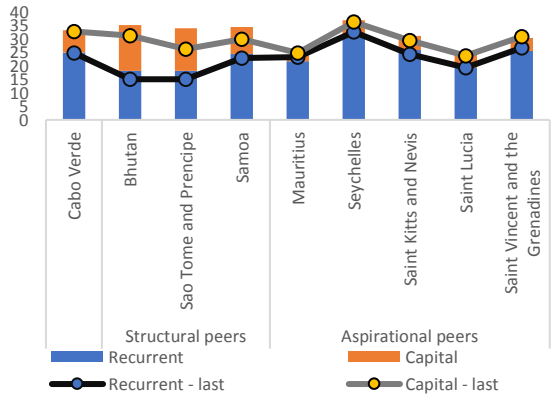
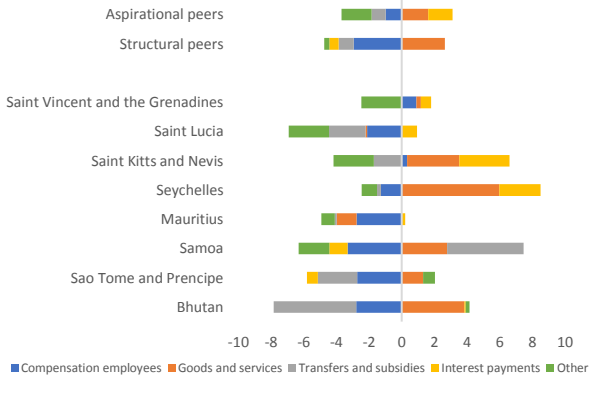


Figure 3.4 Current Spending in Cabo Verde and Peer Countries by Economic Classification, Cabo Verde =1, Average 2005–16



Source: Data from MoF data, ECCB, World Bank and GFS database. * Yellow dots – peer countries, red dot -Cabo Verde.

101. **Cabo Verde's spending is more volatile than aspirational peers (Figure 3.7).** Volatility in public spending in Cabo Verde, like most structural peers, is mostly driven by stop-and-go pattern on public investments. Compared to structural peers, however, the volatility of Cabo Verde's total spending dwarfs that of Bhutan and Samoa. High spending volatility often amplifies the macroeconomic volatility induced by external shocks, which could dampen GDP growth (Berg et al. 2010 shows that in the medium-run shock-induced macroeconomic volatility is associated with severe output losses). On a positive note, the cyclicality of Cabo Verde's was one of the lowest in the sample, with Seychelles and Bhutan leading in the procyclicality of their spending (Figure 3.8).

Figure 3.5 Comparative Expenditure Structure, 2016 (or latest), Percent of GDP

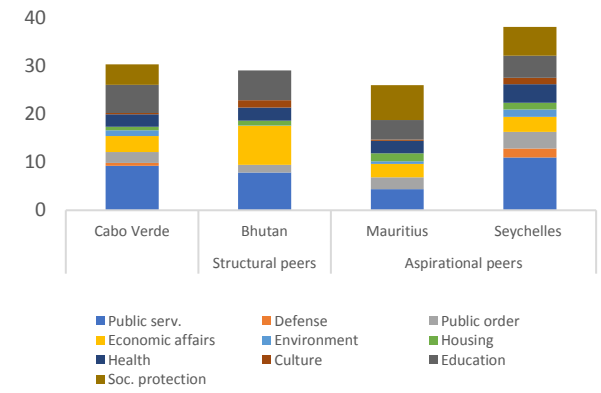


Figure 3.6 Government Spending by Function*, 2016 Percent of GDP

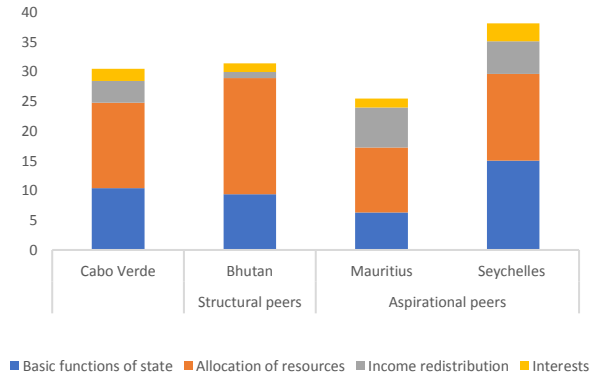


Figure 3.7 Variance of Total Expenditures and Investment, Percent of GDP, 2005–16

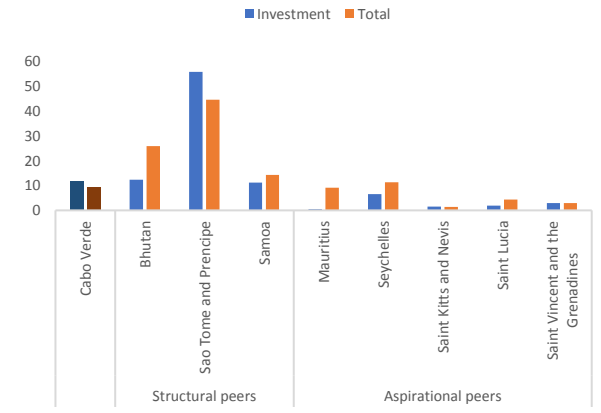
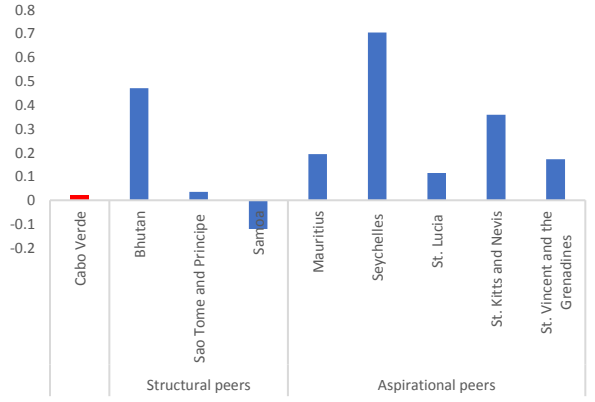


Figure 3.8 Cyclicality of Fiscal policy. 2000–15



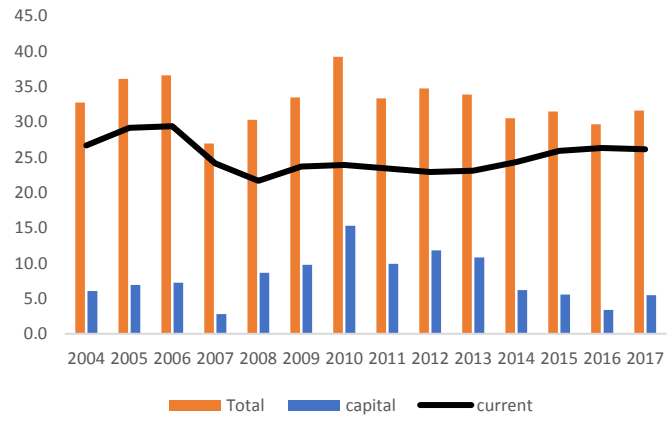
Source: WBG, IMF GFS, BOOST data for Cabo Verde. *Functions according to EC classification. *Note*: Cyclicality of fiscal policy is defined as a correlation between the cyclical components of government expenditures and of GDP.

3.2 Public Spending in Cabo Verde

Composition and Evolution

102. **Total spending peaked at 40 percent of GDP in 2010 with the scaling up in public investment to combat the effect of the global recession (Error! Reference source not found.).** Average capital spending went up from an average of 6.3 percent of GDP in 2004–06 to about 15.3 percent. Faced with rising debt and falling GDP growth the government began to reduce public investment, which fell to 3 percent of GDP in 2016. Current spending initially declined from 30 percent of GDP in 2004–05 to 21 percent in 2008, due to across- the board cuts. It leveled off at about 23.5 percent in 2009–14 and then accelerated to 26.1 percent in 2017.

Figure 3.9 Government expenditures in Cabo Verde, 2004–17, Percent of GDP



Source: MOF data.

103. **While the public sector's wage bill (34 percent) and goods and services (12 percent) combined for almost 50 percent of Cabo Verde public spending, much of the recent growth has been a result of social benefits and other spending**. Social benefits and transfers and subsidies constitute 20 percent of spending (Figure 3.10). Almost 17 percent of public resources goes to investment, while 8 percent are spent on interest. There was a major increase in several items between 2012 and 2017 among them transfers, interest, social benefits and other expenses (Figure 3.11, Figure 3.12, Figure 3.13). When the growth and share of spending are both considered (which determines "spending momentum," see Annex 8), social benefits and the "other spending" category were important drivers of the recent spending growth in Cabo Verde. Public investment was severally cut, having fallen by more than 50 percent since 2012.

104. **Although direct subsidies in Cabo Verde stayed very low (just 0.3 percent of total spending), the state has provided significant capital injections and on-lending to SOEs**. The level and share of spending on subsidies show only the direct budgetary payment of the government to a producer or consumer. there is also no information on the size of dividends paid to the government by its SOEs. The "below the line support" to SOEs -on-lending and recapitalization-, which in 2012–16 in Cabo Verde averaged 4 percent of GDP annually (a cumulative 20 percent of GDP), complement the picture. As discussed in Chapter 1, net transfers to the SOEs have been large and pushed up public debt. In addition, still unrealized contingent liabilities of the largest SOEs are estimated at about 40 percent of GDP, with a high share of public guarantees.

Figure 3.10 Structure of Government Expenditures by Economic Function, 2017

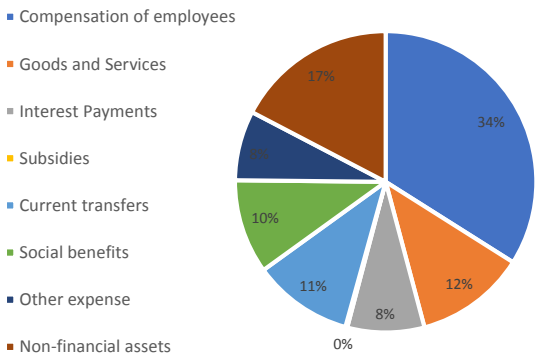


Figure 3.11 Government Expenditures by Economic Function, 2004-2017 (millions of Escudos)

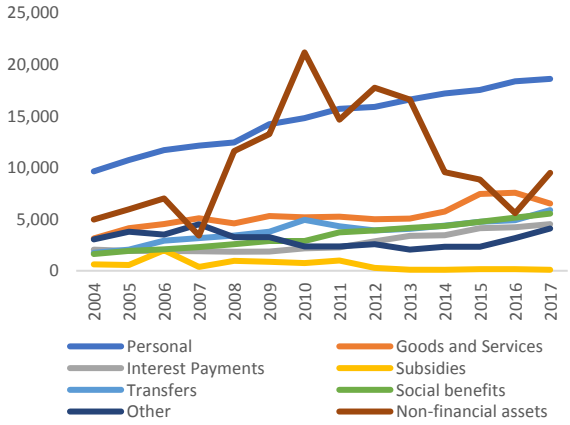


Figure 3.12 Drivers of Current Expenditures by Economic Classification (momentum), 2013–16 (ppts)

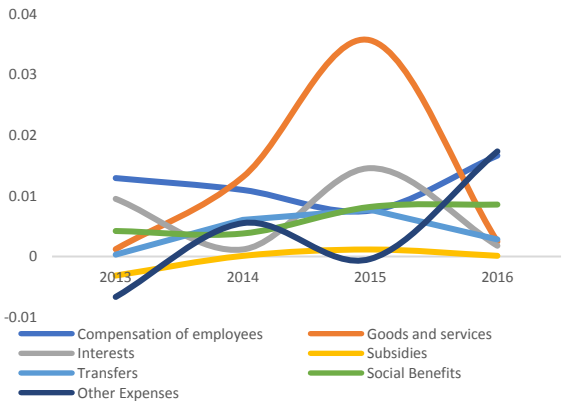
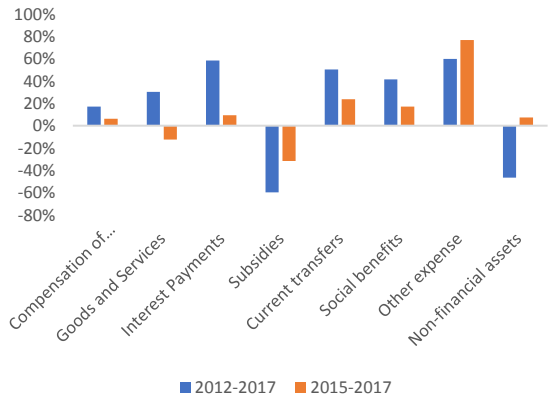


Figure 3.13 Change in the Government Expenditures by Economic Classification, 2012–17, Percent



Source: MOF. *Note:* "Momentum" is the contribution of the spending item to the percentage change in total spending in a given period.

105. **Spending on basic state functions and redistribution have been rising at the expense of spending on programs to improve allocations of resources (**Figure 3.14**).** Analysis of functional classifications of spending in Cabo Verde shows that government spending on basic functions[35] accounts for more than 30 percent of spending in 2016 and up from 24 percent in 2012 (though as a percent of GDP it has not changed). Cabo Verde has also moved toward a greater redistribution of spending by increasing social protection spending. Today social protection accounts for 14 percent of total spending (Figure 3.15). Public spending that improves the allocation of resources, though still taking the largest share of total spending, has fallen from 23 percent of GDP to 14 percent, and from 63 percent of total spending to 46 percent. This category consists of spending on education, economic affairs, R & D, and healthcare. The reduction of spending in this category came mainly from a drop-in spending on economic affairs as public investment was cut. In 2016, education spending also showed high "momentum."

Figure 3.14 Structure of government expenditures by function, 2012–16

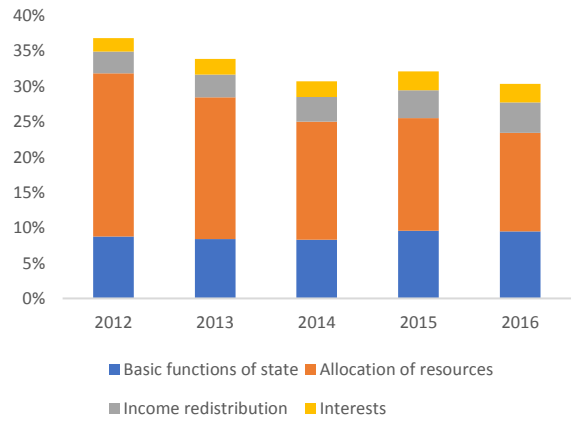
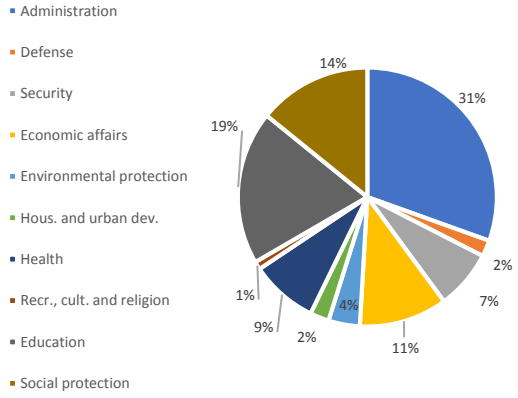


Figure 3.15 Structure of government expenditures by function, 2016



Source: MOF.

106. **Spending on wages dominates public spending on education, public order, defense, and health and a certain amount of "quasi-personnel" spending on public services is hidden under goods and services spending** (Figure 3.16). Salary costs account for almost 80 percent of education spending, 70 percent of spending on public order, 65 percent of defence and about 60 percent of health spending (Figure 3.17). In education and health, the second largest spending item (measured as a share of expenditures) is goods and services. Distribution of spending within public services is more balanced. Interest payments and transfers are each responsible for about 25 percent of public service spending. Spending on goods and services is also important, accounting for about 10 percent of spending. The large and growing spending on professional services within this category suggest that some quasi-personnel expenditures that cover consultant services ("administrative service contracts") could be hidden in this category. This reduces the share of wages in public service.

[35] Basic functions of the state and pure public goods: these comprise public spending on defense, public order and general administration.

Figure 3.16 Structure of expenditures by function, 2016

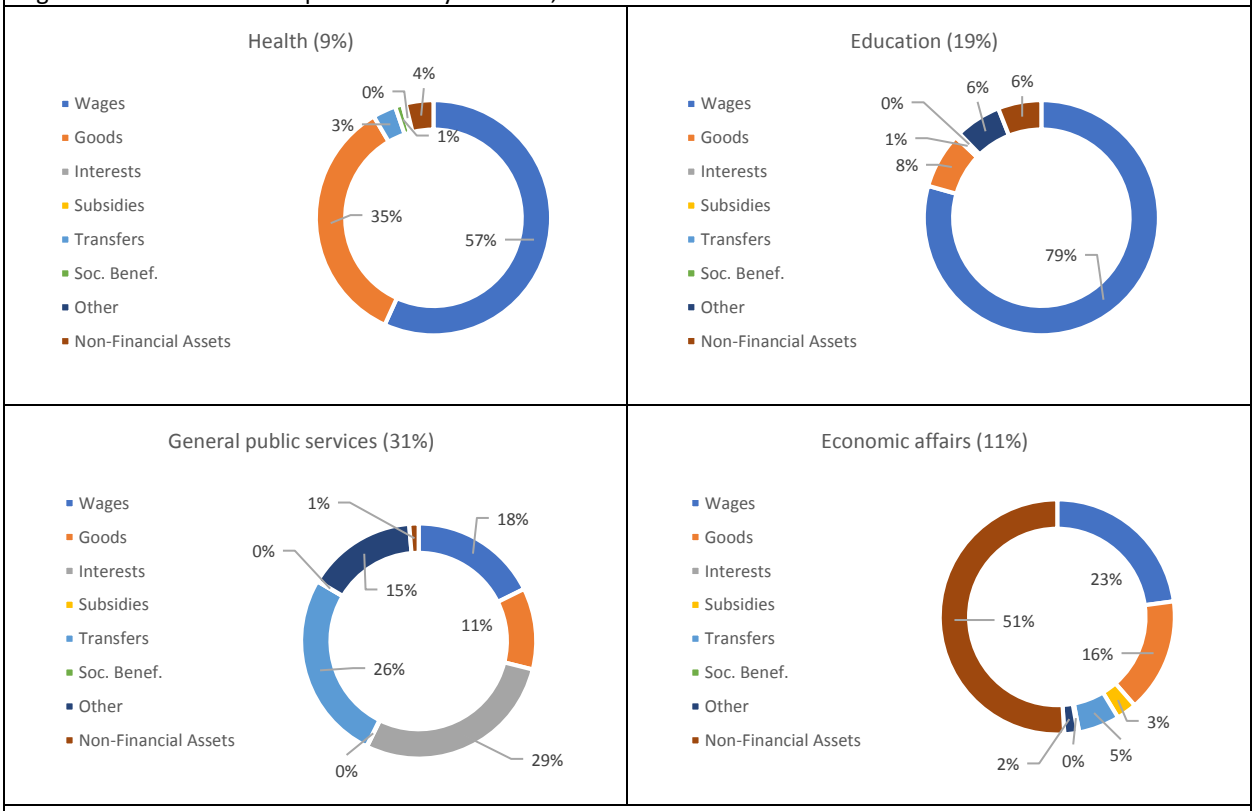
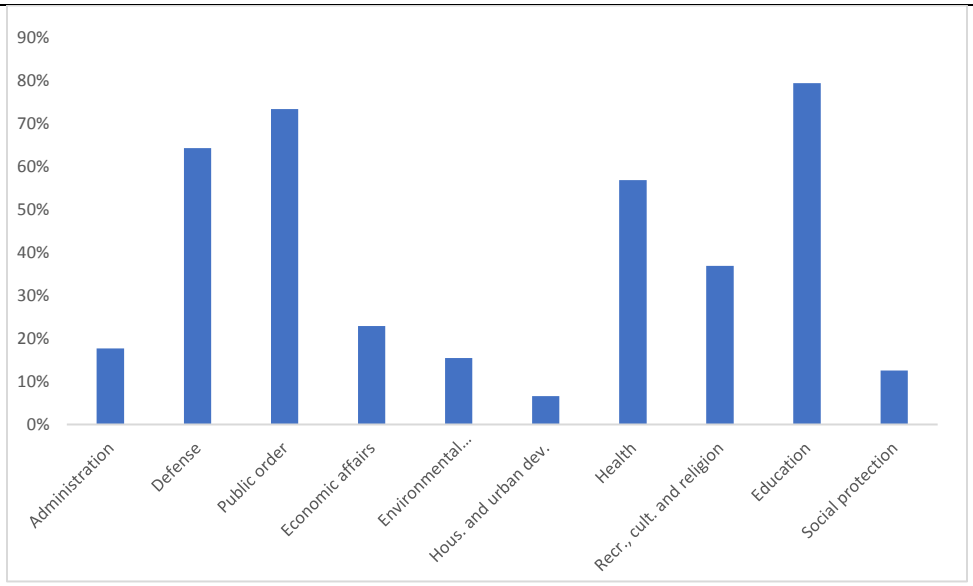


Figure 3.17 Wage Bill as a Percentage of Each Category Expenditures, 2016, Percent



Source: MOF. N*ote:* The share of the category in total expenditures is provided in parentheses.

Assessment of the Wage Bill

107. **The public wage bill in Cabo Verde is on average higher than in structural or aspirational peers.** At 10.7 percent of GDP, it is over 3 pp higher than the average for structural peers, as it has been for the past decade. It is also 0.5 pp above aspirational peers, down from 1 pp (Figure 3.18). In 2016, about 38 percent of total spending went to pay the salaries of government employees (Figure 3.19). Devoting such a large share of the budget envelope to remuneration of public employees limits the fiscal space available for other priority spending, such as growth-enhancing capital investment. It also raises concerns about medium-term fiscal sustainability especially during the economic downturn.

108. **The wage bill rose by about 0.7 pp of GDP (or 16 percent) between 2012 and 2016 with the most momentum in education and health sectors.** Although the wage bill grew fastest in social protection, housing and urban development, and recreation culture and religion, these sectors together make up less than 5 percent of total spending on wages. Today, about 41 percent of wage bill goes to education, 14 percent each to public services and security and public order, and 13 percent to health (Figure 3.19). Growth of wage bill was also high in health, education, and public services (more than 10 percent nominal increase between 2013 and 2016) and that had more impact because of their high share in the wage bill spending (Figure 3.20). The highest momentum is in public services, education, and health (Figure 3.21). This is also confirmed by administrative data received from Ministry of Finance (see Box 3.1, Figure B 3.4). The administrative data also show that the growth of wage bill was driven by both employment and wages.

Figure 3.18 Public wage bill, Cabo Verde and structural peers, 2005-2017, Percent of GDP

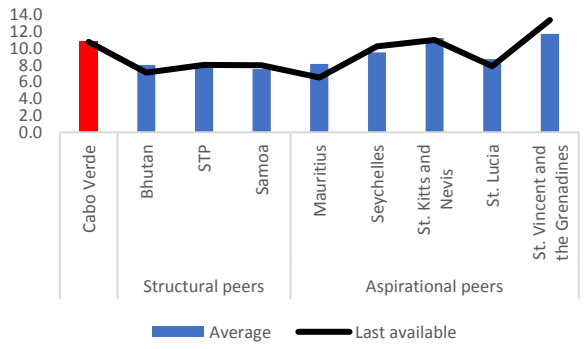


Figure 3.19 Wage bill by function, 2016

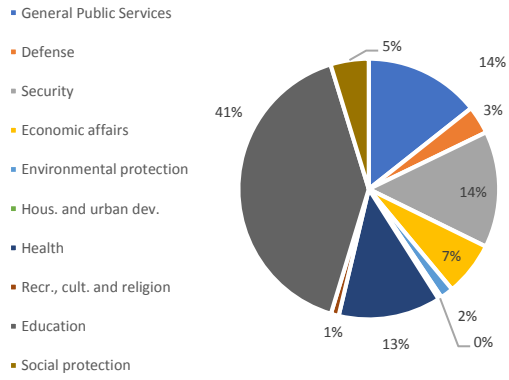


Figure 3.20 Wage Bill by Function (growth)

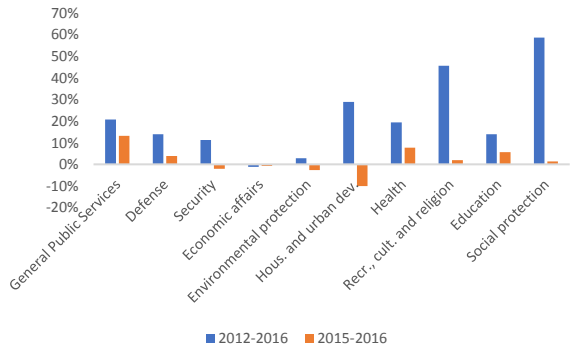
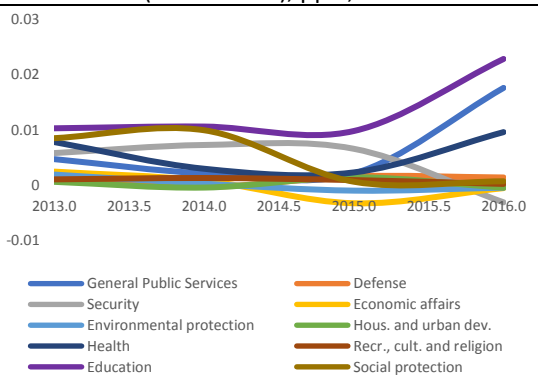


Figure 3.21 Drivers of Wage Bill by Economic Classification (momentum), ppts, 2013-2016



Source: MOF

109. **Notwithstanding data limitations, Cabo Verde's high wage bill appear to be driven by excessive wages**. Reliable data on average wage is not available for Cabo Verde and several comparator countries. Cross-country data on employment is also fragmented and different sources give somewhat different pictures. At about 20 percent of total employment, Cabo Verde's public employment is quite high compared to comparator countries where data are available (Figure 3.22). When a somewhat narrow definition of public employment is used (employment in public administration, defense and social security), which allows more comparators, public employment in Cabo Verde does not looks oversized (Figure 3.23). It is higher than in Mauritius and Samoa but lower than in Seychelles and St. Lucia and two other structural peers. Since comparable data on average wage as a share of GDP per capita are not available, this might suggest that in Cabo Verde the high wage bill is attributable to excessive wages.

Figure 3.22 Employment in Public Sector as a Percentage of Total Employment, 2015

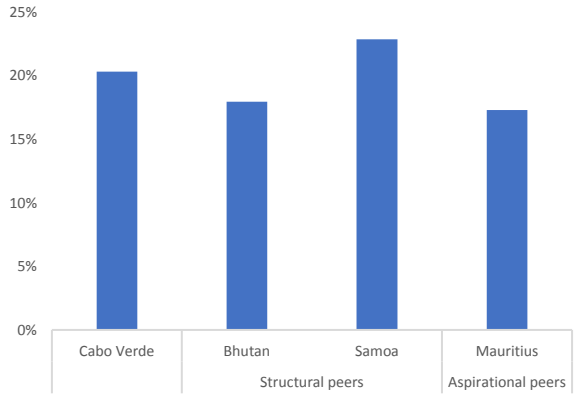
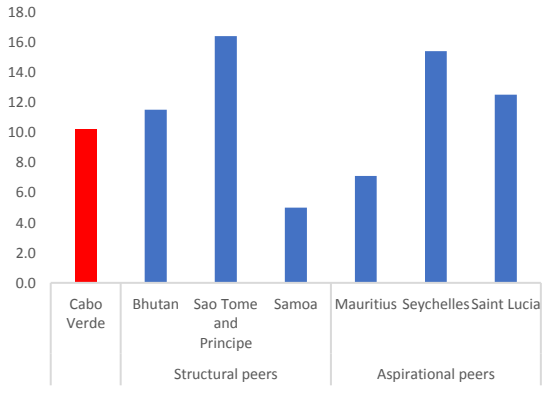


Figure 3.23 Employment in section (L. Public administration and defense; compulsory social security (ISIC-Rev.3)/O (ISIC-Rev.4) 2015 (or newest available), Percent of total employment



Source: Cabo Verde MoF, ILOSTAT database

110. **The average wage in public administration as a percent of GDP in Cabo Verde is above its level of development.** Again, when a narrower description of the public sector is considered (L category in ISIC Rev.3), for the global sample Cabo Verde wages seems to be higher than in countries at similar levels of development (Figure 3.24). Comparing public employment in Cabo Verde with an international sample is not appropriate because Cabo Verde and its comparators are affected by diseconomies of scale. However, the same logic does not apply to average wage. The wage level is more linked to productivity than to the size of an economy. For, example, the productivity and skills of a teacher, doctor, or public sector's worker should be about the same in both poor and rich countries as what drives the productivity difference is mostly non-tradables. However, the remuneration of public administration employees in Cabo Verde is above the trendline for the global sample. At its level of development, Cabo Verde should be paying public administration 10 percent less than it does.

111. **Average salaries in education in Cabo Verde as a percent of GDP ranks among the highest in the world (**Figure 3.25**).** There are only 16 countries for which the salary of education employees is higher than in Cabo Verde. Moreover, while most countries pay public officials more generously than teachers, in Cabo Verde educators are paid about 3.5 percent more than public administrators. Wages in education in Cabo Verde are also above wages in health as a percent of GDP. Wages in health are only slightly above comparators at the same level of development (Figure 3.26). In addition, the recent growth of wage in Cabo Verde was driven by growth at the end of wage distribution. The highest wage growth was noticed in 4^{th}, 7^{th} and 8^{th} decile, while the remuneration of the employees with lowest salaries (1^{st}- 3^{rd} decile) remained almost unchanged, see Box 3.1.

112. **Cabo Verde's education wage bill seems to be driven by both a high number of employees and excessive wages relative to comparator countries**. On average, the education sector in Cabo Verde employs more teachers relative to total employment than peer countries. Its education employees make up 7 percent of total employment, compared to 5.6 percent in structural peers and 3.7 percent in aspirational peers (Figure 3.27). In the health sector, employment in Cabo Verde as a percent of total employment is far below peers (2 percent versus 3.6 for structural peers and 4.6 for aspirational peers). Only 1.8 percent of Cabo Verde workers are engaged in that sector, while in Sao Tome and Principe as well as St Vincent and Grenadines it exceeds 7 percent. Interestingly, compared to Cabo Verde's aspirational peers, its structural peers have higher relative employment in education and lower in health. In the health sector, its wages are broadly in line with peers, but it has fewer employees.

Figure 3.24 Average wage in public administration, defense and compulsory social security (L category in ISIC Rev.3) vs. GDP per capita, PPP, newest available

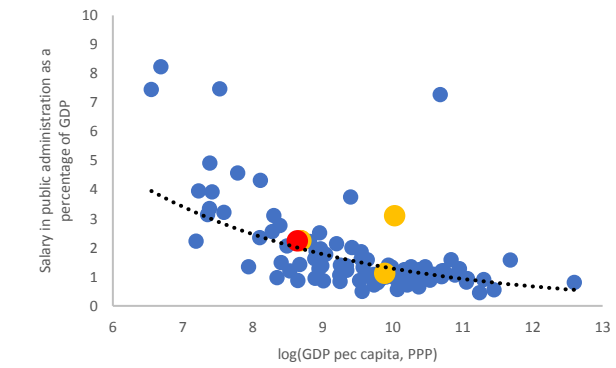


Figure 3.25 Average wage in education vs. GDP per capita, PPP, newest available

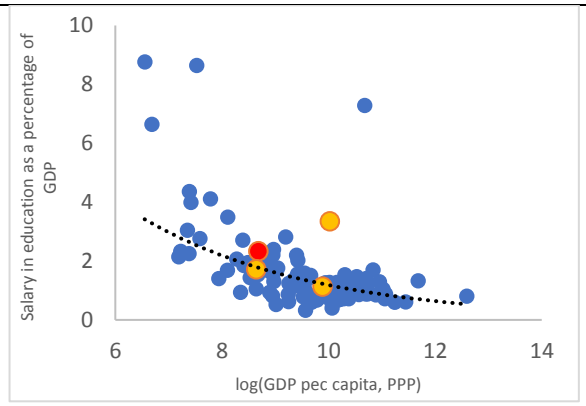


Figure 3.26 Average wage in health vs. GDP per capita, PPP, newest available

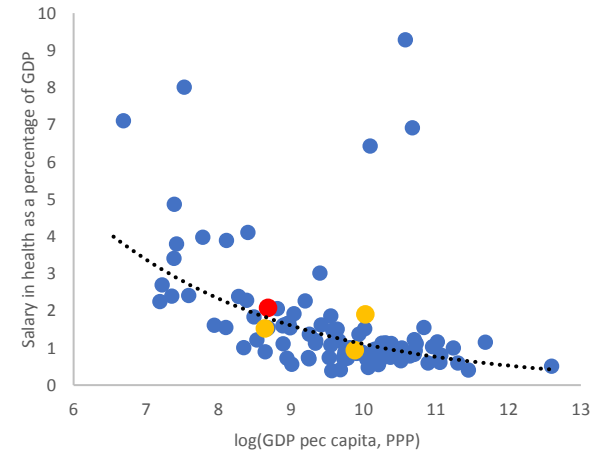
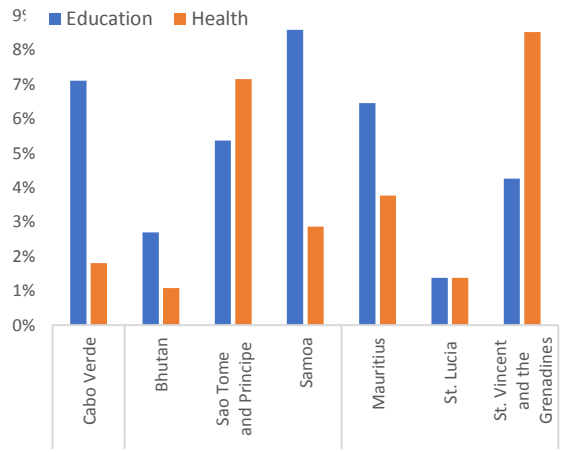


Figure 3.27 Employment in education and health sector as a percentage of total employment, 2015



Source: WDI, ILOSTAT, Cabo Verde BOOST data. *Note:* Red dot = Cabo Verde; yellow = comparators for which data are available.

113. **The pupil-teacher ratio in Cabo Verde is on average in line with peers, which suggests that it must have more non-teaching employees** (Figure 3.28)**.** The pupil-teacher ratio in Cabo Verde is higher than in aspirational peers, but lower than in structural peers, both in primary and secondary education. The average is 22 pupils per teacher in primary schools, in aspirational peers 15 and in structural peers 33.4. In secondary education, the average ratios are Cabo Verde, 16:1, aspirational peers, 11.6, and structural peers, 21.3. Thus, Cabo Verde's relatively high education employment may be attributed to a high share of non-teaching.

114. **Health sector professional personnel in Cabo Verde is below employment of aspirational peers.** Comparisons of physicians, nurses, and midwives per 1,000 of population shows the employment deficit (Figure 3.29). The gap is largest for nurses and midwives (in Cabo Verde the average is 1.3 nurses and midwives per 100 population, in structural peers 1.7, while in aspirational peers 4. The number of physicians in Cabo Verde is in line with structural peers but still below the average in aspirational peers, especially Mauritius (Figure 3.29).

Figure 3.28 Pupil-teacher ratio, 2016

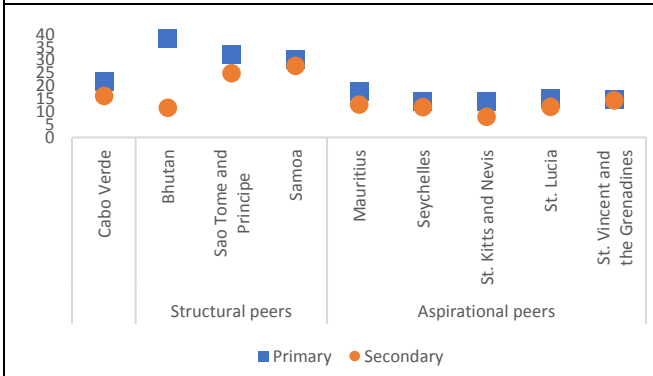
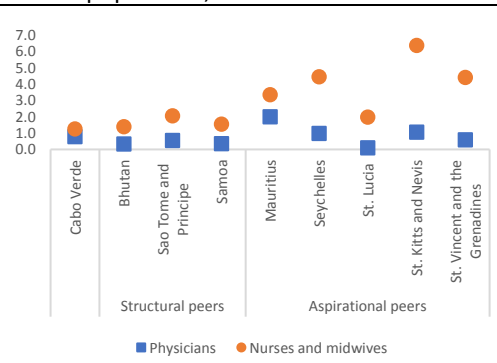


Figure 3.29 Physicians, nurses and midwives per 1000 of population, 2015



Source: WDI

115. **Three categories drive employment and wage spending in Cabo Verde.** The most important in terms of both employment and wages is education (almost 50.9 percent of employment and 53.7 percent of the wage bill). Second is justice and national defense with 17.6 percent of employment and 18.5 percent of wages (Figure 3.30, Figure 3.31). Third is agriculture and environment with 11.9 percent of employment and 7.7 percent of wages. The details of the remuneration structure of public administration employees and employees in the autonomous bodies (such as Direct Administration of the State and the Autonomous Funds and Services, FSA), belonging to public administration reveal that the average monthly salary in these groups approximated LCU 54,960.00 and 36,100.00, respectively. Interestingly, seven ministries (National Defense; Higher Education, Science and Innovation; Communities; Foreign Affairs; Tourism; Industry; and Energy) have average wages that are more than 80 percent higher than the average for the whole public sector. Wages in FSA, the Ministry of Finance and Planning and the Ministry of Higher Education are exceptionally higher than average. Employees of the Ministries of Education and Health are paid at the average salary in Cabo Verde's public sector (Figure 3.32).

116. **Contractual and temporary workers comprise a significant share of the government workforce.** The salaries of 51 percent of employees in public administration in Cabo Verde are based on special or temporary arrangements. In 2015 their compensation constituted about important percent of the wage.

Figure 3.30 Employment by category as a percentage of total, 2015, Percent

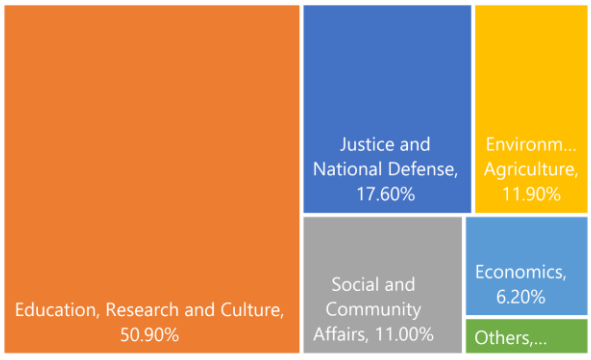
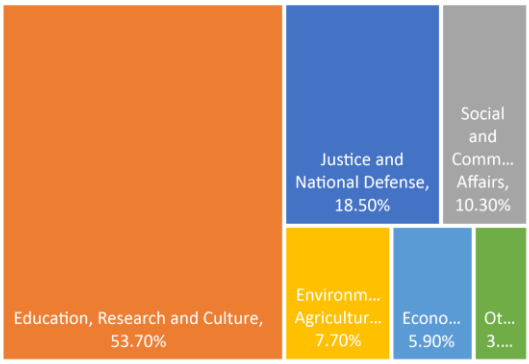
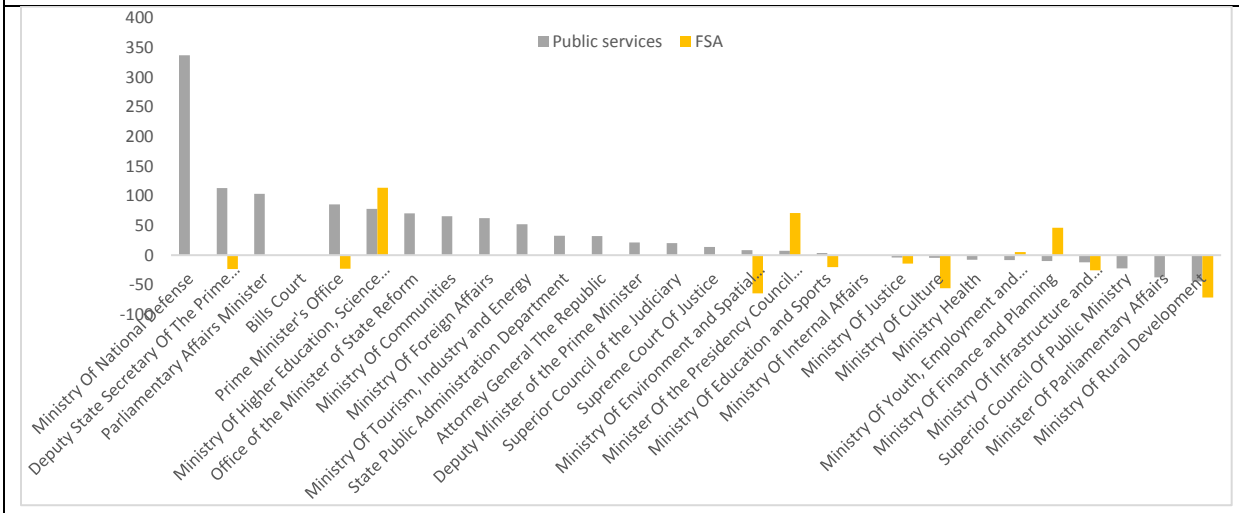


Figure 3.31 Wage bill by category as a percentage of total, 2015, Percent



Source: Government of Cabo Verde

Figure 3.32 Average Wage by Institution, Percent of Average Public Wage, Cabo Verde, 2015



Autonomous Funds and Services (FSA) employees perform public administration duties independently with a considerable degree of administrative and financial autonomy.

Box 3.1 Wage bill dynamics in Cabo Verde (Administrative Data for Ministry of Finance)

Public sector wage bill in Cabo Verde stayed close to 9 percent of GDP in 2017, which is an 0.5 percentage points increase as compared to 2014, which is somewhat below BOOST data used in the main part of the report. The Ministry of Finance's administrative data, however, confirms that the wage bill increase was driven by both employment and average wage growth –. The biggest growth of wage bill was seen in culture, defence and finance and planning. In all three cases, this was caused by the growth in employment (or number of beneficiaries in case of finance and planning, see Figure B 3.1.

Figure B 3.1 Wage bill growth (2014-2017) by sector

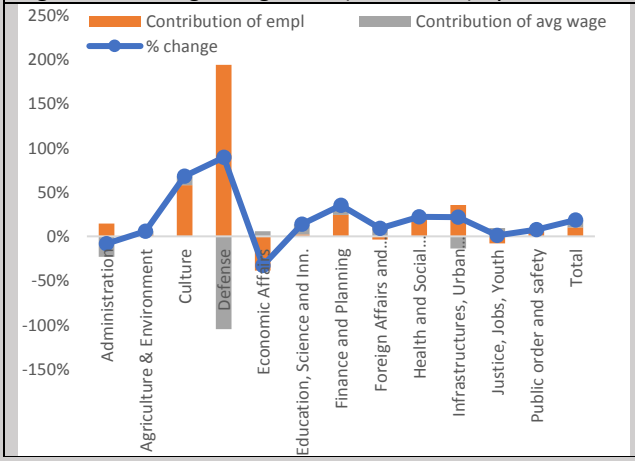
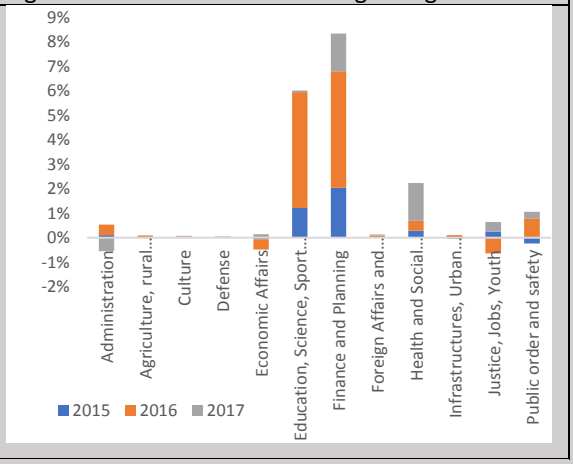


Figure B 3.2 Contributions to wage bill growth



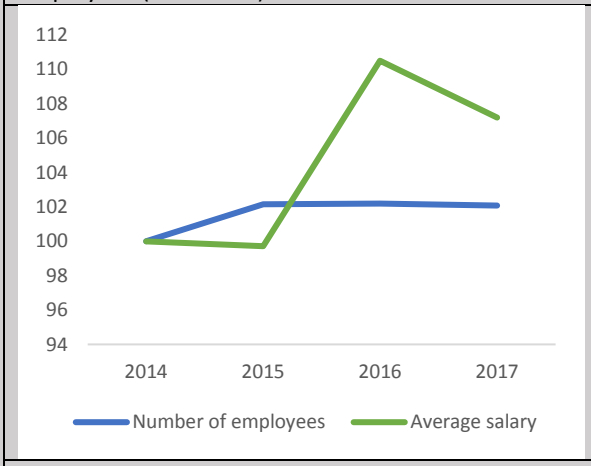
Source: Own calculations

Nevertheless, what matters for public finance, is the growth of the wage bill in the sectors that are responsible for the largest part of the wage bill: education, science and sport; finance and planning and health and social protection. These three sectors contributed the most to overall growth of the wage bill between 2014 and 2017. In case of the education sector the main driver behind the growth of wage bill was increase in salaries. In contrast,

wage bill of Finance and Planning shot up was to increase in number of recipients. Employment growth also stood behind the wage bill increase in health sector (Figure B 3.1). For the finance and planning, as well as education, science sport & innovation, the majority of growth happened in 2015-2016, while in case of health & social protection the biggest increase was observed in 2017 (see Figure B 3.2).

Since 2014, average wages in education grew by almost 10 percent, while at the same time, the additional 2% of workers were employed (Figure B 3.3). The highest wage growth was noticed in 4th, 7th and 8th decile, while the remuneration of the employees with lowest salaries (1st- 3rd decile) remained almost unchanged (Figure B 3.4).

Figure B 3.3 Education, science, sport and innovation – growth in average salary and the number of employees (2014=100)



Source: Own calculations

Figure B 3.4 Wage by decile in education, science, sport and innovation

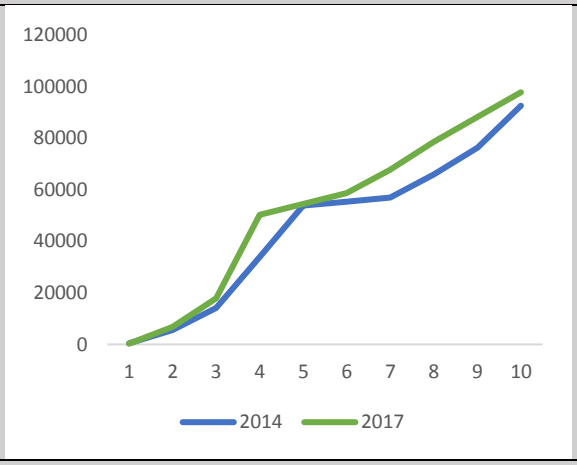
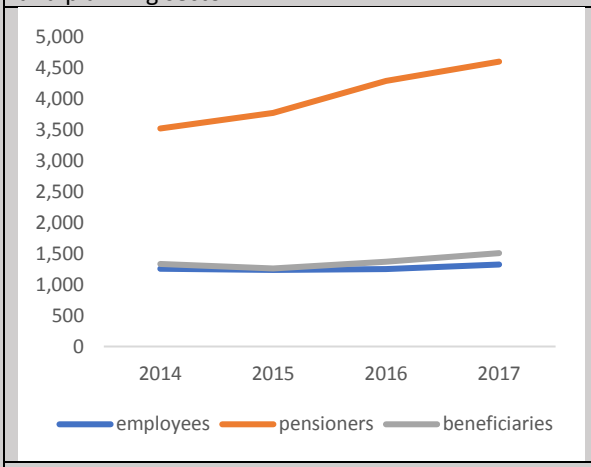
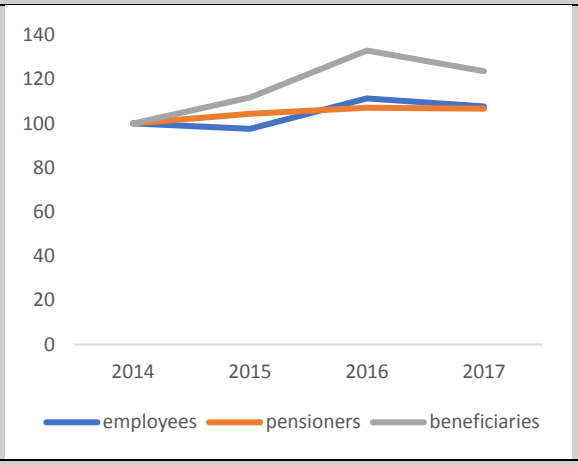


Figure B 3.5 Number of pensioners (aposentados), beneficiaries (pensionistas) & employees in finance and planning sector



Source: Own calculations

Figure B 3.6 Change in wage or benefit 2014-2017 in finance and planning sector (2014=100)



The wage bill increase in finance and planning category can be attributed to increase in the number of pensioners (more than half of the growth between 2014 and 2017) and change in the value of benefits of pensioners and

beneficiaries[36] (Figure B 3.6). The number of pensioners increased by more than 30% between 2014 and 2017 (Figure B 3.5). At the same time, benefits rose by almost 20%, while pensions and wages much less (Figure B 3.6). Moreover, not only is the distribution of wage/benefit by decile is relatively unequal and highly remunerated individuals receive high benefits/wage. In addition, growth of wages was concentrated in 6th and 7th decile, so at the high end of distribution (see Figure B 3.8)

Figure B 3.7 Contribution of number and average remuneration of pensioners, beneficiaries and employees to changes in wage bill in finance and planning sector

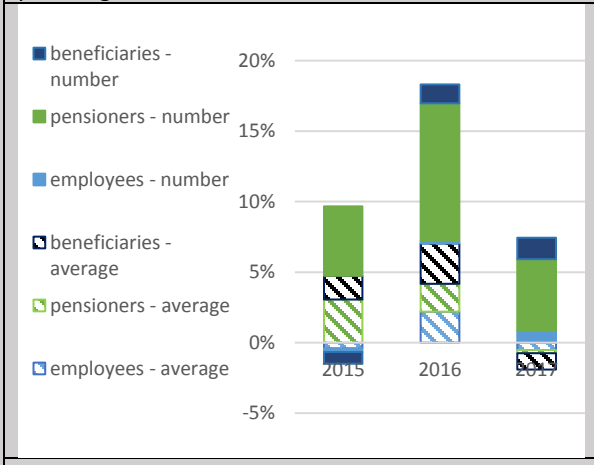
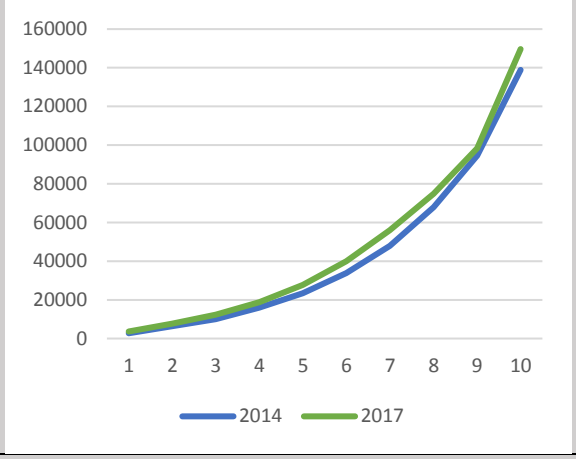


Figure B 3.8 Average wage/benefits in finance and planning by deciles



Source: Own calculations

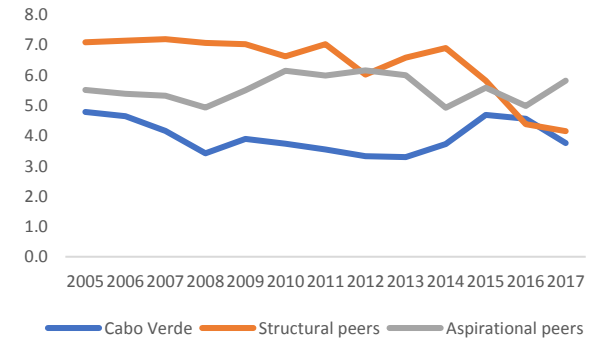
Spending on Goods and Services

117. **Spending on goods and services in Cabo Verde has been less than the averages for the two peer groups for the last decade, although there was a notable increase in 2015**. With expenditures on goods and services averaging around 4.2 percent of GDP, Cabo Verde is at about the median spender in the benchmark group. Nevertheless, it is important to note that that in 2017 only three of eight benchmark countries spent more than Cabo Verde on goods and services and the average is elevated by very high spending in Seychelles, St. Kitts and Nevis, and Samoa (Figure 3.33). The evidence also reveals that spending on this category has been very volatile. After cutting the category from 4.7 percent of GDP in 2005 to about 3.3 percent in 2012, spending on goods and services increased, and by 2016 it was again close to 4 percent (Figure 3.34). Since spending on goods and services is relatively discretionary, there might be scope of tightening this category that could result in quick short-term gains.

118. **The largest component of government spending on goods and services is in public administration and health, due to sizable expenses for professional activities and medicaments**. Public administration consumes about 22 percent of total spending on goods and services (Figure 3.35). Professional activities and office supplies together account for about 40 percent of total public administration spending on goods and services (Figure 3.36). The health sector has second largest share in total spending on goods and services, which is related to its spending on medications. Economic affairs, education, security, and urban development each has a 9 to 11 percent share of spending in this category. Since 2012, the biggest declines in shares has been for administration and education, meanwhile other shares (especially, housing and urban development) expanded.

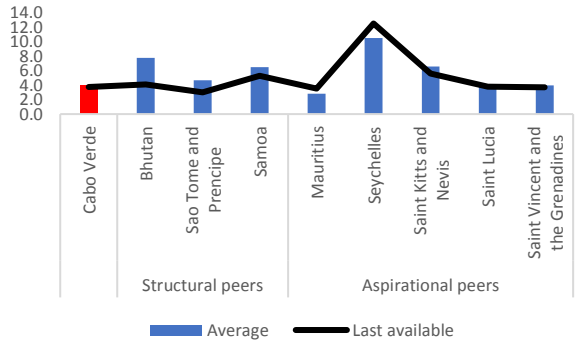
[36] Wage bill of finance and planning category includes disability benefits and old age pensions.

Figure 3.33 Public goods and services expenditure as a % of GDP



Source: IMF GFS, MOF

Figure 3.34 Public goods and services expenditures as a % of GDP in Cabo Verde and structural peers, 2005-2016



Source: IMF GFS, MOF

Figure 3.35 Expenditures on goods and services by function, 2016

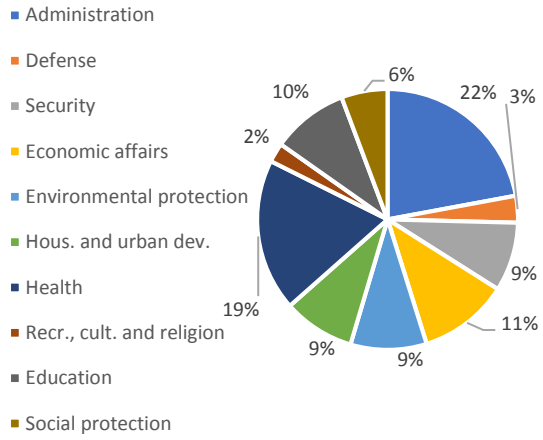
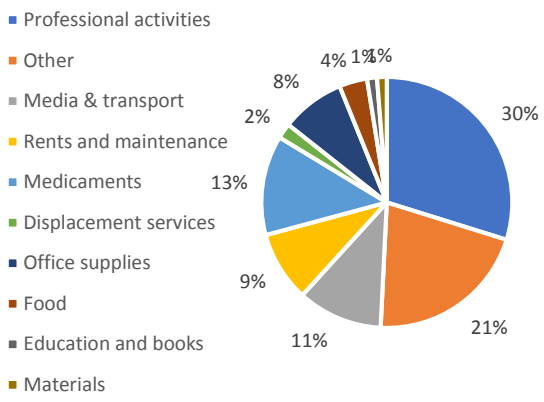


Figure 3.36 Expenditures on goods and services by function as a percentage of total expenditures on goods and services



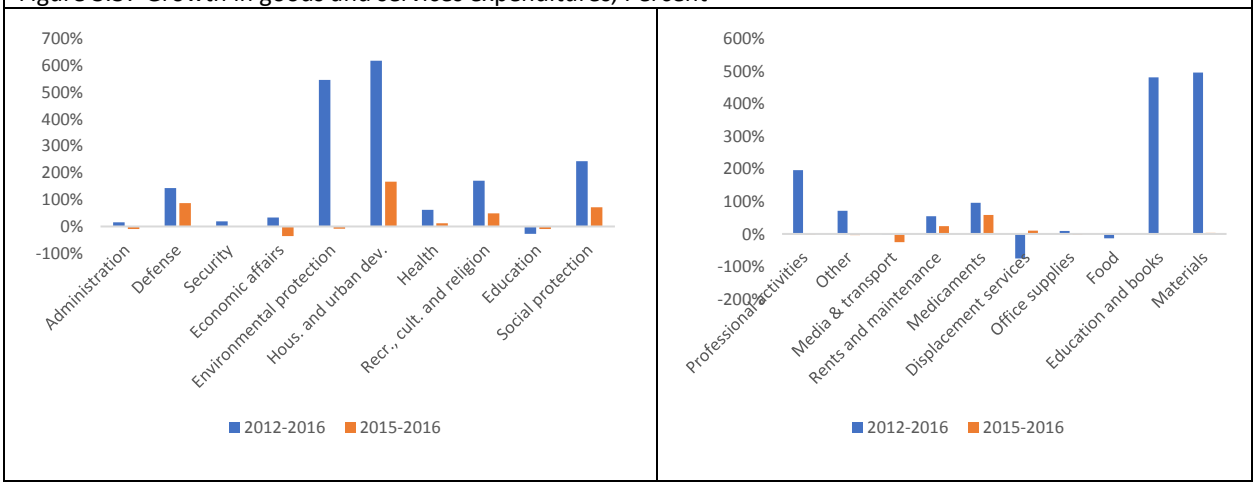
Source: MOF

119. **Between 2012 and 2016 housing and regional development, environmental protection, and social protection had significant increases in spending (**Figure 3.37**)**. The growth in housing and urban development was most dramatic between 2015 and 2016, increasing by 167 percent, possibly related to spending in Fogo and Sao Antao in the aftermath of natural disasters. In addition, 11 percent growth in health, the second largest goods and services spending category, contributed significantly to the country's total growth of spending on goods and service in the last two years.

120. **When spending on goods and service by item is analyzed, the most growth momentum has been in medications, which surged throughout all of 2012–16.** Spending on medications grew by almost 96 percent in 2012–16, and 58 percent just between 2015 and 2016**.** The high spending momentum was also observed in rents and maintenance, which grew by 24 percent between 2015 and 2016 and constituted about 9 percent of all spending on goods and services. On the other hand, professional activities, which had quite strong growth between 2013 and 2014, lost momentum between 2015 and 2016, with both an absolute and a relative (share in total spending) decline.

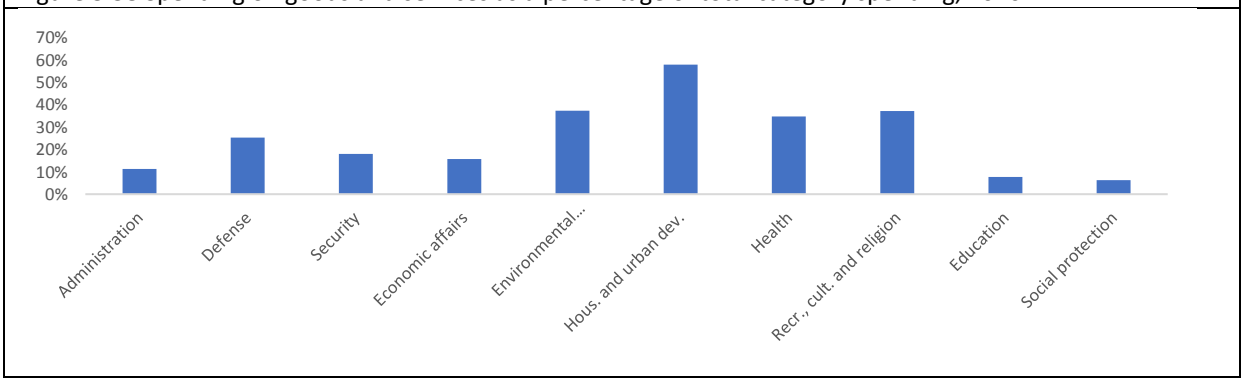
121. **Spending on goods and services constitutes more than 50 percent of spending in housing and urban development.** This category accounts for more than 58 percent of total housing and urban development spending (Figure 3.38). It is also responsible also for more than 30 percent of spending in three other categories: recreation, culture and religion, and environmental protection and health (medications). In contrast, only 11 percent is on goods and services. is spent in public administration. The large share of spending on goods and services in housing and urban development worth having a closer look if some efficiency gains could be possible.

Figure 3.37 Growth in goods and services expenditures, Percent



Source: MOF

Figure 3.38 Spending on goods and services as a percentage of total category spending, 2016



Source: MOF

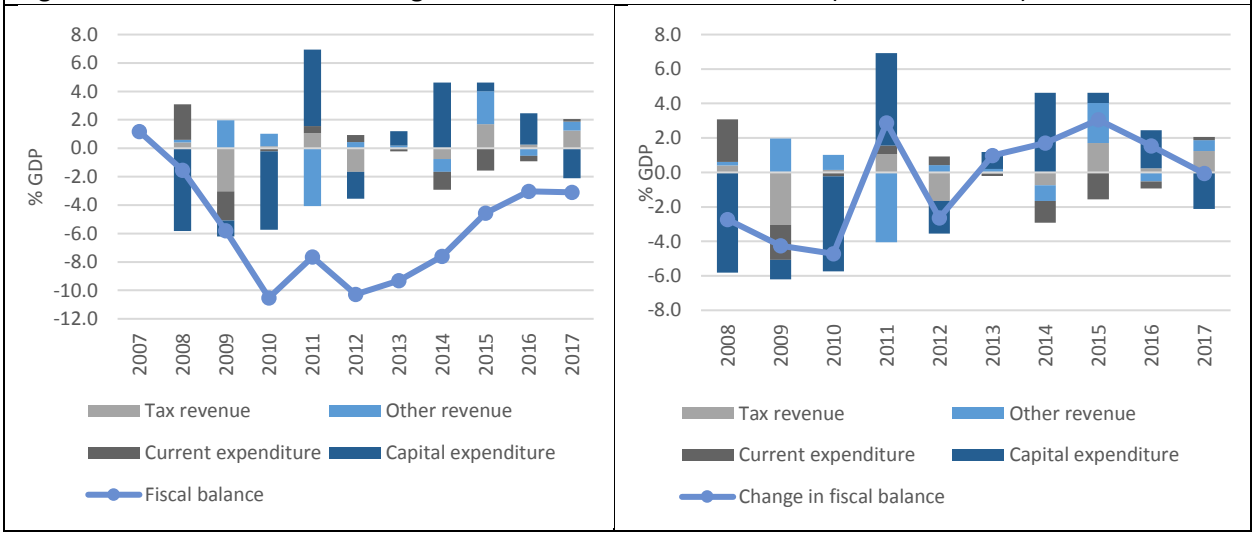
Public Investment Spending

126 **High levels of public debt and recurrent spending limits the amount of fiscal space that is available for public investment.** Because of fiscal consolidation efforts that partially relied on public investment cuts, investments had dropped to about 5 percent of GDP by 2017 (Figure 3.39). Investment has been also volatile and added to procyclicality of fiscal policy.

127 **Public investment is concentrated in economic affairs and under-executed.** Capital investment in Cabo Verde is dominated by foreign funded projects. Domestically-funded investments account for only 5 percent of total capital expenditure. At the functional level, most investments are directed towards economic affairs (Figure 3.40). Donor funded projects over the past six years have been centered mostly around energy, water and sanitation and other infrastructure projects including roads. The execution rate on capital spending is far below planned investment in spite of using the systems of large donors for appraisal, management, and reporting (Table 3.1, Table 3.1**Error! Reference source not found.**40). While cumbersome procurement procedures may be a factor in low execution rates for capital investment, the issue of under-execution is widespread which undermines the credibility of the overall budget.

128 **When investment budgets are not implemented as planned and spending priorities shift public services may be compromised**. Governments consistently deviating from their budgets risk an erosion of public trust. Governments should be accountable for their decisions to deviate from their original budgets. Without such explanations, civil society and other stakeholders can only speculate as to the reasons why governments deviated from their original budgets, which can erode public trust. Written explanations, much like published financial data, can allow for a more robust and evidence-based dialogue between governments and citizens. The importance of such explanations is already recognized by global actors like PEFA.

Figure 3.39: Main drivers of changes to fiscal balance in Cabo Verde (Percent of GDP)



Source: Author's calculations

Figure 3.40a: Public Investment by Functional Classification (Percent of GDP)

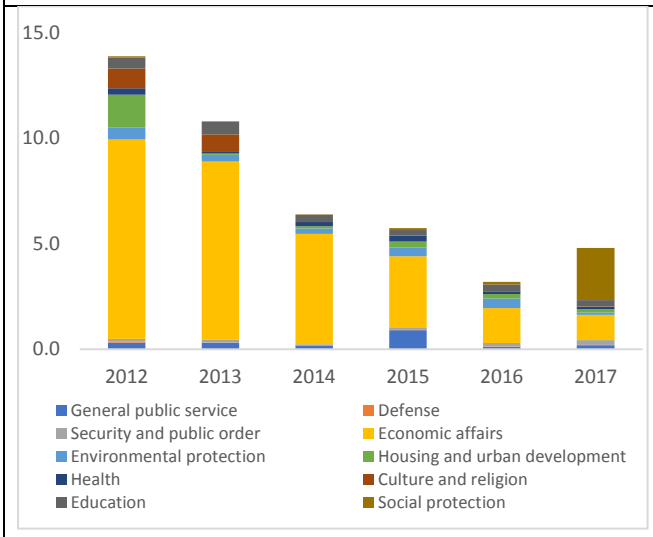
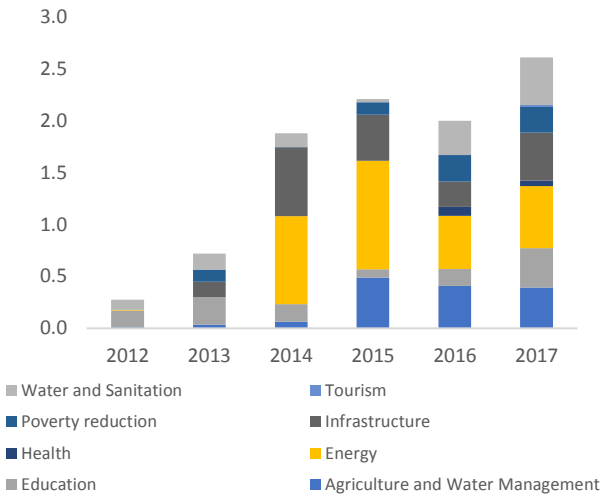


Figure 3.40b: Public Investment Financed by External Support (Percent of GDP)



Source: MoF

Table 3.1: Execution rates by type of spending

	2012	2013	2014	2015	2016	2017	Avg.
Current	**89.8**	**83.2**	**85.9**	**93.5**	**87.8**	**91.9**	88.7
Wages and salaries	91.2	91.5	92.9	93.4	90.1	89.7	91.5
Goods and services	75.5	56.6	68.5	86.6	77	79.3	73.9
Interest	115.5	91.9	82	98.8	99.1	96.1	97.2
Subsidies	62.6	22.4	62.6	167.1	68	53.3	72.7
Transfers	90.2	87.9	81.7	91.7	78.1	100.1	88.3
Social benefits	106.3	107.8	109.1	114.9	101.2	100.6	106.7
Others	76.2	71.4	75.8	77.9	89.8	111.6	83.8
Investment	**110.7**	**93**	**69.5**	**68.6**	**54.1**	**126.9**	87.1

129 **The reporting system for investment has flaws, which results in blurred picture on the level of fixed investment in Cabo Verde**. Cabo Verde investment budget includes recurrent and capital expenditure. Recurrent expenditure (including spending on salaries and others recurrent expenditures linked to the investment projects) are sizeable. They were responsible for almost half of the investment budget in 2016 (Figure 3.41). Separating investment budget from recurrent expenditure reduces capital expenditures to 8 percent of GDP on average in 2012-16, from the reported 12 percent of GDP. Domestic founded projects are responsible for about 70 percent of recurrent expenditures included in the investment budget. Most of the decline in the government capital spending between 2012 and 2016 was on fixed assets (not recurrent expenditures) (Figure 3.42). The budget recording of externally financed investment is not adequate. Externally financed investment projects are not fully included in the budget.

Only externally financed investment expenditures subject to a State Financing Agreement are included in the budget, while projects directly executed by implementing agencies (including NGOs) are not covered.

130 **The public investment framework in Cabo Verde could be improved.** Cabo Verde in 2014 enacted a national planning law which establishes a national planning system, comprising long-term, medium-term, and short-term planning instruments, and formalized the link between the identified planning instruments of varying horizons. The law addresses important elements of good public investment management system (PIM) including fragmentation in the system and the link with national priorities (Figure 3.43). This is an important step towards improving the productivity of public investments. Nevertheless, Cabo Verde is yet to fully operationalize the PIM possibly contributing to the low return on investments (SCD, 2018). An IMF study[37] found that the average country loses about 30 percent of the returns on its investment to inefficiencies in its public investment management processes.

Figure 3.41: Structure of government expenditures by economic function, 2016

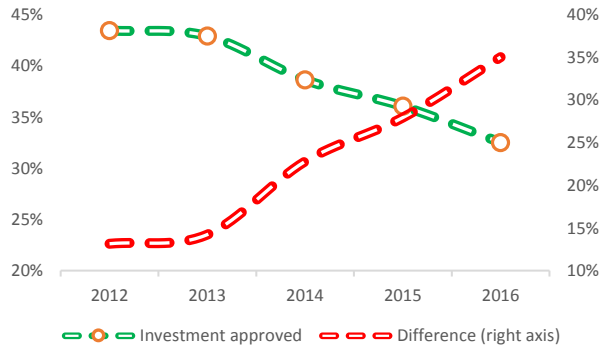
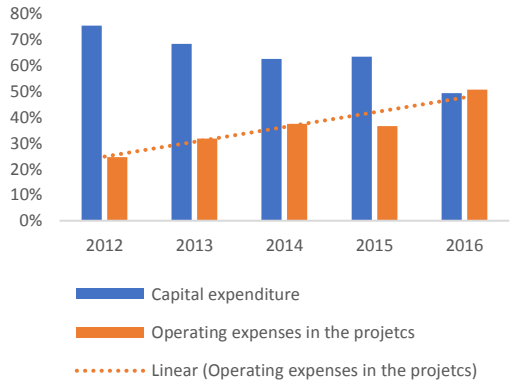
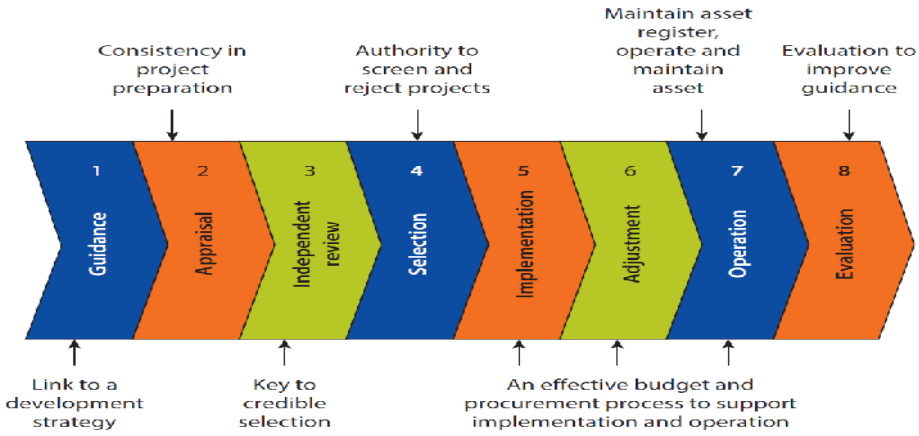


Figure 3.42: Structure of public investment budget (approved), 2012- 16



Source: MOF

Figure 3.43: The Main Features of a Public Investment Management System



Source: World Bank 2014 [Rajaram et al.]

[37] IMF Board Paper "Making Public Investment More Efficient", June 2015

3.3 Recommendations to Improve Spending Efficiency

131 **The benchmarking analysis found some areas where spending could be adjusted to yield some fiscal savings.**

- ***Goods and services:*** There is potential to reduce expenditures on medications, rents and maintenance as well as professional activities. Unfortunately, due to lack of disaggregated data for peers, it was not possible to establish benchmark values (average in the sample). Nevertheless, the most tightening potential is in expenditures on professional activities: reducing this category by up to 20 percent could reduce government spending by 0.4 percent of GDP. A 20 percent reduction in expenditures for medications and rents and maintenance can save an additional 0.13 percent of GDP. At the minimum, a 1 percent cut across these categories would yield 0.04 percent of GDP in savings (Table 3.2).
- ***Education wage bill:*** Adjustments in education wages and employment could also bring useful savings. For example, a 5 percent reduction in the average wage could save more than 0.2 percent of GDP (in gross terms). Reducing the number of workers in education by 10 percent would save almost 0.5 percent (in gross terms – without severance costs). At the minimum, a 1 percent cut across these categories would yield 0.05 percent of GDP in savings (Table 3.3).
- ***Efficiency in education*****.** Efficiency gains in education could yield benefits from improved outcomes or retargeting spending. A preliminary assessment suggests that Cabo Verde's education outcomes underperform peers for the amount spent, in particular in secondary education. Cabo Verde's education system could also benefit from a better targeting of social expenditures while increasing pedagogical resources. Pedagogical expenditures represented only 1.2 percent of primary spending and 0.1 percent of secondary spending in 2014.

Table 3.2: Potential goods and services adjustment measures

	LCU Millions	% of GDP
Reduction in expenditures on professional activities:		
-1%	-32	-0.02%
-5%	-159	-0.10%
Reduction in expenditures on medications by:		
-1%	-10	-0.01%
-5%	-52	-0.03%
Reduction in expenditures on rents and maintenance by:		
-1%	-11	-0.01%
-5%	-53	-0.03%

Table 3.3: Potential wage bill adjustment measures

	LCU Millions	% of GDP
Reduction of wages in public services by:		
-1%	-94	-0.06%
-5%	-471	-0.29%
-12%	-1169	-0.73%
Reduction in employment in education by:		
-1%	-77	-0.05%
-5%	-384	-0.24%
Reduction of wages in education by:		
-1%	-77	-0.05%

Chapter 4: Education Spending

***Summary**: Cabo Verde has recently developed an Education Sector Plan 2017-2021 that focuses on access to education, quality and efficiency. Important progress on access to basic and secondary education has been made but repetition rates and performance on learning outcomes lag peers. The sector's financing is within international best practice range and largely government funded. However, over 80 percent of total spending on education is consumed by wages while critical education inputs and investments are underfunded and underspent. Weak Human Resource Management is the key driver of inefficiencies in the sector while equity issues increase with the level of education. To improve education performance and achieve better value, the Government may want to: (i) allocate more resources to the last cycle of basic education and TVET, (ii) improve its human resources policies, (iii) increase investment and operational budgets of school to enhance quality of education services and school learning environment, (iv) improve efficiency through enhancing decentralization management and allocation of resources, and (v) further provide incentives to tertiary education in order to be more responsive to labor market needs.*

The chapter is organized as follow. It first presents an overview of Cabo Verde's education system and sector goals. Section 4.2 analyzes the progress pertaining to the most important education indicators, including enrollment, repetition, dropout rates, and learning outcomes. These are benchmarked against relevant peer countries. Section 4.3 discusses key trends in public education spending, distribution of expenditures by sub-sectors and economic classification as well as implementation performance. Section 4.4 analyzes issues of sustainability, efficiency and equity in the sector. Section 4.5 concludes with policy recommendations.

4.1 Overview of the Education Sector

Structure of the Education System

132 **The Cabo Verdean education system is fairly centralized although select programs are managed at the sector ministry level.** The education sector in Cabo Verde is managed by the Ministry of Education (MOE), except vocational training which is under the State Secretariat for Innovation and Vocational Training of the Ministry of Finance, since December 2017. Several other ministries manage education programs. Notably: (i) Ministry of Family and Social Inclusion - school social action, education for family life and promotion of gender equality; (ii) Ministry of Sport - youth associations and school sports; (iii) Ministry of Justice and Labor- promotion of education for citizenship and human rights, (iv) Ministry of Infrastructures, Spatial Planning and Housing - construction and maintenance of educational equipment and training and research in the field of Spatial Planning; (v) Ministry of Health and Social Security - health education and training in the field of health; (vi) Ministry of Finance - training and research in the fields of management and public administration; (vii) Ministry of Economy and Employment - training and research in the fields of tourism, trade, industry and energy, with a special focus on renewables; (viii) Ministry of Agriculture and Environment - agricultural sciences and environmental education; (ix) Ministry of Culture and Creative Industries - Cabo Verdean language policy; (x) Ministry of Internal Administration - prevention of situations of insecurity and school violence.

133 **Central administration is responsible for education and training, science and research, curriculum development, management and planning, control, supervision and regulation**. The Ministry has 22 deconcentrated offices (Education Delegations) which are aligned with the municipal subdivisions

(*concelhos*) of the country. The education delegations are charged with the supervision of schools but have only limited public resources and their role in the recruitment and placement remain advisory.

134 **Cabo Verde's formal education system follows an 8-4-5 structure.** This includes eight years of universal, compulsory and free basic education (2 "cycles" of 4 years each), which officially begins at age 6, covering grades 1-8. Basic education is followed by four years of secondary education both general and technical schools, before five years of higher education.

135 **Preschool education is not compulsory.** It relates to the different aspects of socio-educational care of children aged 4 and 5 and is also intended to improve and prepare children for access to basic education. Pre-school education is the responsibility of municipalities, official institutions and private entities, under the oversight of the MOE.

136 **The current basic education structure introduced in 2017 has replaced the previous six-years basic education system**. The old system promoted universal and mandatory 6 years of basic education (Table 4.1and Figure 4.1). To enhance basic learning skills, the extension of basic education will give students more time to develop the foundational skills. Basic education targets children aged 6-13 years old.

137 **Secondary education targets the cohort of students aged 14-17 years old and offers general and technical tracks.** Secondary education had been organized since 1995 in two three-year cycles (a common core and technical specialization path). This has been replaced by one single four-year cycle with the same general and technical orientations.

138 **Higher education has been recently developed in Cabo Verde.** Higher education has been developing quickly since 2002, with two public and eight private institutes and universities. The different educational streams have increased the enrolment by ten-folds over the last fifteen years thus reducing the number of students abroad.

139 **TVET has been strengthened by the development of vocational training courses with various modules.** The main TVET provider is the *Instituto de Emprego e de Formacao Profissional* (IEFP), a public agency with administrative and financial autonomy, overseeing a network of nine regional training centers covering most of the islands. It is under the Ministry of Economy and Employment. The *Escola de Hoteleria e de Turismo de Cabo Verde* (EHTCV) and *Centro de Energias Renovaveis et Manutencao Industrial* (CERMI) are specialized training centers with stronger ties with related industries. Private sector training provision is limited in size and scope.

140 **Non-formal education covers literacy and post-literacy education.** The adult basic education ensures literacy, and post-literacy and other lifelong learning activities, with a view to raising the level of culture and learning. In 2017, 98 percent of the population ages 15–24 was literate[38]. This is one of the highest in Africa, the SSA average is at 75 percent.

[38] UNESCO data, accessed February 2017. http://uis.unesco.org/country/cv.

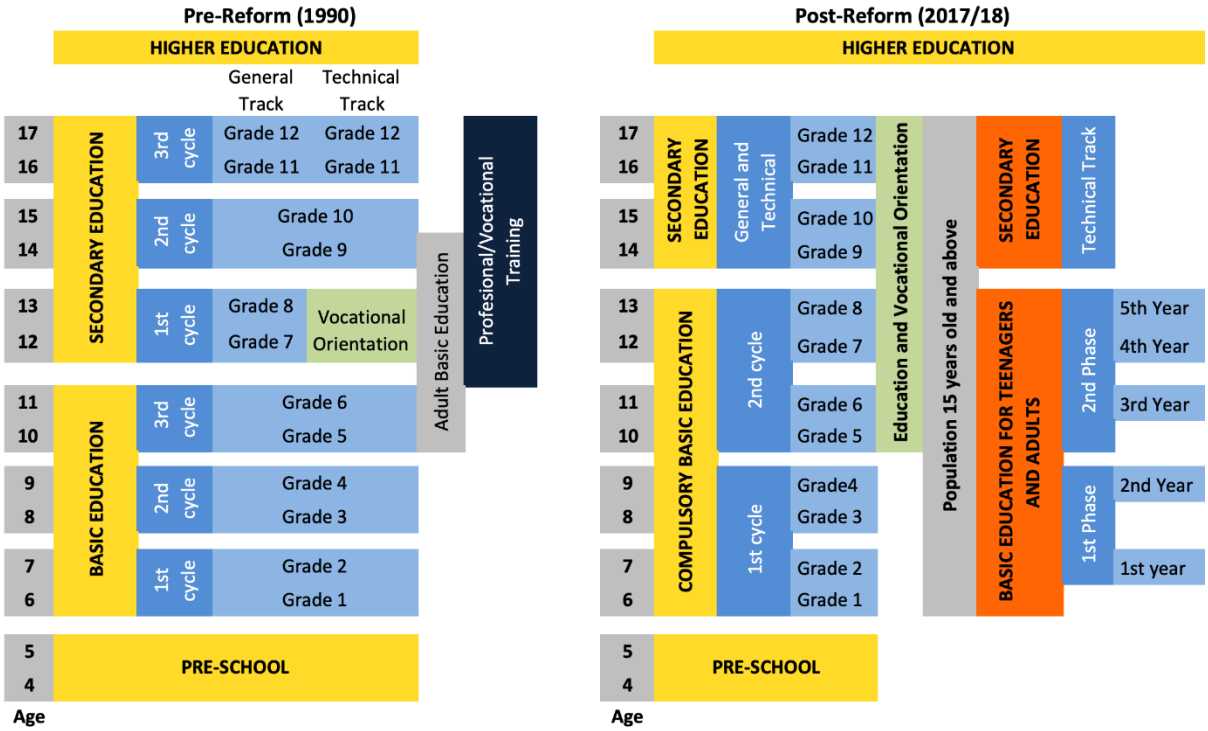
141 **The public sector is the largest provider for basic and secondary education in Cabo Verde.** At the basic education level, only 1.3 percent of children were enrolled in private schools in 2015/16, while it increases to 8 percent for secondary schools. This enrollment pattern has remained the same over the period 2010/11 and 2015/16 (Figure 4.3). In contrast, private schools play an important role in preschool education, accommodating nearly 60 percent of the enrolled students in 2015/16 (Figure 4.2).

Table 4.1: Structure of the Cabo Verdean Education System Before and After Reform

Pre-reform Structure (based on 1990 System)	Post-reform Structure (2017/18)
Basic Education	
• Basic education of 6 years is universal and mandatory • Basic Education is made up of 6 years, organized into 3 cycles (2 years per cycle)	• Basic education is universal, compulsory, and free through Grade 8 for all children, youth, and adults • Basic education is made up of 8 years, organized into 2 cycles (4 years per cycle)
Secondary Education	
• Secondary education is made up of 6 years, organized into 3 cycles 2 years per cycle The third cycle Grades 11 and 12 offers both technical and general tracks	• Secondary education is made up of 4 years and offers general and technical tracks
Vocational Professional Education	
• Professional vocational training is offered parallel to secondary education	• Vocational professional training is no longer under the MoE transferred to the MoF.

Source: World Bank, Educational and Skills Development Enhancement Project, 2018

Figure 4.1: Cabo Verde's Education System, 1990-2017



Source: Educational and Skills Development Enhancement Project, 2018

Figure 4.2 Total enrollment basic and secondary education by level and school type, 2015/16

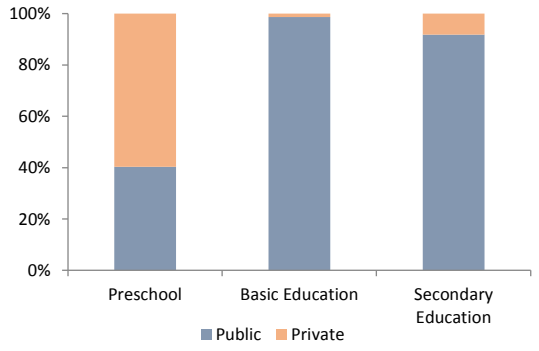
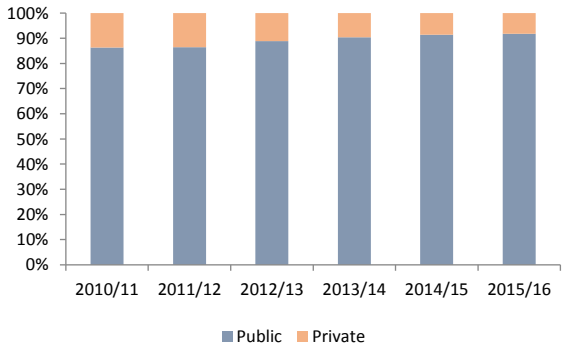


Figure 4.3 Enrollment in secondary education by school type 2010/11-2015/16



Source: EMIS, 2010/11-2015/16

Sector Plan and Goals

142 **The recently approved Education Sector Plan (ESP) 2017-2021 puts an emphasis on access to education, quality and efficiency.** Informed by the 2014/15 Education Sector Analysis, Cabo Verde's recently developed Education Sector Plan focuses on three pillars: (i) gradually increasing universal access to pre-primary education, basic and secondary education, (ii) improving quality and relevance of education services, and (iii) improving the efficiency and management of the education sector. The main sector issues identified by the 2014/2015 Education Sector Analysis sector are: (i) inadequate access to preschool, (ii) low learning outcomes in basic education which have negative effects in secondary education, (iii) high dropout and retention issues in secondary education, and (iv) inefficiencies in the management of the education sector. Among the key priorities of the ESP are the expansion of free basic education, the curriculum reform, the implementation of a student assessment system, teacher training and the strengthening of the MOE's deconcentrated service providers (Table 4.2)

Table 4.2: Key objectives of ESP 2017/21

PROGRAM	OBJECTIVES	PLANNED RESULTS
		Base year: 2015 Targets:2021
Universal access to preschool education	• Implementation of preschool education with quality for children aged 4-5 years old	• Preschool Net Enrollment Rate: 85% to 100%
Integrated Basic Education: The Basics for Life	• Ensure equitable access to universal and compulsory education with quality up to Grade 8 for all children, boys and girls	• Basic Education Net Enrollment Rate: 86% to 100%
Strengthening and Consolidation of Secondary Education (General and Technical)	• Improve access, quality and efficiency of secondary education aligned with the economic development of the country	• Secondary Net Enrollment Rate: 51% to 80% • % of students in Technical Education: 3% to 10%

Higher Education, Science and Innovation	• Promote equitable and sustainable development of Higher education aligned with the country's socio-economic and cultural research and development	• Net Enrollment Rate: 23% to 30% • Number of students per 100,000 inhabitants: 2,264 (2013) to 2,385
Educational Management: The Axis of Change	• Strengthen the quality of services offered by central and decentralized with efficiency	• Percentage of implementation of the ESP: 95%

Source: ESP 2017-21

143 **It is also noteworthy that the Government is developing a skills development strategy to support the national development strategy for 2017-2021(PEDS)objectives.** In December 2017, the Government created a Secretariat of State for Innovation and Vocational Training (SSIVT) under the MoF. The SSIVT' first mission was to develop a skills development strategy with a view to consolidate and better coordinate the various training programs and interventions, to improve their relevance to the current and future needs of the economy and ensure their sustainability overtime.[39]

144 **The Government aims to promote and facilitate access to demand driven training programs, especially for young Cabo Verdeans from disadvantaged background**. A restructuring of the Fund for Employment and Training (*Fundo de Promoção do Emprego e da Formação* (FPEF), which has been operational since 2013, is central to this effort. The FPEF was designed to support vocational and technical training through loans and scholarships to needy students, as well as, financing to small and microenterprises. Nevertheless, the Funds' scope of intervention remained limited owing to low interest from training providers and the cut in funding due to the elimination of its main source of revenue (10 percent) from the tourism tax end of 2016. With the Funds restructuring, the Government seeks to strengthen the involvement of relevant industries, revise the scholarships program to improve access to training programs relevant to the labor market needs, and ensure its financial sustainability.[40]

4.2 Performance of Cabo Verde's Education Sector

Enrollment, Repetition and Drop Out

145 **Cabo Verde has made significant progress in expanding access to preschool and primary education.** Although not compulsory, the net enrollment rate (NER) in preschool was 67 percent for children aged 3 to 5 years and 82 percent for children aged 4 to 5 years in 2017, which is above the structural peers but below its aspirational peers. For primary education, the Government will most likely accomplish the 4.1 SDG education target ensuring "that all girls and boys complete free, equitable and quality primary and secondary education." The NER reached 93 percent in 2017, remaining slightly below the aspirational countries (Figure 4.4). The basic education reform aimed at broadening the instruction from 6 to 8 years by 2021 seeks to ensure universal access and free basic education.

[39] World bank, Education and Skills Development Enhancement Project, 2018
[40] World bank, Education and Skills Development Enhancement Project, 2018

146 **Access to secondary education has also significantly improved in recent years but continues to be lower than aspirational peers.** The NER of secondary education reached 72 percent in 2017 against 59 percent in 2006. Furthermore, transition rates to secondary schools in Cabo Verde are high (85 percent). Nevertheless, the NER in secondary education of aspirational peers stands above 80 percent, reaching 89 percent in Seychelles or 91 percent in Saint Vincent and the Grenadines (Figure 4.4). For higher education, the Gross Enrolment rate (GER) has increased from 8 percent in 2006 to 24 percent in 2017, standing above all aspirational countries, except Mauritius.

147 **Dropout and repetition rates although declining at the primary education level, remains a key feature of secondary education in Cabo Verde.** Repetition rate fell from 15 percent in 2005 to 8 percent in 2016 at the primary education level. However, there is much variations occur across grades with a peak in repetition rates at 16 percent at Grade 2 (Figure 4.5). At the secondary level, repetition rate persists around 20 percent over the last decade, and especially higher at Grade 7 (27 percent). Regarding dropout rate, it is only 2 percent at primary level while it increases to 8 percent for Grade 9-11 at secondary schools. The issue of student retention at the secondary level is likely related to an inadequate primary school learning and inadequate teacher qualification (most secondary teachers have gaps in pedagogy and/or subject area). While there is no system of evaluation and assessment of learning in basic education, curriculum issues and low quality of educational services, lack of household resources to pay for schooling and lack of job opportunity are additional key factors influencing this outcome[41].

148 **Compared to peers, repetition and out-of-school rates in secondary education are high, underlying Cabo Verde's underperformance in terms of internal efficiency.** Except for Sao Tome and Principe, repetitions rates in Cabo Verde are significantly higher compared to all other peers (Figure 4.7). Adolescents out of school reached 19 percent in 2016 compared to an average of 7.6 percent for peer countries (Figure 4.6). Even structural peers such as Bhutan, Samoa and Sao Tome and Principe have lower adolescents out-of-school rates.

Figure 4.4 Net Enrollment Rate by Level of Education among Peers Countries, 2017

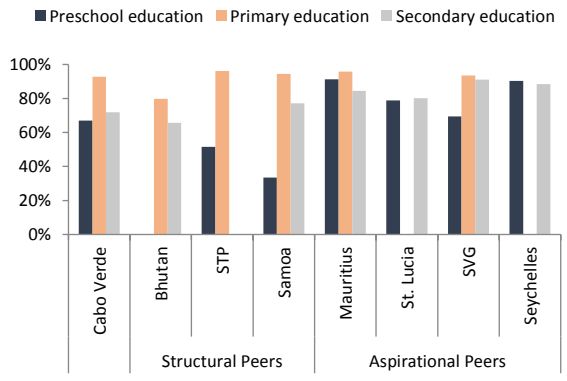
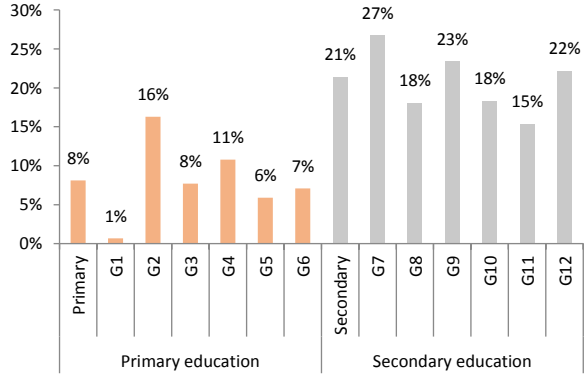


Figure 4.5 Repetition Rates by Grade and Level of Education, 2016/17



Source: EMIS 2016/17 and UNESCO Statistics for 2015 and 2017

[41] Eléments d'analyse sectorielle de l'éducation à Cabo Verde : des services plus efficaces et plus équitables au service de la croissance et de l'Emploi, UNICEF 2015

Figure 4.6 Out-of-school children among Peers Countries, 2016

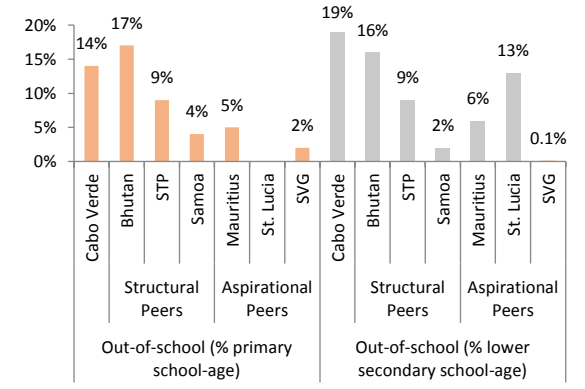
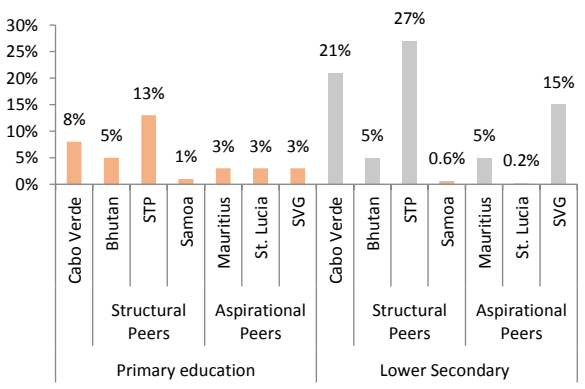


Figure 4.7 Repetition Rates by Education Level of Education among Peers Countries, 2016



Source: UNESCO Statistics 2016. *Note:* STP: Sao Tome and Principe; SVG: Saint Vincent and the Grenadines

Learning Outcomes

149 **Learning outcomes remain below expectations.** While there is no systematic tracking of student learning, available evidence shows limited learning outcomes, at least in primary education. The 2010 *Aferida*, a national large-scale assessment for 6th grade students, revealed both high variability between individuals and lower than expected overall learning outcomes (Table 4.3). The average grade was 8.7/20 in mathematics and 7.8/20 in Portuguese. Less than one third of students demonstrated satisfactory learning outcomes in both subjects. The island of residency and the household living conditions are significant variables that differentiate between student learning outcomes at the primary level. There is a difference of 2.5 points in the average between students from the poorest and the richest quintile, and a difference of 2.9 points between the average score of students in Sal and those in Santa Cruz (UNICEF, 2015).

Table 4.3: Results of 6th Grade Students (Aferida 2010)

	Level of Learning Outcomes		
Subject Areas	Concerning	Weak	Satisfactory
	(<8)	(8-10)	(>10)
Mathematics	41.9%	23.2%	34.8%
Portuguese	49.3%	20.5%	30.2%
Average score	50.0%	22.5%	27.4%

150 **A 2015 sector analysis identified several factors that adversely affect school quality[42].** These include: i) insufficient in-service teacher training; ii) Portuguese being used as the official language of instruction, while for many students it is their second language (Creole being their first); iii) lack of focus and resources on pedagogical aspects (as compared to social programs); and iv) insufficient levels of autonomy for management at the local levels. In addition, the 2017 SABER-Student Assessment (SABER-SA) diagnostic found significant gaps between what is being taught and assessed in the classroom and the official curriculum - in reality, students are not learning what they are supposed to be learning. There is also little systematic tracking of learning outcomes and no standardized national tests exist, making it hard to take timely corrective action.

[42] Eléments d'analyse sectorielle de l'éducation à Cabo Verde : des services plus efficaces et plus équitables au service de la croissance et de l'Emploi, UNICEF 2015

151 **Relevant skills development opportunities are limited and often do not meet the needs of the economy.** The high percentage of students leaving the secondary level before graduation results in a large amount of young people without adequate qualifications and competencies, thus facing difficulties in the job market. On the other hand, the TVET system has a low coverage and accounts for only 5 percent of secondary-level enrollment.[43] Higher education also has limited relevance for the labor market with the distribution of students per subject area unaligned with access to employment: 70 percent of university students enroll in Humanities and Social Sciences. As a result, unemployment among higher education graduates is high, while firms say they have difficulty finding qualified workers with the right skills.

152 **Youth unemployment has been associated with a mismatch between available skills and the demand of a competitive services sector.** In 2016, 49 percent of the urban youth ages 15–19 unemployed. Approximately, 38 percent for those ages between 20 and 24 were unemployed. In Praia, 63 percent of the youth ages 15–24 were unemployed. Concurrently, firms have identified adequately trained personnel as a major constraint to doing business in Cabo Verde. A good example can be found in the tourism sector, which accounts for approximately a quarter of available jobs. Cabo Verde's hotel and tourism schools are unable to address all the needs of the tourism industry, including for basic hotel services such as waiting tables, housekeeping, and small repairs. These skill gaps are corroborated by Cabo Verde's low score 82 out of 141 in 'Human Resources and Labor Market' of the Travel and Tourism Competitiveness Index. In general, weak links between education and work and the absence of apprenticeships prevent students from acquiring adequate skill sets. Higher education has limited relevance for the labor market with the distribution of students per subject area misaligned with access to employment (about 70 percent of university students enrolled in Humanities and Social Sciences). As a result, unemployment among higher education graduates is high, while firms say they have difficulty finding qualified workers with the right skills.

4.3 Financing of the Education Sector

Trends

153 **Education resources show a modest upswing between 2012 and 2018 but remain below the sector's needs.** Public expenditure on education increased by a modest 3 percent in real terms between 2012 and 2016 but show a drop in the 2017 budget before increasing again in 2018 (Figure 4.8). Similarly, education spending as share of the national budget amounted to 21 percent in 2016 from 17 percent in 2012 – this is within the internationally accepted range of 4-6 percent of GDP. However, examining the sector's costing in the PEDS, budget appropriations in 2018 are still far from the actual funding needs of the sector.

154 **Cabo Verde's public education spending is high compared to its peers.** Cabo Verde ranks among the highest spending peer countries (such as Bhutan, Sao Tome Principe and St. Vincent and the Grenadines) both in terms of share of the budget and GDP (Figure 4.9). Its spending per primary student is also among the highest together with Mauritius. Despite the higher spending, other countries which spend less (Bhutan, Samoa or Seychelles) achieve better educational outcomes (Figure 4.10). This suggests that Cabo Verde could further improve its outcomes by using its resources more efficiently.

[43] Cumulated student enrollment for the first and second year of secondary level. Eléments d'analyse sectorielle de l'éducation à Cabo Verde, UNICEF 2015.

Figure 4.8 Education appropriations, expenditures and estimates, 2012-2020

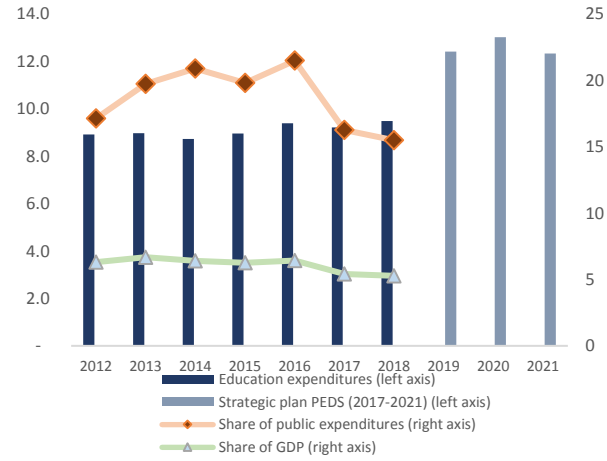
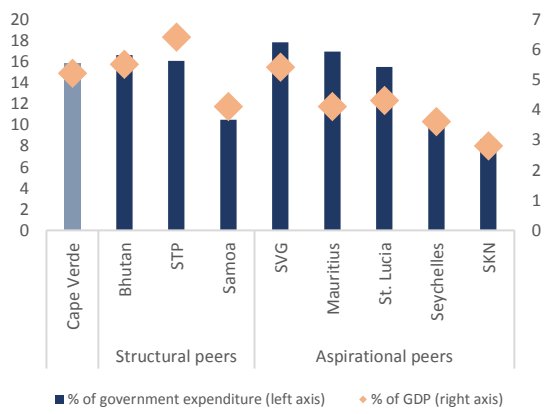
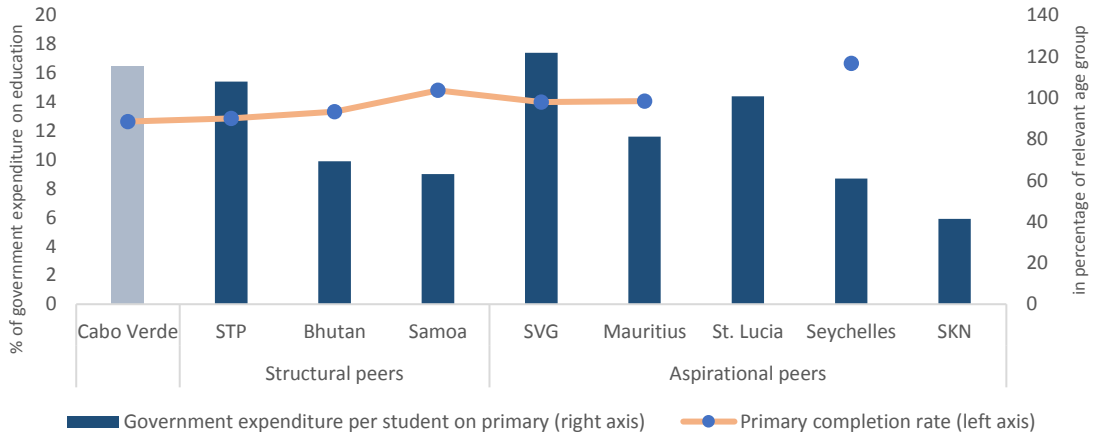


Figure 4.9 Comparison of public education expenditures with Peers



Source: Ministry of Finance, PEDS 2017-2021 and WDI. Note: Budget appropriations of 2017 and 2018 exclude external resources.

Figure 4.10 Comparison of spending and outcome with Peers, Avg. 2010-2015

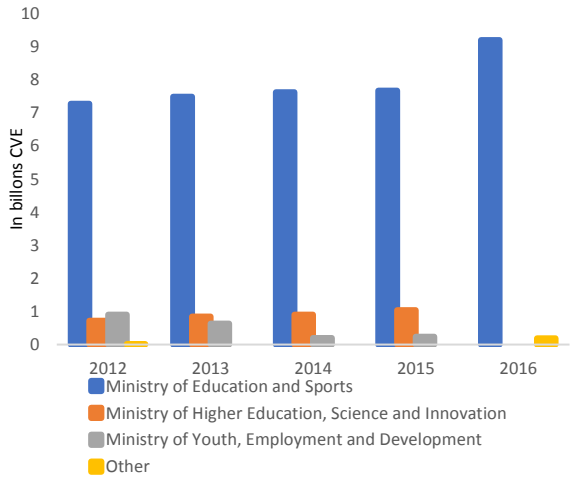


Source: WDI

155 **The education sector is largely financed by domestic resources under the Ministry of Education and Sports.** Over the observed period, domestically funded education public expenditures have increased in real terms and as a share of total education expenditures, from 86 percent in 2012 to 97 percent in 2016. At the same time, external resources show a downswing declining by 70 percent between 2012 and 2016 (Figure 4.11). Despite a range of sector ministries managing education programs, the bulk of the funding is managed centrally by the Ministry of Education and Sports (Figure 4.12).

Figure 4.11 Sources of Finance

Figure 4.12 Spending by Ministry



Source: MOF

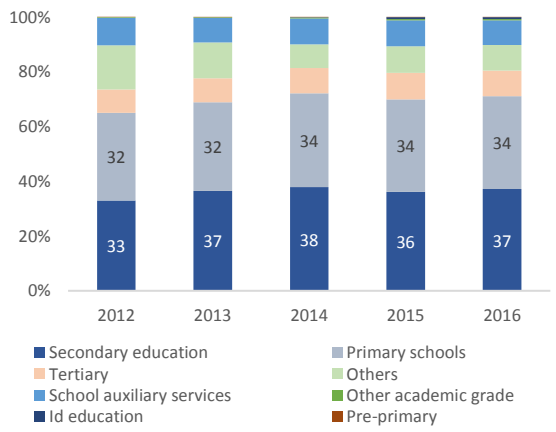
Expenditures by Education Level

156 **Secondary and primary education account for over 70 percent of public education expenditures[44].** Spending on secondary education increased in real terms and as a share of total education expenditures, averaging 36 percent of total education expenditures between 2012 and 2016 (Figure 4.13). Spending on primary education during the review period remained at around 33 percent – below the Global Partnership for Education good practice recommendation of 50 percent However, the recently launched reform to basic education is expected to improve the sector's efficiency's (notably the repetition rates) and generate savings to contribute to the creation of better conditions of teaching and learning. Cabo Verde's student and spending patterns is closer to OECD countries – its share of spending on primary and secondary education as a share of GDP (2.1 percent and 1.9 percent) is broadly in line with the OECD average of 1.5 and 2 percent respectively.[45] Higher education and auxiliary services of education (which includes scholarships) account for approximately 10 percent of the education budget. Spending on pre-school is miniscule and does not constitute a priority even though it is known to improve children's cognitive skills and educational attainment.

157 **A comparison of public education spending per students as a share of GDP per capita shows that Cabo Verde spends relatively higher on primary but slightly below the peer average at secondary level.** Cabo Verde spends around 16.5 percent of GDP per capita on each student at the primary level which is above the average of 12 percent recorded by peers (Figure 4.14). At secondary level, Cabo Verde spends the equivalent of 18 percent of GDP per capita on each student which is just below the peer average of 19 percent. This could change with the reform in basic education.

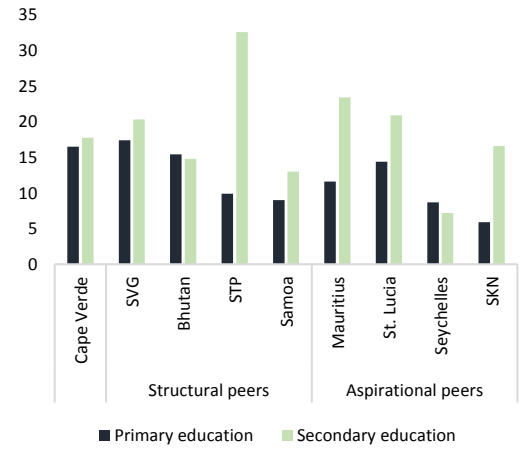
[44] For the analysis, primary education expenditure data is based on the years 2012 -2016 and therefore covers the funding of Grade 1-6 under primary education and not Grade 1-8.
[45] Education at a glance 2018, OECD indicators

Figure 4.13 Breakdown of education expenditure, 2012-2016



Source: MOF

Figure 4.14 Average government expenditure per student, 2010-2016



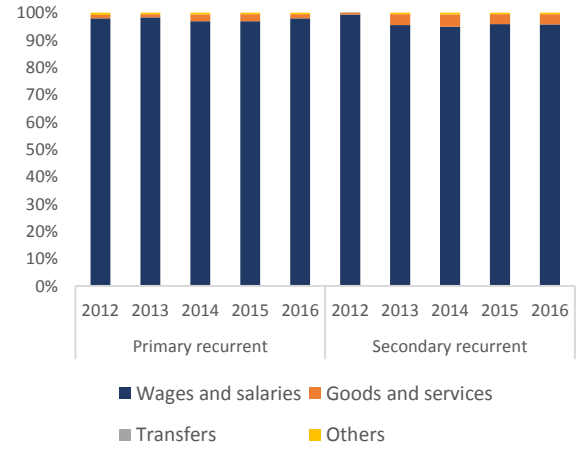
Source: WDI

Expenditures by Economic Classification and Budget Execution

158 **Cabo Verde's economic spending is not in line with suggested best practice benchmarks given its low spending on critical educational inputs, particularly primary education.** Salaries make up the largest share of total recurrent education spending, accounting more than 80 percent of total recurrent expenditures. The recurrent expenditures for primary and secondary education show the dominance in spending on teacher salaries – accounting on average 98 percent (Figure 4.15). In the case of primary education, the remaining 2 percent share of resources devoted to non-teacher salaries in primary education is far below the suggested best practice of Education for All – Fast Track Initiative which recommends one third of recurrent spending on primary education in favour of non-salary spending. This raises concerns about the adequacy of school's inputs at primary level (such as textbooks, teacher training, curriculum development, extra-curricular activities) and its impact on student learning. These items are classified under goods and services, a spending category that has declined as a share and in real terms over the observed period. For the overall sector, investments accounted for 6 percent over the review period and has declined in real terms (Figure 4.16). The lower contribution of investment is explained by the slowdown in the pace of school construction program. The spending category "other" has accounted for almost 7 percent of total spending but its spending items are not clear.

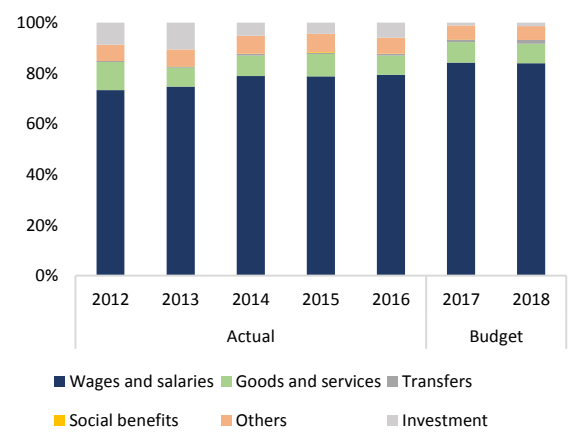
159 **An international comparison of wages as a share of total public expenditures in public institutions shows that Cabo Verde spends more on wages than most of its peers for both primary and secondary education.** The difference in spending is particularly relevant for structural peers which dedicate on average 50 percent of their primary and secondary education spending to staff compensation. With regards to the aspirational peers, who spend on average 72 percent of total expenditure in staff compensation for secondary education, Cabo Verde is close to 90 percent (Figure 4.17).

Figure 4.15 Composition of Primary and secondary Recurrent Expenditures by Economic Category, 2012-2016



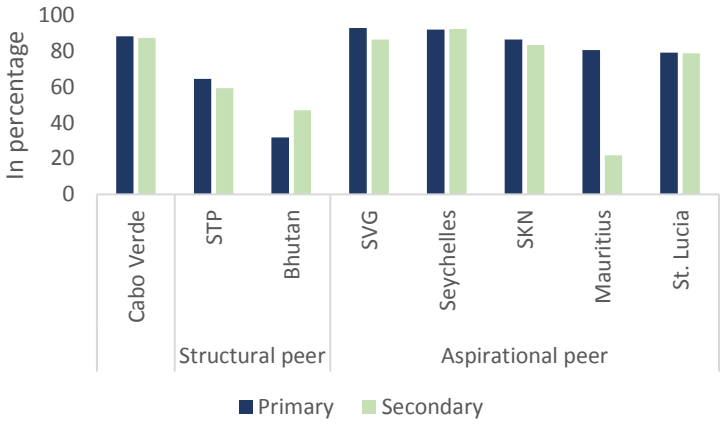
Source: Ministry of Finance, BOOST

Figure 4.16 Education appropriations and expenditures by economic classification, 2012-2018



Source: WDI. Note: Budget appropriations of 2017 and 2018 exclude external resources

Figure 4.17 All education staff compensation as a % of total expenditure in public institutions, Avg. 2010-2016



Source: WDI

160 **The budget execution performance is affected largely by underspending across all categories.** Over the period 2012-2016, budget execution performance was on average underspend by 10 percent (Table 4.4). Consistently lower than budgeted spending points to some weaknesses in preparing realistic budgets and capacity constraints to implement the budget during the fiscal year. Whereas salaries not surprisingly were almost fully spent (at average 97 percent), spending on goods and services, transfers and investments have been consistently below appropriations with about 25-40 percent of education resources not being spent between 2012 and 2016. In the case of transfers, this is surprising as they are typically easily executed. The only spending categories that have at times exceeded budget appropriations are social benefits and others. With regard to the sources, although externally funded have been declining since 2012, the deterioration in the implementation performance has been associated with inefficiencies

in the management of donor aid. In contrast, domestically funded resources have been consistently at 93 percent execution rate.

Table 4.4: Budget Execution: Initial Budget versus Actual Spending (2012-2016), in percentage

	2012	2013	2014	2015	2016	Avg.
Economic classification						
Wages and salaries	(3.9)	(3.3)	(3.4)	(1.8)	(3.0)	(3.1)
Goods and services	(26.1)	(62.3)	(27.0)	(42.1)	(41.9)	(39.9)
Transfers	(20.8)	(26.3)	(10.7)	(43.2)	(25.3)	(25.3)
Social benefits		(73.8)	133.4	375.4	(40.0)	98.8
Others	2.1	2.4	0.5	2.4	(4.6)	0.6
Investment	9.3	5.5	(59.5)	(41.4)	(34.7)	(24.2)
Sources						
External (grants)	28.3	(46.1)	(32.5)	(51.5)	(54.4)	(31.2)
External (loans)	(43.4)	(30.0)	(66.5)	(77.3)	(53.8)	(54.2)
Domestic	(7.2)	(7.7)	(6.9)	(5.3)	(7.7)	(7.0)
Total	**(5.7)**	**(12.6)**	**(11.7)**	**(9.9)**	**(10.5)**	**(10.1)**

Source: MOF

4.4 Sustainability, Efficiency and Equity Issues

Sustainability

161 **Enrolment in public education (basic and secondary) is expected to be reduced by about 8,500 students (9.6 percent) by 2030.** The school-age population (4-22 years old) is expected to reach 183,000 in 2030 down from 193,000 in 2017. Based on the assumptions made under the education sector strategy of universal preschool, gradual improvement of internal efficiency in primary and secondary education and increased transition rate from grade 6 to grade 7, a decrease in enrolment is expected at all levels, except for secondary, which will experience a stagnation over the period 2015 - 2030.

162 **The number of teachers and the share of salaries in the budget is expected to decline over the next 12 years** (Figure 4.18)**.** To maintain the current STRs only part of the teachers that will retire in the coming years will be replaced. The education strategy's objective of increasing the STRs to 2009-10 levels might not be feasible as replacements will be needed to fulfill the needs of specific regions or subject areas. With less teachers being replaced, the share of salaries in the MoE's recurrent budget is expected to decrease after a peak at 79 percent in 2021 to 70 percent in 2028 (Figure 4.19).

Figure 4.18 Teacher Population Projection, 2017-2030

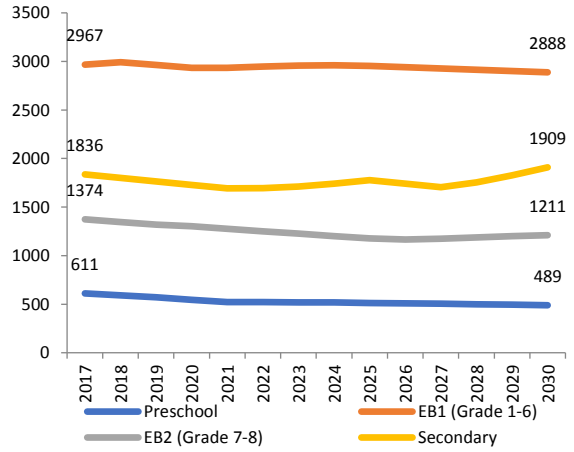
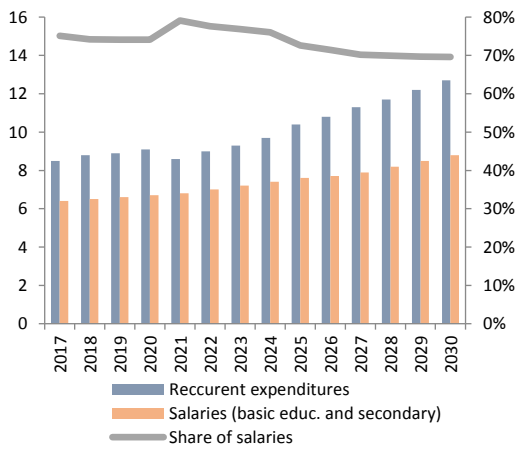


Figure 4.19 : Projection of MOE Recurrent Expenditures and Share of Salaries (Billion CVE)



Source: INE and MoE

Internal Efficiency

163 **Basic education completion rate is high.** Based on current repetition and dropout rates, a reconstructed cohort survival rate estimate shows that for every 100 children who enter Grade 1, 57 percent eventually reach Grade 6 without repetition. Overall, 94 percent of them are estimated to complete Grade 6, and their study takes on average 7.1 years (Table 4.5). In 2014/15, the Education Sector Analysis completed by UNICEF suggested a primary internal efficiency coefficient at 87 percent, which was significantly higher than the 80 percent benchmark target recommended by the GPE[46]. In 2015, survival rate to primary last grade was slightly lower than structural or aspirational peers (Figure 4.20).

164 **In contrast, secondary education system's performance is characterized by high levels of repetition and dropouts.** For every 100 children who enter Grade 7, only 15 percent of them reach Grade 12 without repetition. Furthermore, only 58 percent remain in the system until the last grade, while their study takes on average 9.5 years instead of 6 years. This suggests that survival throughout the cycle remains a challenge, and impact negatively the internal efficiency of the system. Compared to peers, Cabo Verde remain below to all its peers, regarding survival rate to lower secondary last grade in 2015 (Figure 4.20).

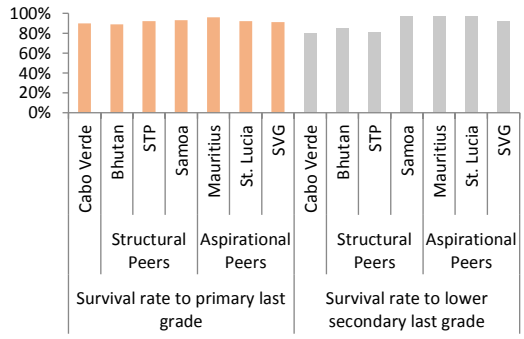
165 **The internal inefficiencies result into substantial cost for the Government.** Based on primary public expenditure in 2016 and the number of repeaters in 2015/16, the cost of school repetition is estimated to US$ 2,700,000 for basic education, and US$ 6,900,000 for secondary, which represented 0.6 percent of GDP.[47] Using cohort analysis, the public total cost per student completing Grade 6 without

[46] The ratio between the theoretical duration of a cycle and the average number of pupil-years effectively invested provides the definition of the internal efficiency coefficient.

[47] The cost of repetition is based on the calculation of the unit cost multiplied by the number of repeaters. The unit cost includes not only salaries but also the cost for school material, textbooks, desks. The fiscal savings is based on the assumption that if the number of repeaters is reduced, it frees more space and resources at the school level and more students can be accommodated.

repetition is around US$3,000 (CVE 304,970), which roughly US$510 per student per year. However, it becomes around US$3,600 (CVE 368,500) if the student took 7.1 years to achieve the cycle given the repetition rates throughout the cycle. Regarding secondary education, given US$676 per student per year, one student who enters Grade 7 and achieves Grade 11 without repetition costs US$3,380 (CVE 337,00) to the Government. However, it becomes US$5,470 (CVE 546,000) when considering the repetition rates throughout the cycle.

Figure 4.20 Survival rate to last grade of primary and lower secondary, among Peers Countries, 2015



Source: UNESCO Statistics, 2015

Table 4.5 Reconstructed cohort analysis, 2015/16-2016/17

	Based on repetition and promotion rates
Basic education (Grades 1- 6)	
% that reaches Grade 6 without repetition	57
% that complete Grade 6	94
Average duration of study Grade 6	7.1 years
Secondary education (Grades 7 – 12)	
% that reaches Grade 12 without repetition	15
% that complete Grade 12	58
Average duration of study Grade 12	9.5 years

Source: Authors' estimate based on EMIS 2015/16-2016/17

166 **As aforementioned, international comparisons show that the teaching staff ratio in Cabo Verde is lower than in structural peers but higher than in aspirational peers.** Cabo Verde's pupil teacher ratio is at 22.1 for primary education and 15.1 for secondary education. The average ratios of the middle-income countries are respectively 24.1 percent and 18.1 at the primary and secondary. It should also be noted that relative to most aspirational peers, the ratios high, in the case of St. Kitts and Nevis (14.1 in primary and 8.1 in secondary) or Mauritius (18.1 primary and secondary 12.1).

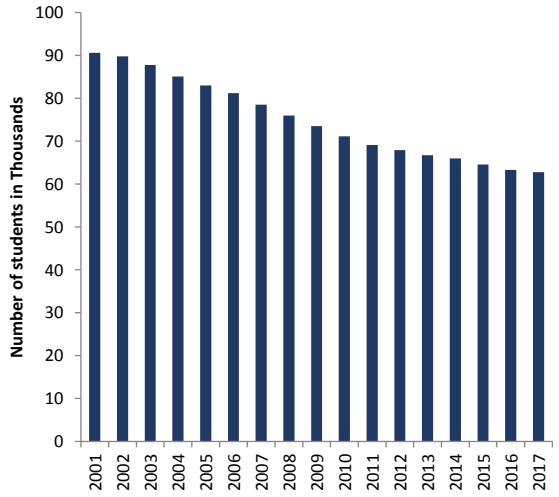
167 **However, the reality in the classroom might be different as large numbers of staff recruited as teachers are not actually teaching.** Information from the 2014/2015 Sector Analysis noted the excessive number of non-teaching staff representing a total workforce of 2,352 or 29 percent of the entire MOE staff[48]. This number includes both staff recruited for administrative tasks as well as teachers assigned to non-teaching tasks. For this PER, an estimate of administrative jobs in the delegations was conducted by comparing the number of teachers in schools and the total number of staff assigned to the delegations. The result is consistent with the Sector Analysis estimate (which covered all MoE staff, not only delegations). The difference amounted to 1,540 employees or 37 percent of MoE staff assigned to the delegations (see Table 4.6). Distribution by delegations shows high rates for all delegations, except for Sal, with Santo Antao, Maio and Sao Nicolau having a non-teacher ratio above 40 percent.

168 **Falling enrollment, inappropriate skill/position mix and teacher regulations may explain the exceptionally high non-teaching staff ratio.** First, there has been a decline in enrollment in primary

[48] Eléments d'analyse sectorielle de l'éducation à Cabo Verde, UNICEF 2015

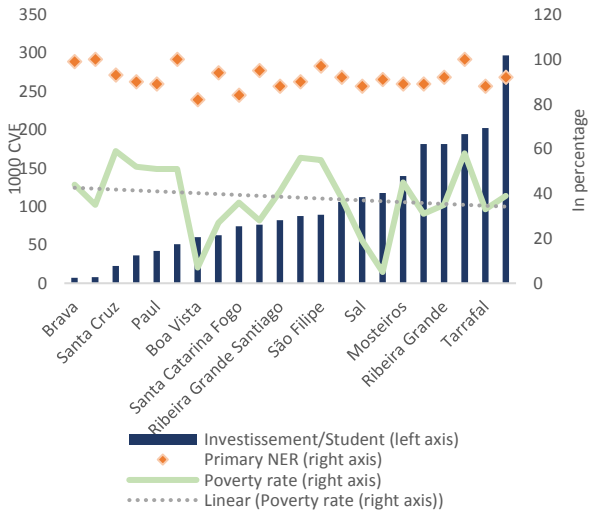
education during the past decade that has resulted in a higher number of teachers relative to requirements (Figure 4.21). These teachers have generally been affected to administrative tasks either in schools or in the delegation offices. Second, limited access to civil servant position led the MoE to use teacher positions to recruit administrative staff, generating both an overstaffing and a mismatch between the posts and profiles. And third, regulations governing teacher mobility have further contributed to a high non-teaching staff ratio. It allows teachers to take leave of absence and choose to be assigned to an administrative task even if redundant and they don't have the required skills for 1 to 5 years with re-entry guarantee. This benefit is widely used given the migration tradition in Cabo Verde. Between June and September 2017 only, the number of leave of absence requests reached 82 applications, about 200 applications per year, representing more than 3 percent of teachers.

Figure 4.21 Primary Education Enrollment (6-11 years)



Source: Authors based on MoE data

Figure 4.22 Investments per student ratio by municipality (2000-2015), Net enrollment (2017) and poverty rate (2015)



Source: Authors based on MoE data

169 **The distribution of public resources is regressive.** Investments in school infrastructure do not take into consideration the enrollment or equity aspects. Municipalities with high net enrollment have lower investments. For instance, the Municipalities, including São Miguel, Tarrafal, Tarrafal de São Nicolau, Ribeira Grande have benefited from significant investments relative to the size of student enrollment (ranging from 181,000 CVE/student to 296,000 CVE/student). In contrast, Paul, Porto Novo, Santa Cruz and Brava received far less resources with higher enrollment rates (from 7,000 CVE/student into 42,000 CVE/student). Those municipalities with limited investment are among the poorest municipalities (poverty incidence above 50 percent), while those with large investment have poverty incidence less than 45 percent, except Tarrafal de São Nicolau (Figure 4.22).

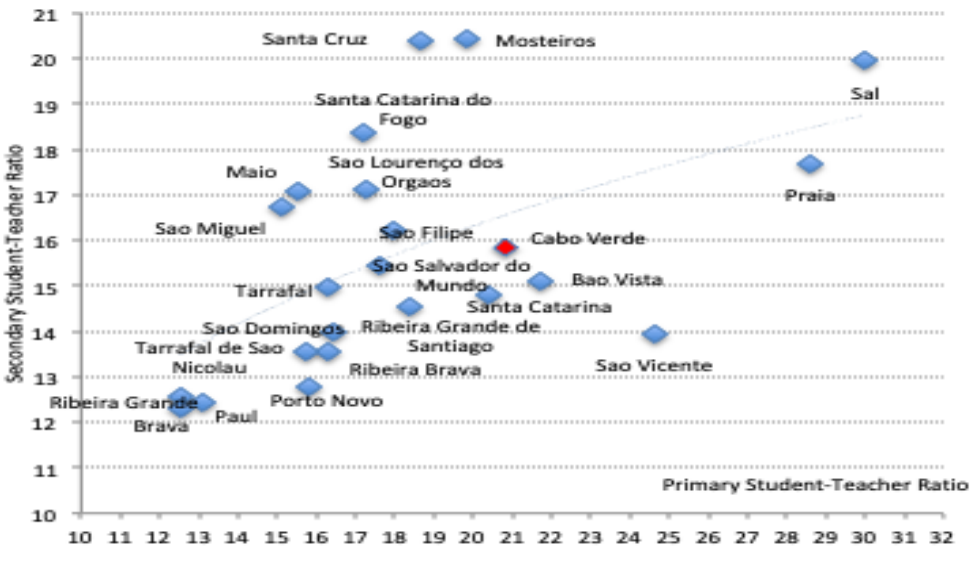
170 **The regional distribution of teachers also shows a great disparity.** Figure 4.23 shows the wide range of STRs for both primary and secondary education with a difference between the best-off and worse-off municipalities. Such situation is usually the result of teacher deployment policies that tend to accommodate teachers (notably in terms of mobility, choice of assignment and leave requests) rather than student needs.

Table 4.6: Distribution of staff by island and by two data sources

	Paid staff assigned to Delegations (1)			Teachers identified by the school survey (2)			Difference (1) - (2)			
	Women	Men	Total	Women	Men	Total	Women	Men	Total	%
Brava	42	48	90	35	25	60	7	23	30	33.3%
Fogo	174	167	341	143	110	253	31	57	88	25.8%
Santiago	1501	766	2267	1077	369	1446	424	397	821	36.2%
Maio	57	25	82	34	12	46	23	13	36	43.9%
Boa Vista	62	11	73	44	6	50	18	5	23	31.5%
Sal	98	22	120	86	21	107	12	1	13	10.8%
São Nicolau	115	59	174	68	32	100	47	27	74	42.5%
São Vicente and Santa Luzia	364	135	499	263	58	321	101	77	178	35.7%
Santo Antao	316	262	578	187	114	301	129	148	277	47.9%
Total	**2729**	**1495**	**4224**	**1937**	**747**	**2684**	**792**	**748**	**1540**	**36.5%**

Source: Authors based on MoE data

Figure 4.23 Student-Teacher Ratio by municipalities



Source: Authors based on MoE data

External Efficiency

171 **The 2014/15 Education Sector Analysis suggested that an additional one year of education results in about 9.3 percent higher wages in Cabo Verde.** In addition, wage workers achieving above the 3rd secondary cycle and higher education earn more than those with basic education[49].

172 **However, unemployment remains high for the youth, while the rate has decreased over the past five years in Cabo Verde.** The Cabo Verdean economy has created about 3,660 new jobs between 2013 and 2017, reducing unemployment rate from 16 to 12 percent over the period. Nonetheless, youth unemployment (age group 15-24) remained at around 34 percent after a peak of 41 percent in 2016. The highest rates of unemployment are observed in the municipalities of Santa Catarina, Praia, São Domingos, Brava and Ribeira Grande de Santiago.

173 **Higher unemployment rates for the more educated illustrate the mismatch between the skills produced by the education system and the needs of the Cabo Verdean economy.** Labor market data show that unemployment increases with education level. In 2017, the unemployment rate was highest for job seekers with secondary (16 percent) and higher (11 percent) education compared to 4 percent for those with no formal education. This could be explained by the high percentage of students leaving the secondary level before graduation without sufficient qualifications and competencies. This is partly due to an outdated organization of secondary education with two main streams (Humanities and Sciences) and a technical stream which is too small, costly and not attractive to students. The technical and vocational education and training (TVET) system has a low coverage and accounts for only 5 percent of secondary-level enrollment.[50] Higher education has limited relevance for the labor market with the distribution of students per subject area unaligned with access to employment. Out of the 1,383 graduates from higher education institutions in 2015, 39 percent were in social sciences and humanities; 31 percent in economic, legal and political sciences studies; 15 percent in Life, Environment and Health sciences; and 15 percent in Sciences, Engineering and Technology.

174 **Efficiency gains in education, particularly secondary education, could yield benefits from improved outcomes over the long term** (Figure 4.24). For instance, Cabo Verde spends more than 5 percent of GDP on education, while St. Lucia spends 4.8 percent and has twice as many students enrolled in upper secondary (70 percent of those eligible vs. 35 percent), even though St. Lucia is still far from the efficiency frontier.[51] To reach the efficiency frontier, Cabo Verde would need to either increase secondary enrolment to 90 percent, with no change of spending, or cut spending on education to 1.5 percent of GDP, with no change in enrolment. In contrast, the efficiency of Cabo Verde's primary education spending is very high, with 98.4 in relation to its spending.

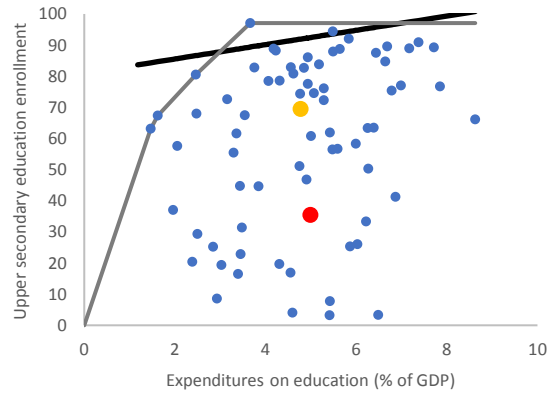
[49] Eléments d'analyse sectorielle de l'éducation à Cabo Verde : des services plus efficaces et plus équitables au service de la croissance et de l'Emploi, UNICEF 2015

[50] Cumulated student enrollment for the first and second year of secondary level. Eléments d'analyse sectorielle de l'éducation à Cabo Verde, UNICEF 2015.

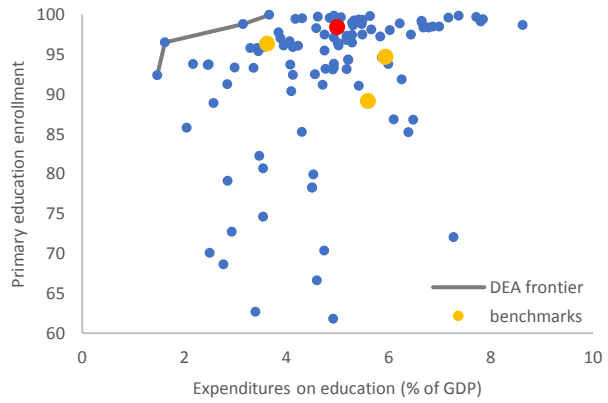
[51] The frontier line is the maximum level of efficiency found, assuming that there are non-decreasing returns to scale in educational production.

Figure 4.24 Expenditures on Education and Education Enrollment

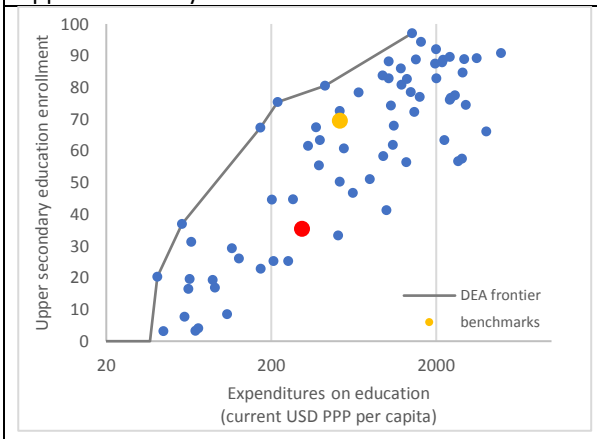
A: Expenditures on education (% of GDP) and upper secondary education enrollment



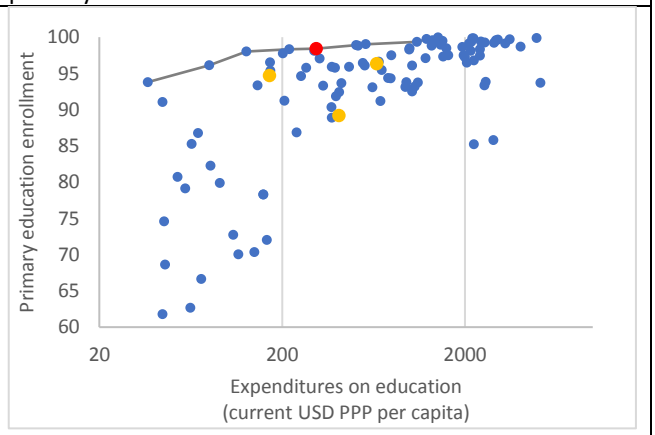
B: Expenditures on education (% of GDP) and primary education enrollment



C: Expenditures on education (current USD PPP) and upper secondary education enrolment



D: Expenditures on education (current USD PPP) and primary education enrolment



Source: WDI database. *Note*: Red dot = Cabo Verde; yellow dots = benchmark countries

Equity Issues

175 **While gender parity in access to primary education has been achieved in Cabo Verde, boys are more likely to repeat and drop out of school than girls.** Since 2007, the NER in primary was already 91 percent for boys and girls[52]. However, enrolment parity by level shows that the percentage of girls increases with education levels - from an average 48 percent in primary education to 52 percent in secondary and 60 percent in higher education (see Figure 4.25). Such pattern might be explained by higher repetition rates for boys at all levels, and their drop-out rates at secondary education (Figure 4.26). Such results are frequently seen, while girls are less likely than boys to enter primary school, but boys face greater risks of repeating grades and leaving school early[53].

[52] Source: UNESCO Statistics, 2007

[53] Global Education Digest, 2012: Opportunities lost: The impact of grade repetition and early schooling leaving, UNESCO 2012.

176 **Access to primary education differs slightly across region, while dropout and repetition rates vary widely.** Improved access to primary education has benefited all islands and municipalities. Only eight out of Cabo Verde's 22 municipalities have NERs below 90 percent[54]. However, repetition rates in secondary vary from 10 percent in Maio to 46 percent in Ribeira Grande de Santiago. No significant correlation was found between school performance and average teacher qualification which indicate that differences in performance might be linked to socio-economic and school-level (environment, management) factors. However, it seems that poor municipalities are more likely to have higher primary dropout rates and higher population with no education (Figure 4.27).

177 **Access to primary education is equal for all wealth groups, but poor groups lag at secondary educational attainment.** In 2015 and among children aged 6-14 years old, 95 percent and above are enrolled, almost similar for all wealth groups (Figure 4.28). However, enrollment vary widely for children aged 15-18 years, while only 57 percent of poorest are enrolled compared to 77 percent for the richest. In addition, 87 percent of youth aged 19-24 years who are non-poor have attained at least secondary level, while it is only 64 percent for the poorest (Figure 4.29). Education costs have more than doubled during 2001-2015, for all wealth groups, and their burden on household budgets has grown according to the Household Income and Expenditure Survey (*Inquerito as Despesas e Receitas Familiares, IDRF*) 2001 and IDRF 2015 data.

Figure 4.25 Percentage of girls by level of education and grade, 2016/17

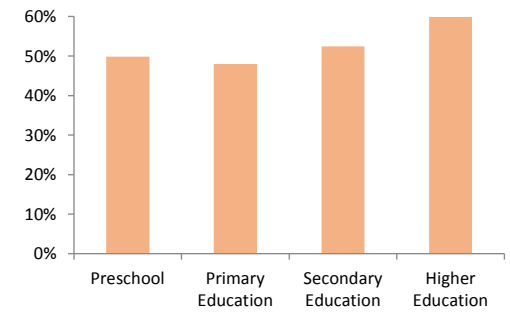
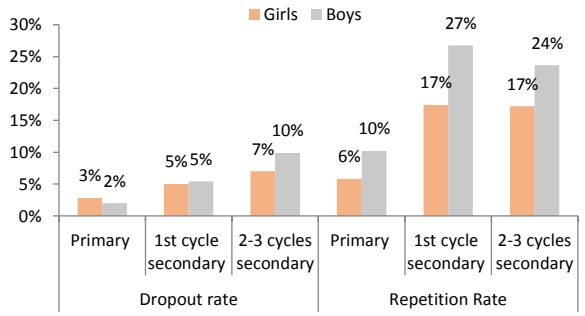


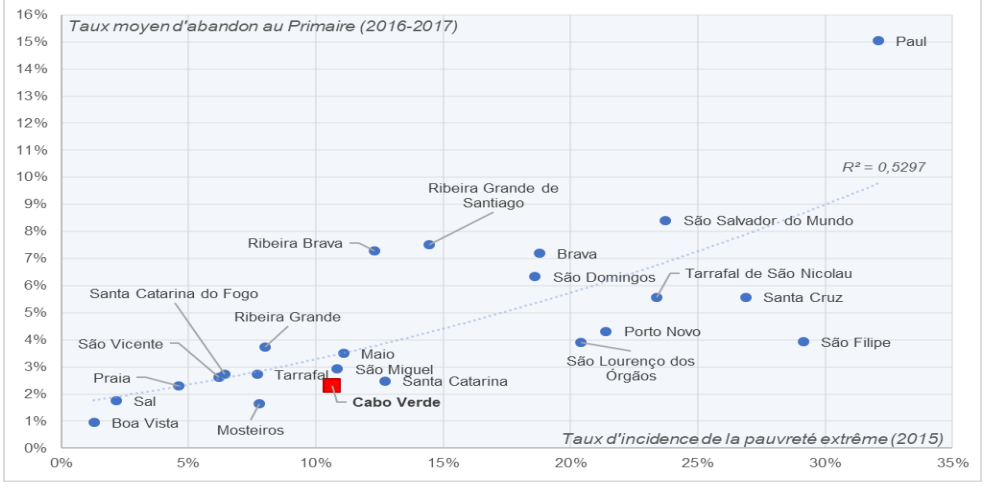
Figure 4.26 Repetitions and Dropout rates, by gender 2016/17



Source: Authors calculation based on MoE data

[54] Paul, Boa Vista, Sal, Maio, Tarrafal, Mosteiros, Riberia Grande de Santiago and Santa Catarina de Fogo.

Figure 4.27 Extreme poverty and Primary dropout rates by municipalities, 2017



Source: INE data (IMC 2016)

Figure 4.28 Proportion of children at school by wealth group, 2001-2015

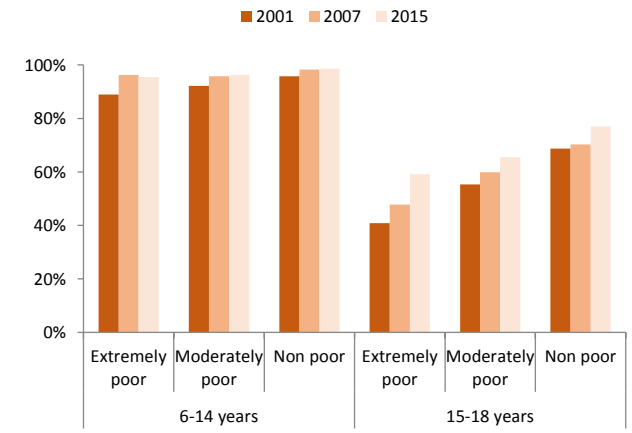
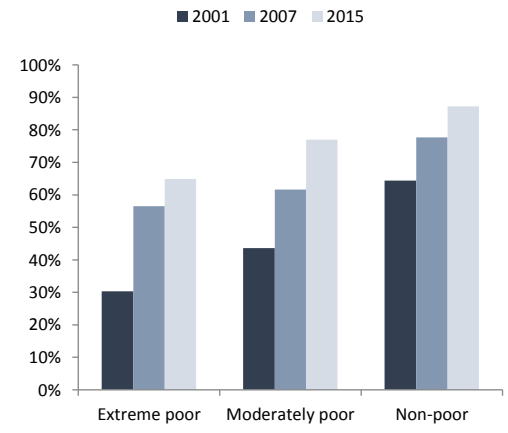


Figure 4.29 Proportion of Youth 19-24 years, attained at least secondary level, 2001-2015



Source: IDRF 2001, QUIBB 2017 and IDRF2015

178 **Fees structure in public secondary schools depends on family income and grade level.** Since 2002[55], tuition fees scale was set up depending on family income and grade and can vary from 1 to 10 ratio: 1st cycle (from 1,200 CVE to 12,000 CVE), 2nd cycle (1,500 CVE to 15,000 CVE) and 3rd cycle (3,000 CVE to 30,000 CVE). About one-tenth of the most disadvantaged students are exempt from these fees. The school keeps 90 percent of the costs collected to meet its current expenses and the remaining 10 percent go to the central administration.

[55] By Decree Law, No. 18/2002 of 19 august 2002

179 **However, schools are not always able to verify family income, leading collecting less resource.** Given the huge differential in fees level, and the fact that family income is declarative and the inability of schools to verify family income level, schools end up collecting the minimum fees from most students. Analysis of one secondary school done for this PER shows that even these minimum fees are not collected. The amount collected represented less than 70 percent of total minimum amount (if minimum fees was applied for all students).

180 **This fee structure also tends to increase inequity**. While the progressive fee structure is motivated by an equity objective through lowering the burden of school fees for poor families, the direct result is that schools in disadvantaged areas will have less resources to provide quality services to their students.

181 **For higher education, Cabo Verdean families pay most of the cost (72 percent) through tuition fees.** The remaining 28 percent is from the Government budget through both direct subsidies to public institutions (13 percent) and scholarships to needy students (14 percent). Scholarships are awarded to students attending public or private universities based on two main criteria: (i) family socio-economic status (income and island of residency); and (ii) merit (score at end of secondary education).

182 **While the Cabo Verdean model for financing higher education is in line with good practices, its outcomes show that the model could be improved.** The scholarship program facilitates access to higher education (17 percent of students benefit from a scholarship) and allows student choice and favors competition between public and private institutions. However, such competition did not facilitate diversification. Most tertiary education programs remained concentrated in low cost humanities and social sciences programs (65 percent of enrolment) which could explain the high level of unemployment for university graduates: young Cabo Verdeans from the age-group 25-29 are more likely to be unemployed when they have a tertiary education degree (27 percent) than when they have secondary education level (21 percent). This model also fragilizes the main public university, UNICV. Government direct financing to UNICV represents only one third of its budget, the remaining coming from tuition fees. Such model facilitates the focus on enrolment, especially on more accessible low-cost programs and doesn't provide incentives for research and innovation.

183 **There are financial barriers for students to attend TVET.** The sector benefits from little government contribution and is mostly funded through donor financing (notably Luxembourg) and student contributions with annual fees around US$1,000. These, in addition to other direct costs, particularly for students travelling to another island, are often above the capacity to pay of students. The government created the Fundo de Promocao do Emprego e da Formacao (FPEF) in 2012 to address some of these challenges provided financing to both training institutions through loans and to students through scholarships. However, the FPEF revolving fund model was deemed unsustainable, requiring more stable sources of funding.

4.5 Conclusion and Recommendations

184 **Cabo Verde should maintain its current level of spending on education at about 6 percent of GDP while reallocating more resources from wages to underfunded sub-sectors**. The ongoing education sector reform which includes the expansion of compulsory education to grade 8 provides an opportunity to put more focus and resources on secondary education. Additional funding to the TVET sub-sector could

be channeled through the Skills Development Fund and a stronger focus on demand-driven training programs. The declining demographic trend should provide space for the government to focus more on improving the quality of education services and student learning. There is also scope to increase allocations to early childhood education. Investing in Early Childhood Development (ECD) programs would support readiness for primary school and contributes to reducing the drivers of internal inefficiency such as dropouts, repetitions and delayed entries. 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.

185 **The MoE should balance its HR policies to consider student needs and a bloating of the wage bill**. While the demographic trends should lead to a reduction in the salaries share in the MoE budget and an increase in resources allocated to improve school and learning environment, the recent trend shows that this may not happen. The trend observed during 2007/17 was that the reduction in enrolment in primary education did not result in a smaller payroll bill but rather in lower STRs. This can be attributed to the sector's HR policies that favor the choice of teachers to take a leave of absence with re-entry guarantee for up to five years of leave of absence. While, the constraints specific to a small islands country like Cabo Verde are understandable, it should be recognized that such policies have resulted in wide inequalities and are penalizing the quality of service delivery, and thus of economic development, in areas experiencing demographic expansion such as Sal and Boa Vista.

186 **Effort should be made to invest in school infrastructure and provide schools with an operational budget to allow them improve quality of education services**. Limited investment in school infrastructure has resulted in serious deterioration of many school buildings putting sometimes students and personnel at risk. School budgets are very limited and will be further reduced with the removal of fees for grades 7 and 8. Also, the student fee model for secondary schools needs to be revised for more transparency and equity.

187 **In primary education, the decline in enrolment should be used to improve school learning environment and provide support to students with special needs**. As mentioned above, the demographic trend will necessarily result, at least in the short term, in a relative overstaffing. Rather than reducing classroom sizes or assigning teachers to administrative tasks, the teachers in excess could be used to provide additional support to students who encounter difficulties for learning.

188 **The government should move quickly to address the high repetition rates which is costing 0.6 percent of GDP per year**. There is not a system of evaluation and assessment of learning in basic education while the issue of student retention at the secondary level is likely related to an inadequate primary school learning, curriculum issues and low quality of educational services, lack of household resources to pay for schooling and lack of job opportunity. To address these issues, the Government should seek to: (i) organize a system of evaluation and assessment of learning in basic education, in order to enhance education quality and to reduce high repetition rates observed in the first grades of secondary; and (ii) transform secondary education to a modern system with diversified streams to address the needs of a broader and more diversified student population and prepare them to pursue further training or join the labor market.

189 **Equity issues need to be addressed.** Students from low income families are lagging in terms of secondary educational attainment. There is scope to institute a pro-poor educational policy intervention

program focusing on marginalized students and communities. the wide disparities between islands, municipalities and schools in terms of resource allocation (notably teachers) and performance (internal efficiency and learning outcomes) show that there is room to improve overall sector performance through focusing on the lowest performing schools and delegations. One way to do it could be through a performance-based contracting mechanism that would allocate resources and responsibilities to delegations against measurable results such as reduction of repetition and/or drop-outs.

190 **A priority should be given to the development of a sustainable financing mechanism for TVET.** The FPEF has provided financing to both training institutions through loans and to students through scholarships. However, as the FPEF revolving fund model is not deemed sustainable, a priority should be given to identifying more stable sources of funding.

191 **Although aligned with globally recognized good practices, higher education financing could be revised to provide more incentives to tertiary education institutions to make them more responsive to labor market needs**. This could be through a combination of a competitive funding mechanism directly addressed to those institutions to develop more innovative/demand-driven programs, and a reform of the scholarship program to encourage enrolment in labor-market oriented training programs.

192 **Several issues have emerged from the education PER that require more research.** First, as the education system is largely centralized, and more resource might be channeled to the schools in the context of the basic education reform and strengthening of secondary education, it is important to get a better understanding how resources are channeled to the front-line services, the decentralization of resources and financial accountability of beneficiaries. Second, as the implementation performance of the education budget shows an underspending across all spending items, it would be important to assess the management of education resources to better understand the inefficiencies in the use of public resources. Third, as the high dropout and repetition rates imply major inefficiencies, more analytical work is needed to better determine the root causes.

Chapter 5: Health Spending

Cabo Verde's health sector has experienced significant improvements in several key health indicators in recent years, outperforming its structural peers but lagging aspirational peers[56]*. However, communicable and non-communicable diseases remain a challenge. The country is also vulnerable to vector-borne diseases. Public spending on health as a share of GDP and government domestic expenditures are high relative to peers. Nevertheless, spending has not kept up with population growth as public spending on health is low in per capita terms. Consistent with overall spending patterns including in the education sector, spending on health heavily favor wages and goods and services, although the sector faces weaknesses in budget execution, capacity and distribution of health workforce. At the aggregate level, there is less scope for efficiency gains in health relative to the education sector. However, there is significant variation across the heath districts with just 2 of the 17 health districts being fully efficient. To improve health sector performance consistent with its stated objective of boosting human capital outcomes*[57]*, the Government may want to: (i) strengthen its health care information and disease surveillance systems, (ii) enhance policies on non-communicable diseases, (iii) improve equitable access to health care services, (iv) improve allocation resources to health delegations, and (v) strengthen human resource management.*

The chapter is organized as follow. It first presents an overview of Cabo Verde's health system, sector goals and health workforce. Section 4.2 analyzes the performance of the health system across key indicators with benchmarking against relevant peer countries. Section 4.3 discusses key trends in public health spending and distribution of expenditures by sub-sectors and economic classification and implementation performance. Section 4.4 analyzes efficiency across health districts and sheds light on equity issues through health care access. Section 4.5 concludes with policy recommendations.

5.1 Overview of Health Sector

Structure of the Health System

193 Cabo Verde's public health system is organized across three levels: central, local and regional. The central level, headed by the Ministry of Health and Social Security (MoH), has responsibility for policy, strategy, standardization and supervision of the sector and conducts general and sectorial health policy[58]. It also guarantees the provision of tertiary care. At the local level, health centers, including their extensions - health posts and basic health units - provide essential primary quality care. They are structured around 17 health delegations or health districts (*Delegacias de Saúde, DS)* covering the twenty-two municipalities. DSs constitute cost centers and manage their own budget. The regional level provides secondary care and surgery in regional hospitals, organized along geographical rather than administrative lines. Each region coordinates the DSs and their infrastructures and is responsible of reorientation of the prevailing health care model and a balance between primary and secondary care (Figure 5.1).

[56] Data sources include the Global Burden of Diseases and Injuries (2016), the World Development Indicators (2016), and the last available Statistical Summary issued the Ministry of Health (República de Cabo Verde, 2016).
[57] See Chapter 4 of the PEDs for a discussion on health.
[58] Politica Nacional De Saude, 2007.

194 **In 2018, there are 173 public facilities providing primary health care across the archipelago.** At the base, there are 112 basic health units (*Unidade Sanitária de Base*), which are designed to be staffed only by non-clinical personnel: two community health workers and an auxiliary worker. The next level is the health post (*Posto Sanitário*), with all 34 units each requiring one nurse and three non-clinical workers. At the top of the health delegation, health centers (*Centros de Saúde*) should comprise one doctor, specialized in family health, two nurses, as well as four non-clinical staff members.

195 **Each health center is intended to serve a population of 5,000, but it varies widely by health districts.** Paul and Brava, which are small municipalities, serve little more than 5,000 inhabitants per health center, while it reaches 35,600-inhabitants per health center in Sal. Praia and São Vicente serve nearly half of the country's population (46 percent), with roughly 27,000-inhabitants per health center (Figure 5.2).

196 **Four public regional hospitals provide secondary care, while two national hospitals offer tertiary care.** The four regional hospitals are endowed with 263 beds, which represent exactly one-third of the country's capacity. The central level comprises two hospitals *(Agostinho Neto in Praia and Baptista de Sousa in Mindelo)*, which provide surgery and treatments for difficult conditions (including intensive care and mental health). Some of the health centers are equipped with hospital beds.

197 **Private healthcare in Cabo Verde is present in some areas and tends to assume its complementary role in the provision of health care.** With legal support dating back to 1989[59] - mainly in Praia and Mindelo - offices for medical and stomatology consultants, clinical analysis laboratories, physiotherapy offices and private pharmacies were established. In 2011, the private sector counted on the licensing of sixty-seven doctors' offices, forty-seven stomatology and dentistry clinics, five nursing posts, seven physiotherapy centers, sixteen clinical analysis laboratories and more than thirty private pharmacies. Enhancing public-private partnerships and complementarity in health through a clear regulation framework is one of the components highlighted in the National Health Development Plan 2012-2016.

Figure 5.1 Cabo Verde System Organizational Chart

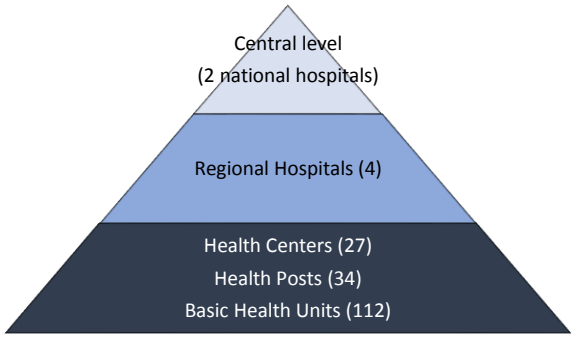
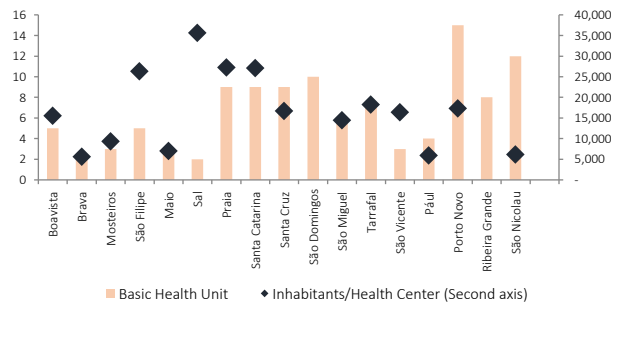


Figure 5.2 Distribution of Basic Health Unit and Health Center by Health District, 2018



Source: Plano Nacional De Desenvolvimento Sanitario, 2012-2016

[59] Plano Nacional De Desenvolvimento Sanitario, 2012-2016.

Sector Plan and Workforce

198 **Cabo Verde National Health Policy (2020) is being implemented and monitored through successive medium-term National Health Development Plans and the PEDS (**Table 5.1**).** Adopted in 2007, the National Health Policy aims to: (i) promote greater equity in decentralized health care and to improve the performance of health institutions; (ii) ensure an increased technical quality of care, (iii) improve access to services, humanization of care and user satisfaction; and (iv) improve the performance of the national service and management of health resources, with a strengthening of decentralization towards health stations and Sanitary Regions, and a greater differentiation of the central level of provision and management. The National Health Development Plan 2012-2016 focused on 8 programs and several components (Table 5.1).

Table 5.1 Key Programs of National Health Development Plan 2012-2016

PROGRAM	COMPONENTS
Health Care Provision	• Prevention and control of priority diseases • Specific attention by gender and age groups of population • Operationalization of care at each level of health system
Health Promotion	• Development of health promotion policies in urban and rural areas, within national, regional and local development process • Promotion of School Health
Health Human Resources Development	• Development and implementation of basic training specialized and improvement of health professionals • Promoting equitable distribution of health professionals through ensuring minimum and functional types of equipment and the balance between different levels of care • Strengthening human resources management and development competencies
Intervention Program in Health Infrastructures Network	• Consolidation and adaptation of sanitary infrastructures network • Creation of a preventive maintenance and repair service
Health Sector Financial Sustainability	• Improved capacity to raise contributions and mobilize resources for the health sector • Improvement of the financial and accounting administration capacity • Contribution to the development of a policy of a care universal coverage
Development of the Pharmaceutical Sector and Health Technologies	• Development of the regulation of pharmaceutical activity • Guarantee of regular supplies • Standardization and adequacy of sanitary equipment for each type of establishment
Development Program of Integrated Health Information and Health Research System	• Integrated Health Information System • Development of Health Research
Leadership Development and Governance Program of the National Health Service	• Improvement of the organizational structure of the Ministry of Health • Adequacy of the legal framework with development of the regulatory and control function • Public-private partnership and complementarity in health • Creation of National Institute of Public Health

Source: Plano Nacional De Desenvolvimento Sanitario, 2012-2016

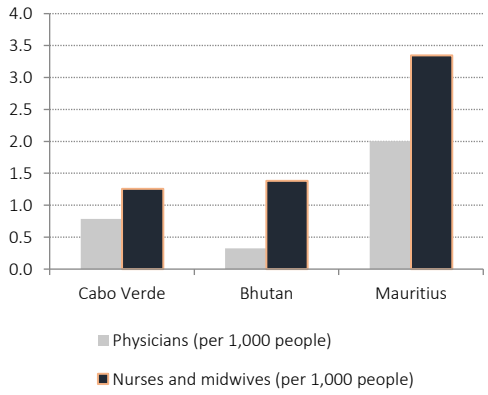
199 **Notwithstanding a sharp increase in the number of healthcare practitioners since 2010, the supply of clinical workers in Cabo Verde remains below aspirational peers for healthcare delivery.** Between 2010 and 2016, the number of physicians and nurses have increased by 57 percent and 25 percent, respectively (Table 5.2). These increases resulted from the implementation of the WHO-inspired 2010-15 Strategic Plan for the buildup of Health Human Resources[60]. The boosting in the supply of university-level graduates for health professions also contributed to improve the availability of health workers. The number of available technicians rose three-fold over the observed period. The country had 2.6 health workers per 1,000 inhabitants in 2016. This is above the threshold suggested by the WHO to deliver an essential package of health services (2.3 per 1,000 inhabitants). However, this figure is low in comparison to aspirational peer. For instance, Cabo Verde has less physicians and nurses/midwives per 1,000 people than Mauritius (Figure 5.3).

200 **The skills mix, and distribution of health workers are considered inadequate.** Health workers are concentrated in the islands of São Vicente and Santiago and staffing less central posts is a challenge. One of the concerns of the public health sector is how to attract health workers to the remote areas, which are served by less than 10 percent of the doctors in the system. The challenges of distance are being met using telemedicine since 2013. The smaller and rural health districts (*Delegacias de Saúde*) are left with a limited supply of health workers. Only four health delegations have a higher density of health workers than the national average. As a result, about one-half of the Cabo Verdeans live in districts below the threshold of 2.3 clinical health workers per 1,000 (Figure 5.4). The imbalances in the skill mix with shortages of specialized health workers have led to many cases needing to be evacuated to Portugal and other countries. Meeting the estimated needs in terms of human resources would imply roughly doubling up the existing quantity of doctors and nurses[61].

Table 5.2 Density of clinical workforce, 2015 (in 1,000 inhabitants)

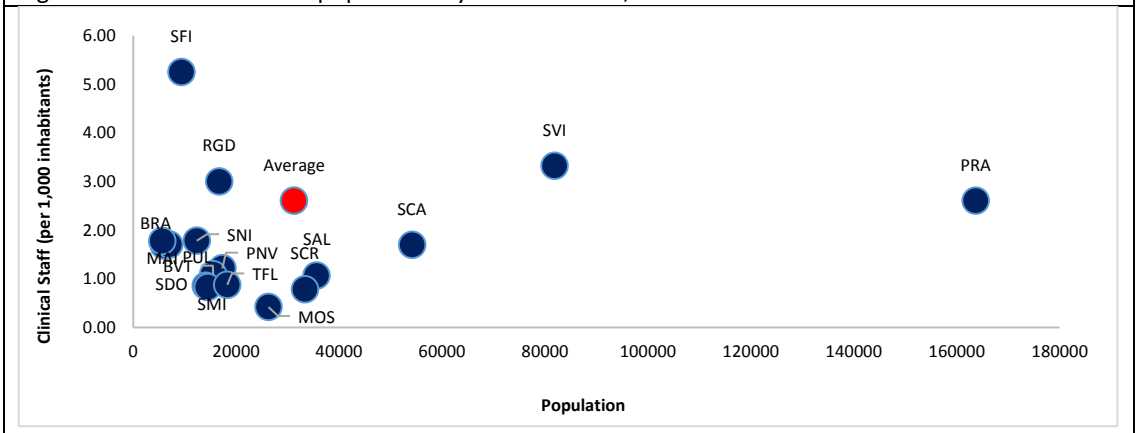
	Per 1.000 inhabitants	***Number***	**Change from 2010 (in %)**
Physicians	0.77	408	+57%
Nurses	1.30	690	+25%
Technicians	0.53	281	+193%
Doctors and Nurses	2.07	1,098	+35%
Clinical Health workforce	2.6	1,379	+52%
Other (administration included)	2.94	1,159	-7%
All	5.53	2,938	+14%

Figure 5.3 Health Workforce Indicators, Cabo Verde and Peers, 2016



[60] MINISTÉRIO DA SAÚDE, *Plano Estratégico* (2012)
[61] MINISTÉRIO DA SAÚDE, *Plano Estratégico (2012)*

Figure 5.4 Clinical Staff and population by health district, 2016



Source: WDI 2016; Ministry of Health 2015-2016

5.2 Performance of Cabo Verde's Health Sector

201 **Cabo Verde's human capital achievements have been remarkable, particularly in health.** Cabo Verde's HDI index (0.654) puts the country in the medium human development category, just below the Arab states (0.699 avg.). The health index (0.815) is the main contributor to the HDI (followed by income (0.699) and education (0.555)) and reflects a key accomplishment in the country's high life expectancy (73 years), which is the second highest in Africa, after Mauritius. Health is a foundational investment in a country's human capital. People are more productive when they are healthier. As Cabo Verde seeks to realize its potential to raise productivity and promote innovation, investing in the country's healthy productive workforce will become more important.

202 **Under-five-child and maternal mortality have steadily decreased over the past two decades in Cabo Verde, while immunization coverage rates and qualified-assisted birth rates have improved.** Child mortality rate in Cabo Verde fell from 63 deaths per 1,000 births in 1990 to 17 per 1,000 births in 2017. Maternal mortality also declined – by 84 percent from 256 to 42 deaths per 100,000 births as at 2015 (Figure 5.5). Furthermore, immunization coverage has increased for key major childhood diseases (including hepatitis, diphtheria, pertussis, tetanus and measles). Between 2000 and 2017, immunization against measles for children aged 12-23 months improved from 86 percent to 96 percent (Figure 5.6). Similarly, the rate of births attended by skilled health staff reached 91 percent in 2015, while it was only 78 percent in 2005.

203 **Cabo Verde outperforms its structural peers but lags aspirational peers in almost all health indicators.** Cabo Verde's maternal mortality ratio is far ahead of its structural peers. It was 148 and 156 deaths per 100,000 births in Bhutan and Sao Tome and Principe, respectively, against 42 deaths per 100,000 births in Cabo Verde (Figure 5.8). Child mortality rate and qualified-assisted birth rate in Cabo Verde are also better than its structural peers, but the country underperformed compared to its aspirational peers, except for immunization coverage against measles compared to Mauritius, Saint Lucia or Saint Kitts and Nevis in 2017 (Figure 5.7, Figure 5.9, Figure 5.10).

Figure 5.5 Maternal and Under-five-child Mortality, 1990-2017

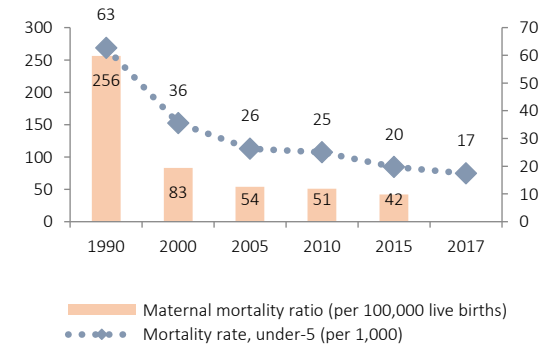


Figure 5.6 Immunization Coverage for Measles, DTP and Hepatitis, 2000-2017

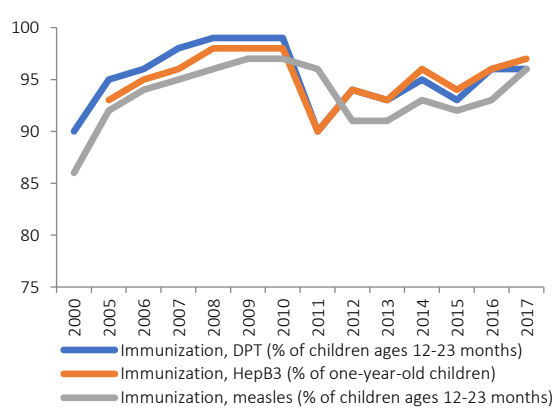


Figure 5.7 Comparison of Under-Five Mortality Ratio (per 1,000 live births), 2017

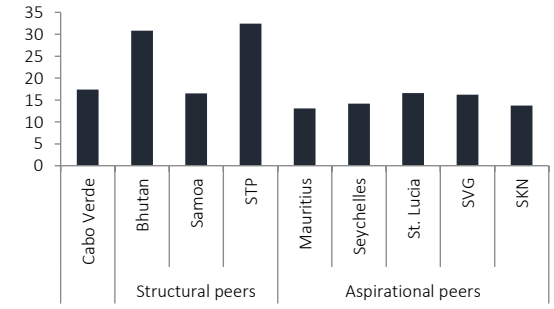


Figure 5.8 Comparison of Maternal Mortality Ratio (per 1000,000 live births), 2015

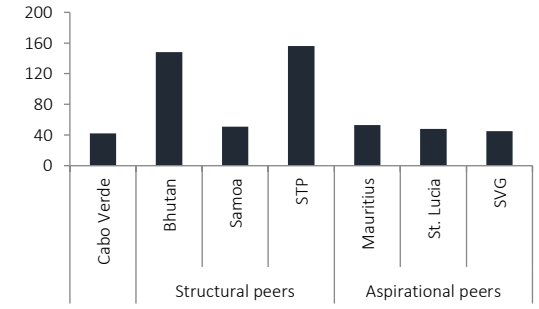


Figure 5.9 Comparison of Immunization Coverage against Measles (% children ages 12-23 months), 2017

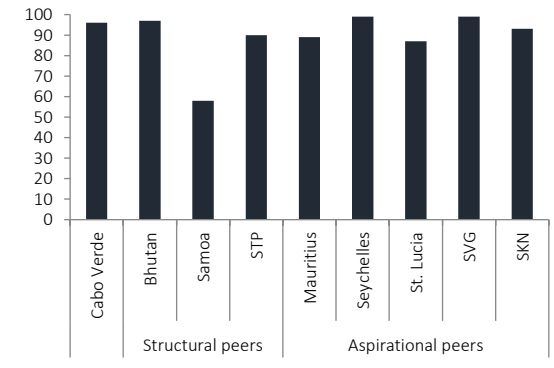
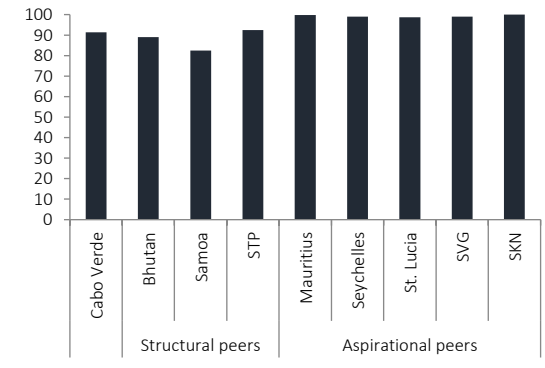


Figure 5.10 Comparison of Births Attended by Skilled Health Personal, 2015



Source: Health Nutrition and Population Statistics, WDI 2015-2017.

204 **The country also made progress in other key health indicators such as life expectancy, but incidence of tuberculosis remains high. As aforementioned,** average life expectancy at birth reached 73 years in 2017, reflecting a steady increase from 63 years in 1990. This is slightly below the average among its aspirational peers (74.3 years) and higher than the average among its structural peers (70.6 years). For

tuberculosis incidence, 137 cases per 100,000 people are estimated in 201 against 147 in 2010. It is considerably higher than observed in aspirational peers and Samoa and Sao Tome (Figure 5.11).

205 **Information from different sources points to a decline in HIV/AIDS.** According to World Health Organization statistics, HIV/AIDS prevalence was estimated to 0.7 percent in 2010, from 0.8 percent in 2005. Atlas of African Health Statistics estimated HIV/AIDS at 3.8 percent in 2010 and 2.7 percent in 2016. At 75 percent, antiretroviral coverage for people with HIV infections is higher compared to Sub-Saharan Africa (60 percent) and lower-middle income countries (49 percent).

206 **There has been a long-term shift in the causes of death from maternal, nutritional and communicable (MNC) to non-communicable diseases (NCD) (**Figure 5.12**).** The country managed to reduce its burden of disease, as measured in DALYs (disability-adjusted years of life). In 1990, DALYs were estimated at around 43,000 per 100,000 inhabitants, whereas in 2016 they were down to 26,000. Diarrhea, lower respiratory infections (LRI) and other infections were the main cause of death and of loss of DALYs. These have been replaced by cardiovascular disease. Diarrhea/LRI/other, neonatal disorders, nutritional deficiencies and other communicable diseases all became less mortal or created less disabilities. Although NCDs have become more important, there was also a rise in the impact of some communicable diseases. In 2009-2010, Cabo Verde faced a dengue epidemic for the first time, and in October 2015 and 2017 a Zika virus outbreak was declared. A Malaria outbreak was declared in sections of Santiago in 2017 (Annex 9). The vulnerability of the country concerning vector-borne diseases is a major public health concern and a challenge for health security.

207 **NCDs account for the two-thirds of deaths.** When considered from the angle of years lost to disability (YLD), the weights of maternal, nutritional and communicable and non-communicable diseases are nearly identical at 44 percent and 46 percent, respectively. Deaths due to injury have also become more prevalent in the last decades, given the increase observed in two categories: transport injuries and self-harm and violence. At 44 percent, the impact of maternal, nutritional and communicable diseases is relatively high to Cabo Verde's aspirational peers, where this category causes only 16 percent of the DALYs. The explanation lies in the current prevalence of communicable diseases, rather than in maternal or nutritional pathologies in Cabo Verde.

Figure 5.11 Tuberculosis incidence (per 100,000 people) in Cabo Verde and Peers, 2016

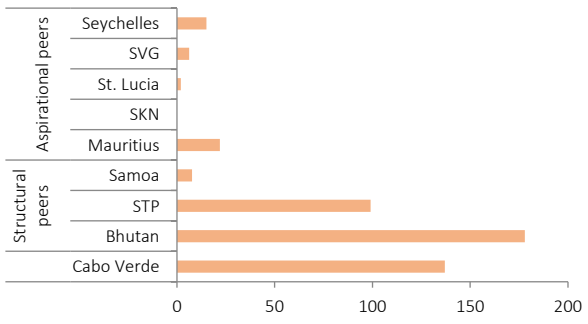


Figure 5.12 Causes of Death in Cabo Verde and Peers, 2016

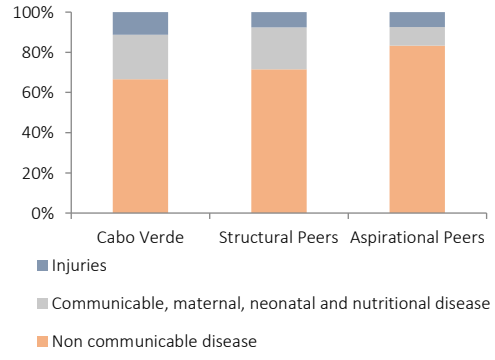
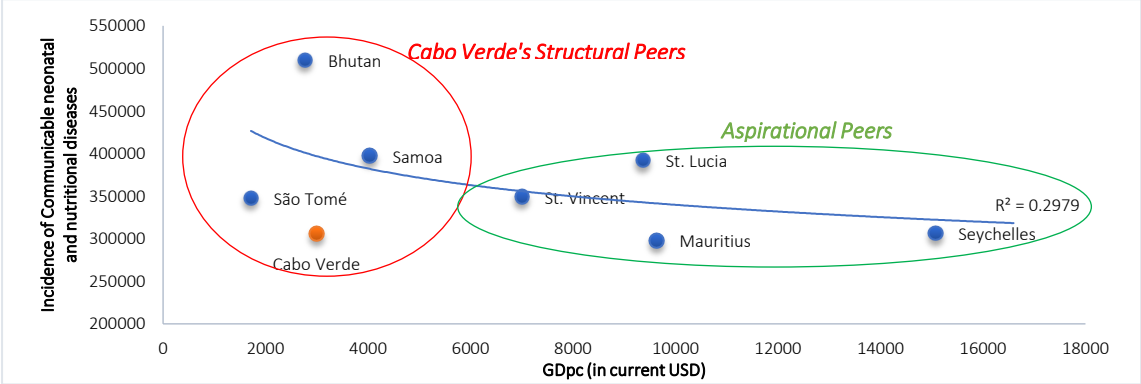


Figure 5.13 Incidence of Communicable, neonatal and maternal diseases and GDP per capita, 2016



Source: WDI 2016, IHME, GBD 2016.

5.3 Financing of the Health Sector

208 **Public health expenditures show a gradual upward trend between 2012 and 2016 which is also reflected in the 2017 and 2018 budget appropriations, but its spending level remains below the sector targets.** In real terms, public health expenditures increased by 16 percent between 2010 and 2016 (Figure 5.14). By 2016, the health sector accounted for 8.4 percent of total public expenditures and 3.2 percent of GDP. Despite the increase, health spending did not meet the target of 10 percent of total public expenditures set the National Health Plan (*Plano Nacional de Saude 2012-2016*). Moreover, the per capita spending dropped from US$78.5 in 2012 to US$77.6 in 2016, suggesting that spending on the sector was not sufficient to keep pace with the population growth.

209 **A comparison of public health spending with peer countries and international benchmarks shows a mixed picture.** Cabo Verde's spending as a share of government's domestic expenditures (excluding contributions from donors) and as a share of GDP is high compared to peer countries (Figure 5.15). Cabo Verde's health spending per capita (US$104) is below the peer average (US$184 per capita) but above the guidelines from the Taskforce on Innovative Financing for Health Systems, which recommends a per capita expenditure of US$56 per year (Figure 5.16). In terms of the relationship between spending and outcomes, Cabo Verde's performance is above average (Figure 5.16). Except for Bhutan and Sao Tome Principe, Cabo Verde achieves better health outcome in terms of infant mortality than countries at similar or higher level of spending (see section IV for a more detailed analysis).

Figure 5.14 Health appropriations and expenditures, 2012-2018

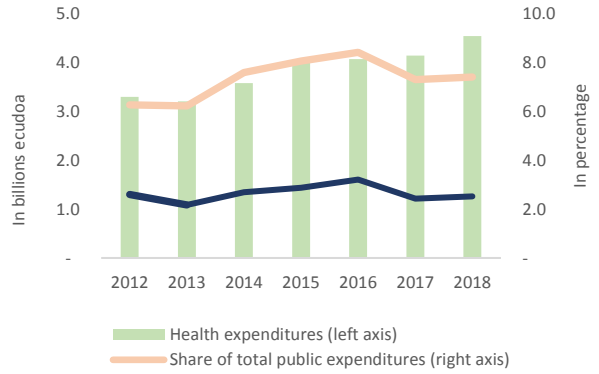
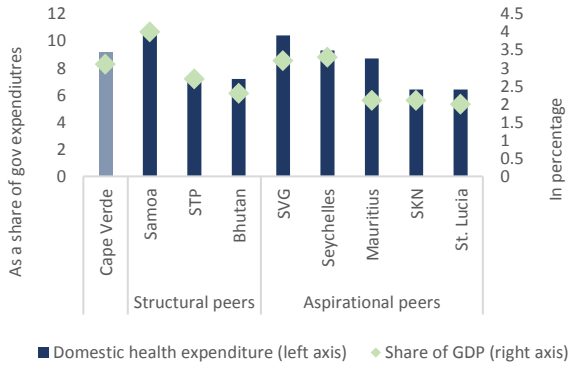
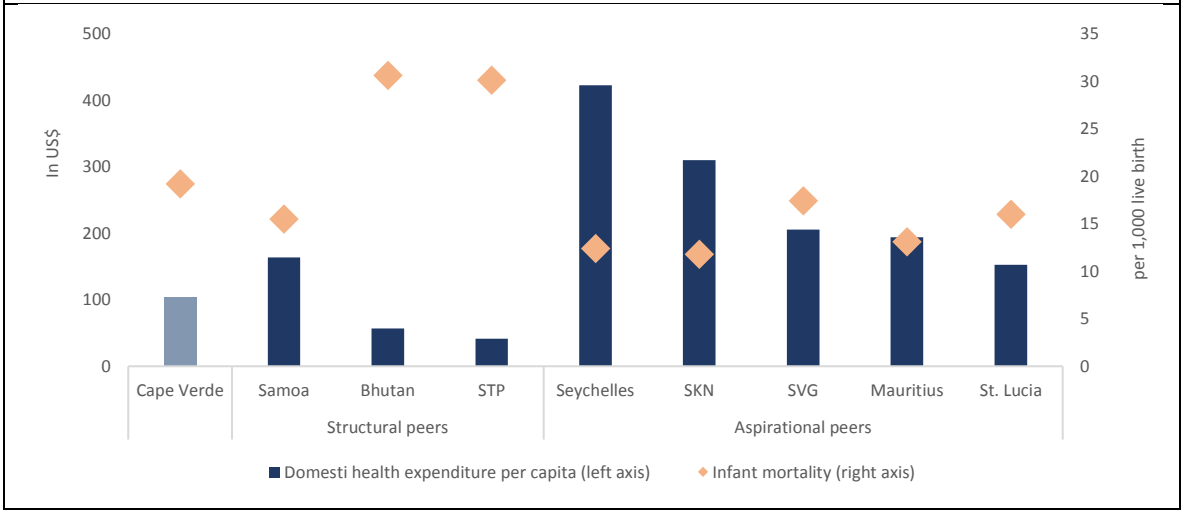


Figure 5.15 Public health expenditures, Avg. 2012-2016



Source: WDI. Note: Budget appropriations of 2017 and 2018 exclude external resources

Figure 5.16 Comparison of spending and outcome with Peers, Avg. 2010-2015



Source: WDI

Sources of Financing

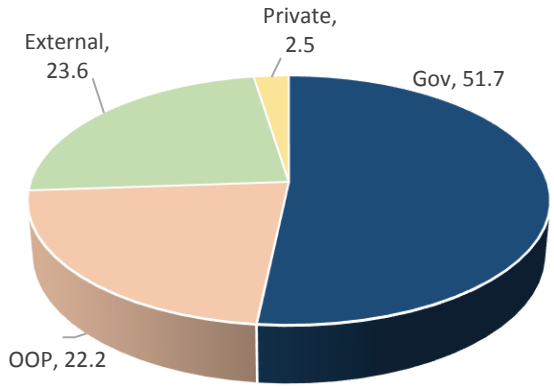
210 **Government spending has been the largest source of financing for the health system, external aid is overall low in per capita terms compared to peers**. Government health spending accounted for more than half of the total health expenditures, followed by out-of-pocket (OOP) payments (22 percent) and external sources (23.6 percent) in 2016 (Figure 5.17). Government health spending in Cabo Verde is just below its peer's average of 50 percent but the country's external aid contribution to sector funding is largely above the average (11 percent). Nevertheless, in per capita spending of external Cabo Verdean's receive US$19 in external aid, which is one of the lowest levels compared to peers (Figure 5.18, Figure 5.19).

211 **External aid to Cabo Verde is almost entirely (94 percent) channeled through the government budget but there is no mechanism in place to monitor, track and assess its use**. Nonetheless, development partners tend to provide evacuations, telephone appointments linking patients with specialists outside of Cabo Verde, infrastructure and equipment (including for dialysis). Evacuations of

patients are considered a "major challenge" for Cabo Verdean health service.[62] In a small archipelago with a very uneven population distribution and clinical staff, internal and external evacuations are a necessity.

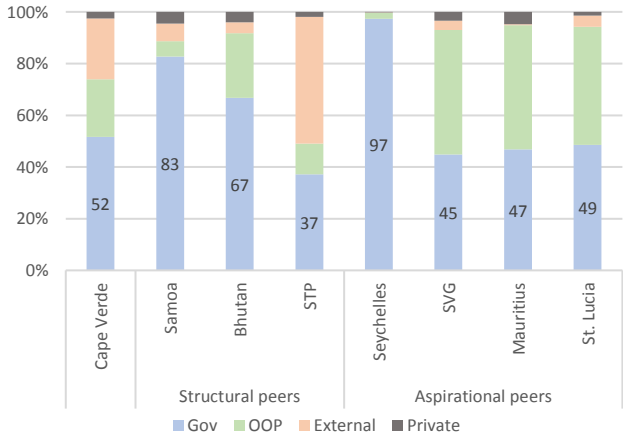
212 **Out of pocket health expenditure are below peer average but have increased in recent years, putting the population at risk.** Surgery paid OOP represents a considerable burden in the household. Approximately one-third of the Cabo Verdeans are under the threat of falling into poverty if faced with OOP for surgical care (Figure 5.20). Moreover, approximately one fifth of the citizens risk "catastrophic" expenditure induced by surgical care (Figure 5.21)[63]. Surgery is a substantive part of any health system and surgical conditions often uniquely put patients at risk for financial catastrophe because they can be time-critical, life threatening, and fraught with large up-front costs.

Figure 5.17 Cabo Verde's Sources of Finance, Avg. 2012-2016:



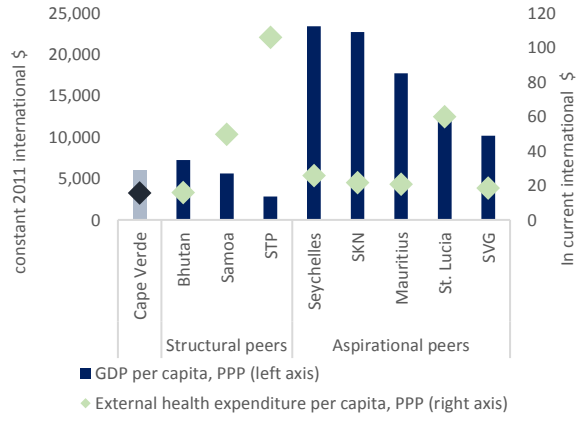
Source: WHO 2016

Figure 5.18 External health expenditures per capita with Peers, Avg. 2012-2016



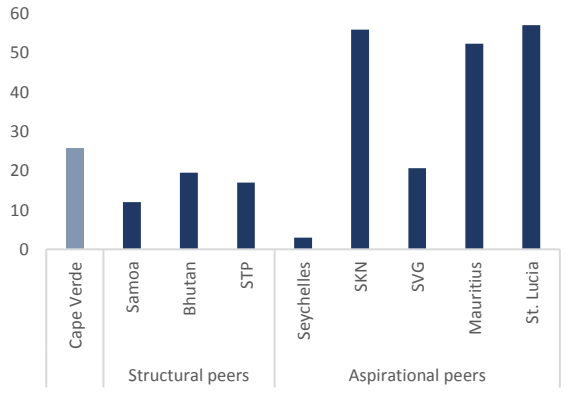
Source: WDI

Figure 5.19 External health expenditure per capita, Avg. 2012-2016



Source: WHO 2016

Figure 5.20 Comparing out of pocket expenditure

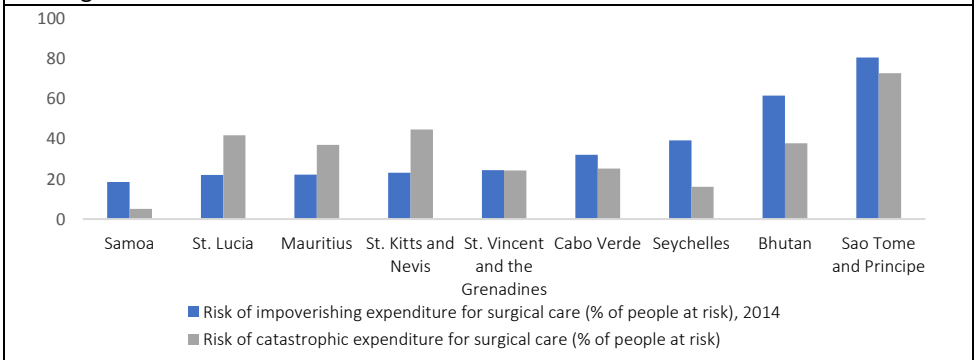


Source: WDI

[62] PEDHRS 2014

[63] The Lancet Commission on Global Surgery, 2015

Figure 5.21 Population at risk of "impoverishing" and "catastrophic" expenditure due to surgical care – 2014



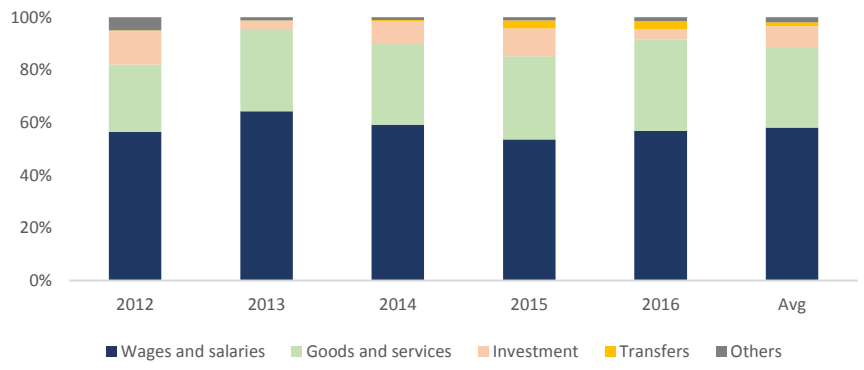
Source: Lancet Commission on Global Surgery, 2015

Expenditures by Economic Classification and Budget Execution

213 **Public expenditures heavily favor wages and salaries and goods and services, which accounted for almost 90 percent of total public health expenditures.** Wages and salaries represent the main spending items, accounting on average more than half of total public health expenditures. Spending on salaries increased in real terms on average by 4 percent per year between 2012 and 2016. About one third of health expenditures were spent on goods and services, this category increased as a share and by half in real terms between 2012 and 2016. Consistent with the findings in Chapter 3, the high spending on goods and services can be attributed to the purchase of medication that account for almost half of the expenditures under this category. This is oversized relative to peers. In contrast, investment expenditures show a downward trend as a share from 13 percent in 2012 to 4 percent in 2016, which is associated with a decline in external resources over the same time (Figure 5.22).

214 **Consistent with the overall spending budget described in Chapter 3, execution in the health sector shows an under performance across most categories.** During 2012 to 2016, total public health expenditure averaged 10 percent below appropriations (Table 5.3). Salaries were almost fully implemented, averaging -4 percent. Similar to the education sector, spending on goods and services and investments have been almost consistently below appropriations. Substantial underspending particularly in the category "others" where almost 40 percent of the resources are not implemented but the category represents only a small share of total expenditures. Transfers and social benefit are the only spending categories that were overspent during the observed period. As with the education sector, the performance for the externally funded programs and projects is very low, with less than 60 percent of donor aid (grants and loans) being implemented.

Figure 5.22 Composition of Health Expenditures by Economic Category, 2010-2016



Source MOF

Table 5.3 Budget Execution: Initial Budget versus Actual Spending (2012-2016), in percentage

	2012	2013	2014	2015	2016	Avg.
Economic classification						
Wages and salaries	(7.3)	(0.1)	(3.9)	(0.8)	(7.8)	(4.0)
Goods and services	(24.3)	(13.7)	(21.5)	(15.7)	(13.9)	(17.8)
Transfers	183.9		9.0	25.2)	(22.2)	36.4
Social benefits		107.6	4.2	(36.2)	15.4	19.1
Others	(61.0)	(63.7)	(29.0)	(13.1)	(29.2)	(39.2)
Investment	(0.1)	92.4	(33.6)	(32.2)	(80.8)	(10.9)
Sources						
External (grants)	28.3	(46.1)	(32.5)	(51.5)	(54.4)	(31.2)
External (loans)	(43.4)	(30.0)	(66.5)	(77.3)	(53.8)	(54.2)
Domestic	(7.2)	(7.7)	(6.9)	(5.3)	(7.7)	(7.0)
Grand Total	**(5.7)**	**(12.6)**	**(11.7)**	**(9.9)**	**(10.5)**	**(10.1)**

Source: MOF

5.4 Efficiency and Equity Issues

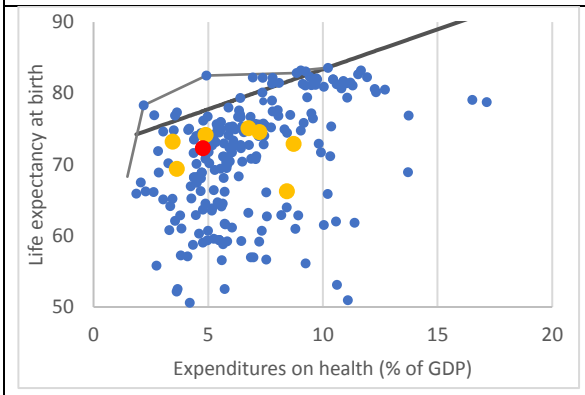
Efficiency of the Health Sector

215 **At the aggregate level, there seems to be much less scope for early efficiency gains in health care than in education.** Cabo Verde's outcomes are as good as or even better than those of several countries that spend more on health, including some peer countries when considering only life expectancy at birth (Figure 5.23 A and B). Still, Cabo Verde can make its spending more efficient without changing the level of speeding if life expectancy were to rise to 80 years, or it could cut health spending to about 2.5 percent of GDP without changing its life expectancy. Health spending is seen as even more efficient if public spending is expressed in current US$ per capita. At US$297 per capita Cabo Verde is much closer to the frontier and can get to the frontier if life expectancy just rises to 73.9 years. On this cost indicator, aspirational peers like Seychelles, Mauritius, and St. Vincent and the Grenadines performed significantly

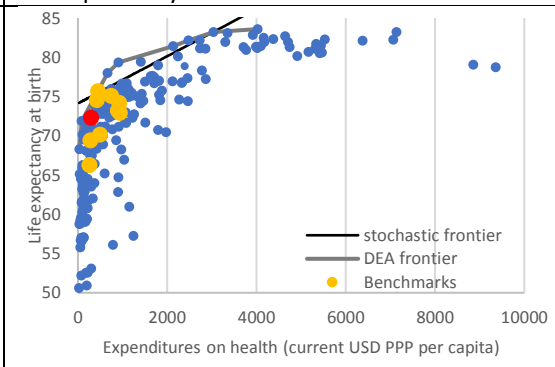
worse: their spending at about US$900 is triple that of Cabo Verde, yet their life expectancy is very close to Cabo Verde's.

Figure 5.23 Expenditures on health and life expectancy at birth

A: Expenditures on health (% of GDP) and life expectancy at birth



B: Expenditures on health (USD per capita) and life expectancy at birth

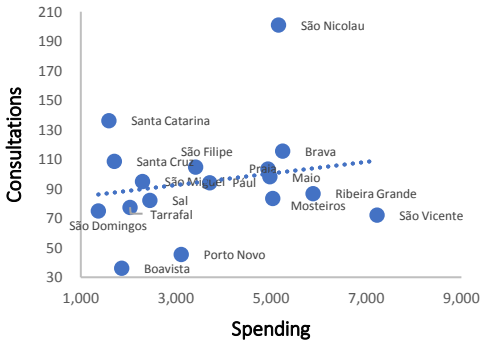


Source:WDI, https://data.worldbank.org/indicator/SH.XPD.TOTL.ZS. Note: Health spending shows both public and private outlays.Red dot = Cabo Verde; yellow dots = benchmark countries.

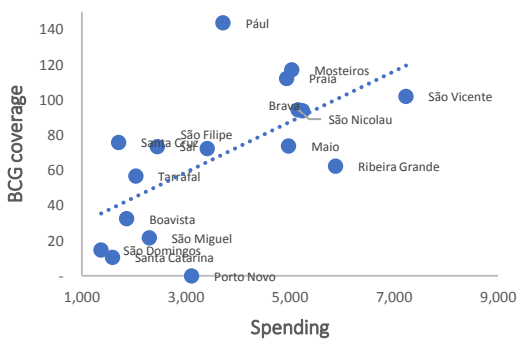
216 **A comparison of the distribution of per capita spending by health districts with BCG coverage and consultations revealed certain disproportion between the spending and the outcomes (**Figure 5.24 **A and B**). Some health districts, such as Ribeira Grande and Sao Vicente with high spending, have limited consultations, while Sao Domingos or Taraffal have almost the same consultations but with lower spending (Figure 5.24). However, regarding BCG coverage, it seems that this outcome increases with per capita spending. The correlation is largely positive, suggesting that there are other factors at play, besides the effectiveness of the DS in terms of number of consultations.

Figure 5.24 Health Spending, Number of Consultations and Vaccinations, 2017

A: Health Spending and Number of Consultations, 2017



B: Health Spending and BCG Vaccinations Coverage, 2017



Source: Ministry of Health, 2018

217 **The Data Envelopment Analysis (DEA)[64] is also used to assess the resource utilization efficiency by linking inputs to health outcomes.** The analysis allows identifying best health districts practices leading to greater health outcomes that could be replicated by others. The efficiency scores are estimated at health district (DS) level, and outputs measures are captured by (i) Infant Mortality Rate/ 1,000 births; (ii) Nurse Consults (children < 1 years-old), (iii) Vaccine coverage (first year of life) - BCG, measles and Polio3 immunization. The inputs include (i) Primary care spending per capita, (ii) Sum of Basic Health Units, Health Posts and Health Centers.[65]

218 **The analysis shows that there is significant variation across DSs in terms of efficiency.** The mean efficiency score across all DSs is 0.55, i.e., there is scope to increase efficiency of DSs by 45 percent. Out of 17 DSs, two are 100 percent efficient: São Vicente and Pául. Just below, Praia has a 0.99 score and São Domingos, 0.88. As already observed pointed, São Vicente and Praia comprise 46 percent of the Cabo Verdean population (Figure 5.25). Pául and São Domingos are smaller DSs localized in Santo Antão and Santiago Islands, respectively, and their efficiency are based on their comparative lower use of resources given the observed outputs. The DS with the lowest efficient score, 0.24, was Porto Novo (Santo Antão Island).

Figure 5.25 Efficiency, Primary Care Spending and IMR/1,000 live births

Figure 5.25a: Efficiency and Primary Care Spending per capita across DSs, Cabo Verde – 2016

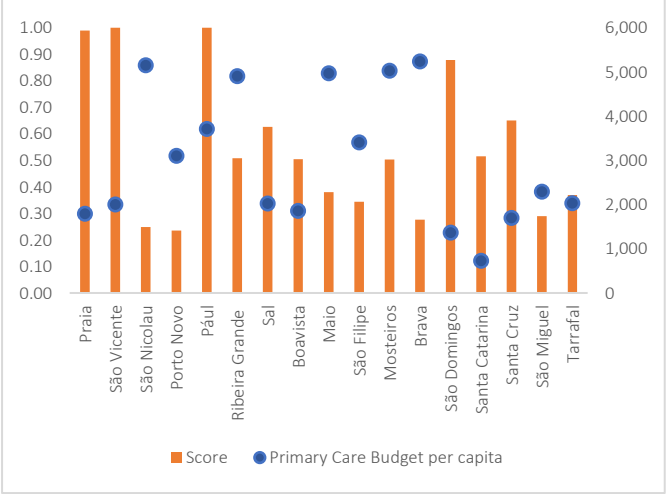
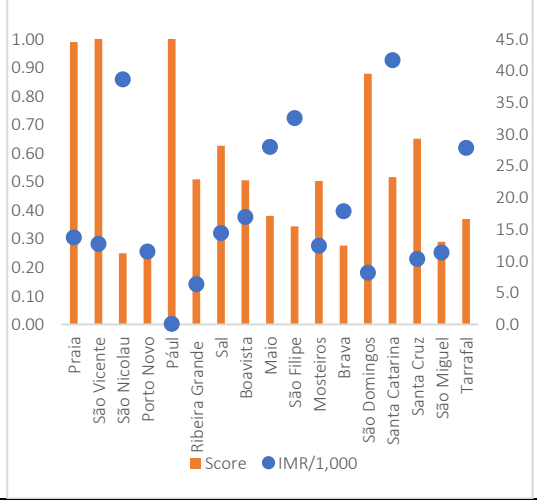


Figure 5.25b: Efficiency and IMR/1,000 live births across DSs, Cabo Verde – 2016



Source: Author's based on Ministry of Health and WDI

219 **The DEA technique allows the computation of the necessary increase (or decrease[66]) in the production of outputs for the DMUs achieve the best production frontier.** To achieve efficiency, DSs should increase nurse consultations by 32.3 percent to reach the best practice frontier, but with large

[64] The DEA of efficiency is a relative and not an absolute efficiency analysis. It measures a relative efficiency and ranges for 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 resources utilization.

[65] Weight restrictions guaranteed that all variables were considered inside DEA model.

[66] If output is undesirable.

variation across DSs: for instance, São Miguel and Tarrafal could increase the number of nurse's consultations by 245 percent and 170 percent, respectively.[67]Table 5.4 shows output projections to reach best practice frontier. There is scope to reduce IMR by 37 percent across DS, with highest potential reductions in Maio (54.7 percent) and Santa Catarina (69.5 percent).

Table 5.4 Input and Output projections across DSs, 2016.

DS	IMR	Nurse Consults	Vaccine Coverage	Efficiency Score
Praia	-7.4%	1.1%	1.1%	0.99
São Vicente	0.0%	0.0%	0.0%	1.00
São Nicolau	-67.1%	87.0%	0.0%	0.25
Porto Novo	0.0%	31.0%	74.4%	0.24
Pául	0.0%	0.0%	0.0%	1.00
Ribeira Grande	0.0%	26.9%	28.9%	0.51
Sal	-12.1%	59.7%	32.1%	0.63
Boavista	-16.8%	98.5%	15.6%	0.50
Maio	-54.7%	87.7%	0.0%	0.38
São Filipe	-30.6%	113.9%	14.4%	0.34
Mosteiros	-0.1%	116.6%	0.0%	0.50
Brava	-28.9%	75.0%	0.0%	0.28
São Domingos	0.0%	13.8%	0.0%	0.88
Santa Catarina	-69.5%	46.5%	82.5%	0.52
Santa Cruz	-0.4%	53.8%	5.5%	0.65
São Miguel	0.0%	245.4%	88.8%	0.29
Tarrafal	-31.4%	170.6%	16.2%	0.37
Overall *	**-36.9%**	**32.3%**	**11.7%**	**0.55**

Source: Authors' calculation *Efficient units have no projections (already in the frontier).

Equity Issues

220 **Households in Cabo Verde spend on average 2.9 percent of their budget on health care, which is low even when considering only non-food expenditure but spending increases with income level.** The budget share of health expenditure is almost identical in rural and urban areas. Cabo Verdean families in 2015 allocate 10.5 percent of their non-food spending on leisure, culture, hotels and restaurants (7.6 percent, when considering food expenditures). Richer households spend a larger proportion of their income on health than the poorer households. According to results from the 2015 consumption survey, the percentage of household budget spent in health care per capita increases in the first four income quintiles (Figure 5.26)[68]. In absolute terms, per capita health spending in the top quintile is three times higher than per capita health spending in the fourth quintile (13,772 CVE and 4,669 CVE, respectively).

221 **Per capita spending varies widely across DS, but without significant correlation to poverty incidence.** São Vicente and Ribeira Grande DSs show highest per capita spending, respectively US$ 72.5

[67] Vaccine coverage considers a pool of these three vaccines.
[68] Estatísticas das famílias e condições de vida. Inquérito Multi-objectivo Contínuo 2017.

(CVE 7,229) and US$ 59 (CVE 5,879), while it is only US$13.7 in Sao Domingo and US$16 in Santa Catarina (Figure 5.27). On average, per capita spending stands at US$ 37 (CVE 3,645). There is no significant and clear correlation between poverty incidence and per capita spending.

Figure 5.26 Household health Expenditure by Income Quintiles (1988-9, 2001-2 and 2015 surveys)

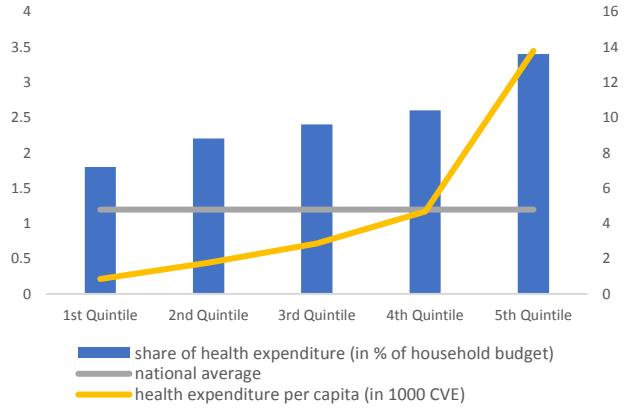
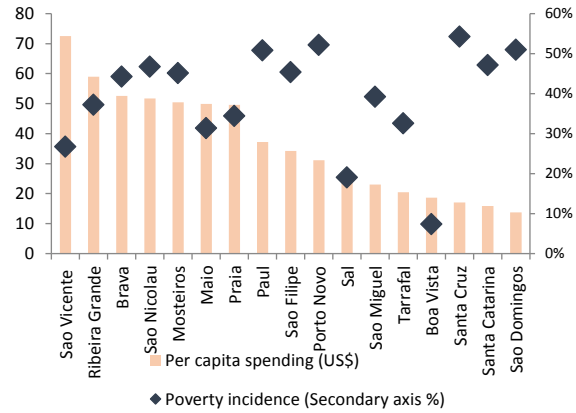


Figure 5.27 Per capita spending and poverty incidence by Health Districts, 2018



Source: Ministry of Health, 2018

222 **Access to health care is still a challenge for rural households.** In Cabo Verde, 86 percent of households with children live within 30 minutes from a health center, leaving 14 percent further than 30 minutes away. However, geographical structures of the country imply that there is a marked town-country imbalance. Only 4 percent of urban households live further than half an hour from health center, while it rises to 28 percent for rural households. Disparity increases regarding access to hospitals. More than half an hour is necessary to reach hospitals for two third of rural households with children, whereas it concerns one fifth of urban households. Nevertheless, the 2007 enquiries on the quality of public services reveal no meaningful difference between the overall satisfaction about health care provided to urban and rural patients (respectively 83.9 and 82.5 percent; QUIBB 2007[69]).

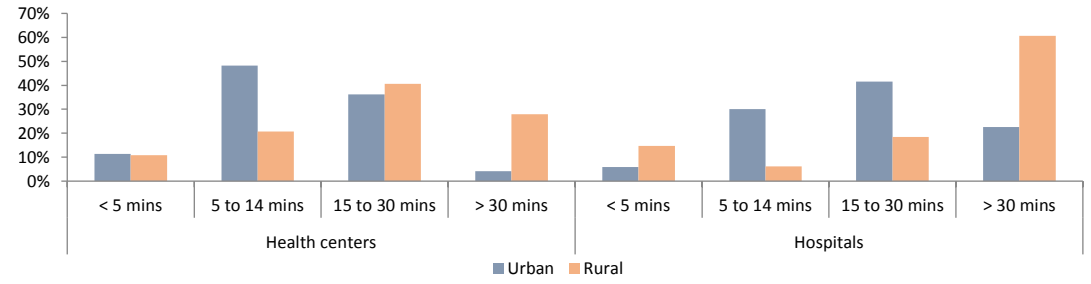
223 **Over 70 percent of the population positively access health service, and this is uniform among the poor and the non-poor.** Over 73 percent of the poor and the non-poor perceive health care services as 'good' or 'reasonable'. The percentage of those indicating services are not available is higher among the poor (4.1 percent) than among the non-poor (0.8 percent) (Figure 5.28). This likely reflects the higher incidence of poverty in rural areas, especially in remote municipalities where services are sometimes absent. When comparing with other public services, the share of the population perceiving problems in health service delivery is 25 percent, twice the share of those negatively assessing education services.

224 **There is evidence that financial barriers significantly influence access to health services especially among poor households.** Data from the latest household consumption survey show that more than 25 percent of the households declared having not been seeking care at least once, due not having money to pay. This percentage is even higher among the 'poor' (48.4 percent) and the '*very poor*' (over

[69] Questionario Unificado de Indicadores Basicos de Bem-estar (QUIBB, 2007)

56.1 percent) (Figure 5.29). Among the non-poor, 28.3 percent of the households declared having not sought care due to insufficient funds (at least once in the last three months) (Figure 5.30).

Figure 5.28 Distance from health facilities by share of households with children, 2013



Source: INE, Inquérito Multiobjetivo Contínuo – 2015

Figure 5.29 Perceived quality of health services among the poor and non-poor, Cabo Verde – 2015

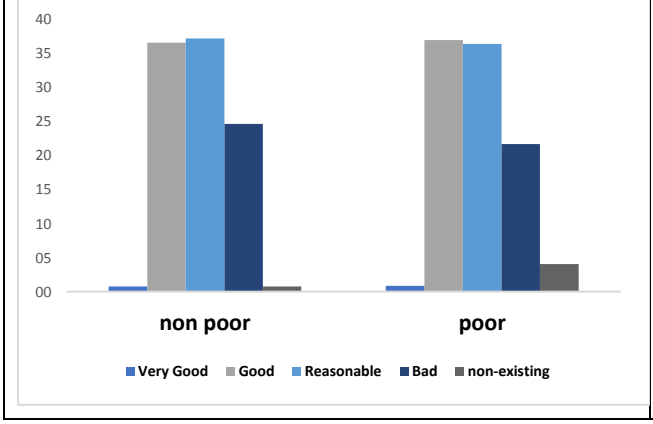
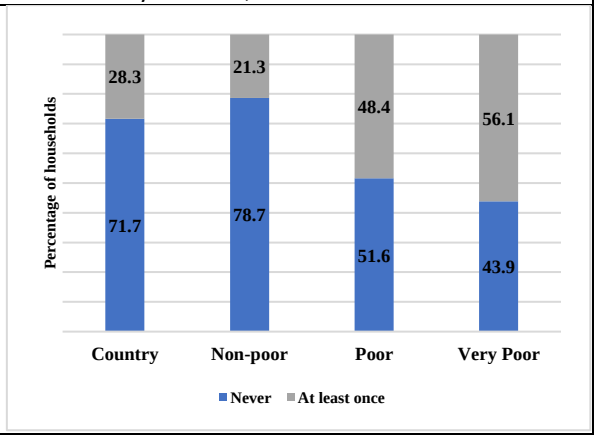


Figure 5.30 Households not seeking care due to unavailability of funds, Cabo Verde – 2015



Source: INE, Inquérito Multiobjetivo Contínuo – 2015. *Note: Answers to the question "how often your household was left without drugs or health treatment due to lack of money?"*

5.5 Conclusion and Recommendations

225 **Cabo Verde could benefit from enhancements to its health information and disease surveillance systems.** The vulnerability of the country concerning vector-borne diseases is a major public health concern and limits the country's tourism potential. The country faced an outbreak of Zika virus with more than 7,000 suspected cases were reported between October 2015 and March 2016. In the absence of an emergency contingency plan for epidemics the government has been responding to these events in an ad-hoc manner, there is an urgent need to strengthen its health information and disease surveillance systems to respond fast to disease outbreaks. This is also critical given the concentration in the distribution of health workers in select islands.

226 **There is need to strengthen human resource management.** Given the shortcomings of human resources in the health sector, it will be important to: (i) recruit skilled health workers (physicians, doctors

and nurses) to ensure that health care facilities meet their nationally recommended staffing norms; and (ii) promote equitable distribution of health professionals across health districts, smaller and rural areas.

227 **Addressing non-communicable diseases is a priority for Cabo Verde.** The country is facing an epidemiological transition, with a burden of disease now mostly related to non-communicable diseases which account for 69 percent of all deaths in the country (cardiovascular diseases, cancers, chronic respiratory diseases, diabetes are the main ones). This transition requires two main policy changes. First, increase the investment in prevention and advocacy for healthy behaviors. Secondly, improve the health service delivery system towards better capacity for diagnosis and treatment of chronic diseases strengthening primary care functions and integration of care across the different levels and providers within the health system.

228 **Promoting equitable access to health services will improve outcomes**. Additional resources should benefit remote areas and very poor households as financial barriers significantly influence access to health services especially among poor households. Access to health care in rural areas is a challenge. Financial barriers to access may be addressed by: (i) removing out-of-pocket costs for some services at facility level for targeted poor households and some remote areas, (ii) introducing measures such as health equity fund, fee exemption schemes for services/medicines, vouchers, conditional/non-conditional cash transfers and community health insurance, (iii) prioritizing investment into remote areas.

229 To improve the efficiency and effectiveness of resource utilization and eliminate inefficiencies in the health sector, it is crucial for health districts to make decisions based on outcomes produced and inputs used. One way to do this could be through a performance-based contracting mechanism that would allocate resources to health delegations against measurable results such as increase of different vaccinations coverage, reduction of tuberculosis incidence or other diseases.

230 **Several issues have emerged from the health chapter that require more research.** To assist the Ministry of Health in prioritizing, it would be important to undertake cost-benefit analysis of the various policy recommendations proposed. This will require greater access to data and sector personnel. More work is needed to assess (i) the major risk factors of a high burden of non-communicable diseases, (ii) the raising of tobacco taxation and alcohol taxation as potential sources of additional revenue for government, and (iii) instruments for primary health care, such as population empanelment, risk stratification of patients, and proactive care management plans for people with multi-morbidities, to manage chronic diseases and multi-morbidity over time. Additionally, there is scope for more research on the quality of care, especially clinical effectiveness and overuse of services (notably the overuse of drugs).

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Annex 1: Definition of Peer Countries

The Cabo Verde PER feature a systematic benchmarking exercise using a pre-identified list of structural and aspirational peer countries. The country's performance is also compared against lower and upper middle-income country groups, Sub-Sharan Africa and where, possible with small island states. A BOOST database covering for the period 2011 to 2016, which includes indicators on public spending and outcomes, was created for this PER using data from Ministry of Finance. BOOSTs are country-specific databases of public expenditures disaggregated at the lowest level available within a country's Treasury system and broken down by government level, administrative units, sub-national spending units, economic classification, functional classification, and financing source. This database was also supplemented by other official sources where possible.

The peers were selected using the MTI Find My Friends Tool as follows:

Structural Peers

We selected countries with similar economic characteristics to Cabo Verde using the following criteria:

a. Being a lower middle-income country.
b. International tourism receipt (as a percentage of total exports) greater than 18 percent.
c. Population less than 1.5 million people.
d. Having general government gross debt above 50 percent of nominal GDP.

Aspirational and regional peers

Under this classification, we allow for higher levels of development. The criteria used are:

a. Small island states
b. Population less than 1.5 million people.
c. Upper middle to high income countries.
d. International tourism receipt (as a percentage of total exports) greater than 25 percent.
e. Debt to GDP ratio of greater than 50 percent

These criteria deliver the following groups of countries:

Country	Classification by income	Region	Population (million)	Tourism receipts as % of total exports	General government gross debt as % of Nominal GDP	Investment, % of Nominal GDP	CPIA	2016 GNI Per Capita, US$
Cabo Verde	Lower MIC	SSA	0.5	53.0	110.0	39.0	3.8	2,970
Structural Peer (s)								
Bhutan	Lower MIC	SAR	0.8	19.0	94.0	57	3.7	2,510
Sao Tome and Principe	Lower MIC	SSA	0.2	64.0	74.0	29.4	3.1	1,730
Samoa	Lower MIC	EAP	0.2	65.0	55.0	--	4.0	4,100
Aspirational Peers								
Mauritius	Upper MIC	SSA	1.3	27.0	56.0	19.0	4.6	9,760
Seychelles	High income	SSA	0.1	35.0	68.8	32.9	3.6	15,410
St. Lucia	Upper MIC	LAC	0.2	58.0	80.2	20.5	3.7	7,670
St. Kitts and Nevis	High income	LAC	0.1	34.0	82.9	30.0	3.6	15,860
St. Vincent and the Grenadines	Upper MIC	LAC	0.1	47.0	77.9	25.1	3.7	6,790

Source: MFM Find Friends Toolkit and WDI

Annex 2: Debt Sustainability Analysis (DSA) Model

The stock of public debt measured as a share of GDP depends on four key variables: (i) the public debt stock inherited from the past, which results from past borrowing choices; (ii) the primary balance that reflects the current fiscal policies and institutions concerning taxation and spending; (iii) the cost of borrowing, represented by the average interest rate charged on the inherited public debt stock; and (iv) the growth rate of GDP. Formally, a basic DSA model postulates a debt dynamics equation to determine the public debt-to-GDP ratio:

$$(1) \qquad D_t = \underbrace{D_{t-1}}_{\substack{Inherited \\ debt}} + \underbrace{PD_t}_{\substack{Primary \\ deficit}} + \underbrace{\frac{i_t}{1+\hat{Y}_t} D_{t-1}}_{Interest\ cost} - \underbrace{\frac{\hat{Y}_t}{1+\hat{Y}_t} D_{t-1}}_{Growth-dividend}$$

where D_t denotes the public debt-to-GDP ratio at end of year t, PD_t is the primary deficit as share of GDP, i_t is the average interest rate paid on the inherited debt stock that determines the cost of carrying debt, and $\hat{Y}_t$ is the growth rate of nominal GDP that determines the growth-dividend.

Macroeconomic and fiscal variables involved in the debt dynamics equation (1) depend on each other through several interactions and feedbacks, which underlie the co-movements among variables observed in practice. For instance, output growth depends on public investment and government revenues depend on economic activity. We consider a DSA model for Cabo Verde that enriches the debt dynamics equation (1) by introducing a set of functions to capture interactions and feedbacks as well as the specificities of the Cabo Verdean economy. We then consider an expanded debt dynamics equation:

$$(2) \qquad \underbrace{D_{d,t} + D_{f,t}E_t}_{Debt\ Dt} = \underbrace{D_{d,t-1} + D_{f,t-1}E_{t-1}}_{\substack{Inherited \\ debt}} + \underbrace{CE_{t(Y_t)} + KE_t - T_{t(Y_t)}}_{\substack{Primary \\ deficit}} + \cdots$$

$$\cdots + \underbrace{\frac{i_{d,t}}{1+\hat{Y}_t} D_{d,t-1}}_{\substack{Interest\ cost\ on \\ domestic\ debt}} + \underbrace{\frac{i_{f,t} + i_{f,t}\hat{E}_t + \hat{E}_t}{1+\hat{Y}_t} D_{f,t-1}E_{t-1}}_{\substack{Interest\ cost\ on \\ foreign\ debt \\ (including\ valuation\ effect)}} - \underbrace{\frac{\hat{Y}_t}{1+\hat{Y}_t} D_{t-1}}_{Growth-dividend}$$

where additional factors are introduced: (i) the public debt-to-GDP ratio D_t is disaggregated into domestic debt $D_{d,t}$ and foreign debt $D_{f,t}$ (converted into local currency using the nominal exchange rate E_t); (ii) the primary deficit-to-GDP ratio PD_t is broken down into primary current expenditure CE_t, capital expenditure KE_t (i.e., public investment), and total revenues T_t (all variables scaled by GDP); (iii) the primary current expenditure CE_t, and total revenues T_t explicitly depend on the nominal GDP Y_t as a proxy for the scale of expenditure programs and relevant tax bases in the economy; (iv) the interest expenditure reflects the cost of carrying both domestic and foreign debt, with the corresponding average interest rates paid denoted $i_{d,t}$ and $i_{f,t}$; and (v) the valuation effect of currency depreciation $\hat{E}_t$ on foreign liabilities is explicitly added to the cost of carrying foreign debt.

Gross borrowing requirements arise out of the overall budget deficit, amortization payments (i.e., repayment of maturing liabilities), support to SOEs (i.e., capitalization and on-lending operations), and the net acquisition of financial assets. We assume these requirements are met with borrowings (i.e., new debt

flows). A debt management strategy is the choice of instruments of a certain type and financial terms (e.g., currency of denomination, tenor, interest rate) issued to meet the funding needs in a given year. This strategy specifies the shares of gross borrowing requirements that are met with each instrument. In the DSA model, we consider only domestic debt and foreign debt, which can be seen as two highly-aggregated instruments. The corresponding formal expressions, with all variables scaled by GDP, are:

(3) $$\underbrace{GBN_t}_{\substack{Gross\\ borrowing\\ requirements}} = \underbrace{PD_t}_{\substack{Primary\\ deficit}} + \underbrace{\frac{i_t}{1+\hat{Y}_t} D_{t-1}}_{Interest\ cost} + \underbrace{Am_{d,t} + Am_{f,t}E_t}_{\substack{Amortization\\ (principal)}} + \underbrace{SSOE_t}_{\substack{Support\\ to\ SOEs}} + \underbrace{NAFA_t}_{\substack{Net\ acquisition\\ of\ financial\\ assets}}$$

(4) $$GBN_t = \underbrace{w_{d,t}GBR_t}_{\substack{Issuance\ of\\ domestic\ debt}} + \underbrace{w_{f,t}GBR_t}_{\substack{Issuance\ of\\ foreign\ debt}} \quad \text{with} \quad w_{d,t} + w_{f,t} = 1$$

(5) $$\underbrace{D_{d,t}}_{\substack{Domestic\ debt\\ (\%\ of\ GDP)}} = \frac{1}{1+\hat{Y}_t} D_{d,t-1} + w_{d,t}GBR_t - Am_{d,t}$$

(6) $$\underbrace{D_{f,t}E_t}_{\substack{External\ debt\\ (\%\ of\ GDP)}} = \frac{1+\hat{E}_t}{1+\hat{Y}_t} D_{f,t-1}E_{t-1} + w_{f,t}GBR_t - Am_{f,t}E_t$$

where the debt management strategy specifies shares of domestic and foreign debt instruments to be issued, $w_{d,t}$ ad $w_{f,t}$, respectively.

The DSA model for Cabo Verde, therefore, encompasses the equations (2) to (6) and provides reasonable description of the behavior of macroeconomic and fiscal variables. The DSA model projects the fiscal and debt variables of interest, e.g. revenues, expenditures, budget balances, net borrowings, and debt-to-GDP ratio. With simple assumptions on the financing terms applicable to the public debt instruments (e.g., amortizations, maturity, grace period), the DSA model also projects the gross borrowing requirements.

Annex 3: Vector Auto-Regressive (VAR) Model and Fiscal Risks

To estimate the impact of public investment on economic growth, which is actually a fiscal multiplier, we use a VAR model estimated with historical data on Cabo Verde's real GDP growth, domestic real interest rate, CVE/Euro bilateral real exchange rate, and public investment. The VAR model captures the dynamic interactions between economic growth, domestic financial conditions, competitiveness, and public investment (considered a policy-determined exogenous variable). We forecast the endogenous variables in the period 2018-2023 conditional upon the path of public investment-to-GDP ratio assumed in the No-Tax-Reform Scenario. The VAR model formulation does not include government revenue since this variable proved to be barely significant in other exercises undertaken. The implication is that the proposed reforms aimed at rationalizing tax expenditures (e.g., elimination of exemptions and special tax regimes) will not significantly undermine economic growth, e.g., through supporting investment incentives. For the same token, a failure to implement those reforms will not lead to higher economic growth. As a matter of fact, historical data suggest Cabo Verde has been able to sustain economic growth rates higher than those expected in the baseline outlook while at the same time exhibiting a high taxation burden; thus, it is likely that variables other than tax expenditures have a stronger influence in investment decisions, particularly in the tourism sector. Hence, we consider that the any effect of marginal changes in taxation regimes on the country's economic growth is of second order and can be safely omitted.

Set-up of the model:

We consider three basic decompositions to treat nominal and real variables in the DSA model discussed in Annex I. Firstly, the growth rate of nominal GDP $\hat{Y}t$ is broken down into the growth rate of real GDP $\hat{y}t$ and the domestic inflation rate measured by GDP deflator pt, using $\left(1+\hat{Y}_t\right)=(1+\hat{y}_t)(1+\hat{p}_t)$. Secondly, the domestic nominal interest rate id,t is broken down into the domestic real interest rate rd,t and the domestic inflation rate, using $\left(1+i_{d,t}\right)=\left(1+r_{d,t}\right)(1+\hat{p}_t)$. Thirdly, movements (if any) in the CVE/Euro bilateral nominal parity $\hat{E}t$ is decomposed into changes in the CVE/Euro bilateral real exchange rate $\hat{e}t$, the domestic inflation rate, and the foreign inflation rate, using $\left(1+\hat{E}_t\right)=(1+\hat{e}_t)(1+\hat{p}_t)/\left(1+\hat{p}_{f,t}\right)$.

Next, we specify an empirical macroeconomic dynamic model: a Vector Auto-Regressive (VAR) model, which formally represents interactions and feedbacks between the real GDP growth $\hat{y}t$, the CVE/Euro bilateral real exchange rate $\hat{e}t$, the domestic real interest rate rd,t, and the public investment-to-GDP ratio KEt. The VAR model allows capture patterns of macro-fiscal co-movements observed in Cabo Verde, e.g., the public investment-to-GDP ratio KEt affects economic growth $\hat{y}t$ (through the accumulation of physical capital, including infrastructure) and the CVE/Euro bilateral real exchange rate $\hat{e}t$ (through foreign-exchange inflows associated with external financing for public investment projects).

The VAR model is not a perfect forecasting device, but it is a useful model to represent interactions and feedbacks among variables involved in the public debt dynamics and to simulate alternative macroeconomic scenarios that can be compared with the Baseline Scenario.

The VAR model is estimated for three endogenous macroeconomic variables ($\hat{y}_t$, $\hat{e}_t$, and $r_{d,t}$), one exogenous policy-determined variable (KE_t), and two exogenous external variables (the growth rate of the European Union economy as a main trade partner, $\hat{y}_{eut}$, and the six-month Libor on US dollar deposits

as proxy for international financial conditions, $Libor_t$). We use annual data in 1990-2015, obtained from World Bank's World Development Indicators and IMF's World Economic Outlook. As times series are not long, we consider only one lag of the endogenous variables, i.e., a VAR(1) model. The estimated coefficients and standard statistics are reported below, as well as the estimated residuals' covariance matrix used to perform stochastic simulations.

Table 1: VAR Model- Estimated Coefficients, t-statistics in [ ].

	GDP growth (%)	Real exchange rate (% change)	Domestic real interest rate (%)
Lagged GDP growth (%)	0.523131	0.108294	0.277588
	[2.27727]	[0.37487]	[0.92878]
Lagged real exchange rate (% change)	-0.149208	-0.476995	-0.798855
	[-0.49760]	[-1.26497]	[-2.04771]
Lagged domestic real interest rate (%)	0.263022	0.097781	0.238909
	[0.99253]	[0.29342]	[0.69294]
Constant	-0.543047	-4.671197	0.476777
	[-0.16252]	[-1.11164]	[0.10967]
EU growth (%)	0.302343	0.268291	0.418025
	[0.85608]	[0.60408]	[0.90976]
Libor (6-month, US dollar deposits) (%)	-0.008444	0.029506	-0.325514
	[-0.02570]	[0.07142]	[-0.76158]
Public investment-to-GDP ratio (%)	0.087067	5.46E-04	-0.13727
	[0.90915]	[0.00453]	[-1.10171]
R-squared	0.347314	0.182005	0.450663
Adj. R-squared	0.067592	-0.168564	0.215233
Sum sq. resids	90.16466	142.5876	152.6214
S.E. equation	2.537781	3.191368	3.301746
F-statistic	1.241639	0.51917	1.914212
Determinant resid covariance (dof adj.)		418.6735	
Determinant resid covariance		124.0514	
Log likelihood		-140.0104	
Akaike information criterion		15.33433	
Schwarz criterion		16.37885	

Source: World Bank calculations

Table 2: VAR Model- Estimated Residuals' Covariance Matrix.

	GDP growth (%)	Real exchange rate (% change)	Domestic real interest rate (%)
GDP growth (%)	6.44033	-1.31278	-1.88464
Real exchange rate (% change)	-1.31278	10.18483	6.51894
Domestic real interest rate (%)	-1.88464	6.51894	10.90153

Source: World Bank calculations

Annex 4: Macro-Fiscal Projections for Alternative Scenarios

Table 1: Business-As-Usual Scenario.

	Historical			Projections					
Variables	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP at current prices (CVE million)	158,700	165,800	173,400	184,900	195,565	206,438	218,131	231,393	245,462
GDP at constant prices, annual growth rate (%)	1.0	4.7	3.9	4.5	4.0	4.0	4.0	4.0	4.0
GDP deflator, annual growth rate (%)	1.8	-0.2	0.7	2.0	1.7	1.5	1.6	2.0	2.0
Exchange Rate CVE/EUR	110.3	110.3	110.3	110.3	110.3	110.3	110.3	110.3	110.3
Real Exchange Rate, Index 2015=100 (1)	100.0	102.2	103.6	103.5	103.8	104.4	104.8	104.8	104.8
Revenue	26.9	26.6	28.5	29.3	28.5	29.0	28.5	28.5	28.5
Direct Taxes (Tax on Income & Profits)	6.1	6.1	6.5	7.0	6.7	6.8	7.0	7.0	7.0
Indirect Taxes (Taxes on G&S and Int'l Trade)	12.7	13.1	13.9	15.2	14.4	15.5	14.9	14.9	14.9
Grants	2.5	2.7	3.5	1.9	1.5	1.4	1.2	1.2	1.2
Other Revenue (incl. Other Taxes)	5.6	4.7	4.5	5.2	5.9	5.3	5.4	5.4	5.4
Expenditure	31.6	29.7	31.7	32.3	32.7	32.0	30.9	30.9	30.9
Compensation of Employees	11.0	11.1	10.7	11.6	11.3	11.3	11.3	11.3	11.3
Use of Goods & Services	4.7	4.6	3.8	5.1	4.3	4.2	4.0	4.0	4.0
Grants, Subsidies, and Social Benefits	6.1	6.2	6.6	6.9	7.4	7.0	6.7	6.7	6.7
Other Expenses	1.5	1.9	2.4	2.5	2.4	2.2	2.1	2.1	2.1
Interest Payments	2.6	2.5	2.6	2.9	2.9	2.6	2.5	2.5	2.5
Net Acquisition of Non-Fin.Assets	5.7	3.4	5.6	3.3	4.4	4.7	4.3	4.3	4.3
Primary Balance	-2.1	-0.5	-0.6	-0.1	-1.3	-0.4	0.1	0.1	0.1
Overall Balance	-4.7	-3.0	-3.2	-3.0	-4.2	-3.0	-2.4	-2.4	-2.4
Gross Borrowing Requirements	12.4	11.3	8.7	11.6	10.1	9.2	9.9	10.3	15.0
Overall Balance (+ indicates deficit)	4.7	3.0	3.2	3.0	4.2	3.0	2.4	2.4	2.4
Amortizations Payments	4.5	4.8	4.8	3.4	2.7	2.9	4.3	4.7	9.4
Support to SOEs (Cap. & On-Lend.)	3.2	3.4	0.7	5.2	3.2	3.2	3.2	3.2	3.2
Net Acquisition of Fin.Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Borrowing Sources	12.4	11.3	8.7	11.6	10.1	9.2	9.9	10.3	15.0
Issuance of Domestic Debt (% share) (2)				40.0	40.0	40.0	40.0	40.0	40.0
Issuance of External Debt (% share)				60.0	60.0	60.0	60.0	60.0	60.0
Public Debt	126.0	127.8	126.1	129.8	130.1	129.5	128.1	126.4	124.7
Domestic Debt	29.0	31.7	33.1	34.9	36.9	38.4	39.3	40.1	38.0
External Debt	97.0	96.1	93.0	94.8	93.2	91.0	88.8	86.2	86.8

Notes:
(1) Real exchange rate defined as the CVE/Euro bilateral exchange rate times the ratio between int'l prices and domestic GDP deflator.
(2) Includes domestic debt issued for deficit fiancing and accumulation of government deposits and other financial assets.
Source: World Bank projections.

Table 2: Fiscal Adjustment Scenario.

	Historical			Projections					
Variables	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP at current prices (CVE million)	158,700	165,800	173,400	184,900	195,565	206,438	218,131	231,393	245,462
GDP at constant prices, annual growth rate (%)	1.0	4.7	3.9	4.5	4.0	4.0	4.0	4.0	4.0
GDP deflator, annual growth rate (%)	1.8	-0.2	0.7	2.0	1.7	1.5	1.6	2.0	2.0
Exchange Rate CVE/EUR	110.3	110.3	110.3	110.3	110.3	110.3	110.3	110.3	110.3
Real Exchange Rate, Index 2015=100 (1)	100.0	102.2	103.6	103.5	103.8	104.4	104.8	104.8	104.8
Revenue	26.9	26.6	28.5	29.3	28.5	30.7	30.2	30.2	30.2
Direct Taxes (Tax on Income & Profits)	6.1	6.1	6.5	7.0	6.7	7.8	8.0	8.0	8.0
Indirect Taxes (Taxes on G&S and Int'l Trade)	12.7	13.1	13.9	15.2	14.4	16.2	15.6	15.6	15.6
Grants	2.5	2.7	3.5	1.9	1.5	1.4	1.2	1.2	1.2
Other Revenue (incl. Other Taxes)	5.6	4.7	4.5	5.2	5.9	5.3	5.4	5.4	5.4
Expenditure	31.6	29.7	31.7	32.3	32.7	31.2	30.0	30.0	29.9
Compensation of Employees	11.0	11.1	10.7	11.6	11.3	11.3	11.3	11.3	11.3
Use of Goods & Services	4.7	4.6	3.8	5.1	4.3	4.2	4.0	4.0	4.0
Grants, Subsidies, and Social Benefits	6.1	6.2	6.6	6.9	7.4	7.0	6.7	6.7	6.7
Other Expenses	1.5	1.9	2.4	2.5	2.4	1.4	1.3	1.3	1.3
Interest Payments	2.6	2.5	2.6	2.9	2.9	2.6	2.4	2.4	2.3
Net Acquisition of Non-Fin.Assets	5.7	3.4	5.6	3.3	4.4	4.7	4.3	4.3	4.3
Primary Balance	-2.1	-0.5	-0.6	-0.1	-1.3	2.1	2.6	2.6	2.6
Overall Balance	-4.7	-3.0	-3.2	-3.0	-4.2	-0.5	0.2	0.2	0.3
Gross Borrowing Requirements	12.4	11.3	8.7	11.6	10.1	6.7	7.3	7.7	12.3
Overall Balance (+ indicates deficit)	4.7	3.0	3.2	3.0	4.2	0.5	-0.2	-0.2	-0.3
Amortizations Payments	4.5	4.8	4.8	3.4	2.7	2.9	4.3	4.7	9.4
Support to SOEs (Cap. & On-Lend.)	3.2	3.4	0.7	5.2	3.2	3.2	3.2	3.2	3.2
Net Acquisition of Fin.Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Borrowing Sources	12.4	11.3	8.7	11.6	10.1	6.7	7.3	7.7	12.3
Issuance of Domestic Debt (% share) (2)				40.0	40.0	40.0	40.0	40.0	40.0
Issuance of External Debt (% share)				60.0	60.0	60.0	60.0	60.0	60.0
Public Debt	126.0	127.8	126.1	129.8	130.1	127.0	123.2	119.1	115.2
Domestic Debt	29.0	31.7	33.1	34.9	36.9	37.4	37.3	37.2	34.2
External Debt	97.0	96.1	93.0	94.8	93.2	89.5	85.9	81.9	81.0

Notes:
(1) Real exchange rate defined as the CVE/Euro bilateral exchange rate times the ratio between int'l prices and domestic GDP deflator.
(2) Includes domestic debt issued for deficit fiancing and accumulation of government deposits and other financial assets.
Source: World Bank projections.

Table 3: Reform Scenario.

	Historical			Projections					
Variables	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP at current prices (CVE million)	158,700	165,800	173,400	184,900	196,881	209,626	224,268	240,191	254,795
GDP at constant prices, annual growth rate (%)	1.0	4.7	3.9	4.5	4.7	4.9	5.3	5.0	4.0
GDP deflator, annual growth rate (%)	1.8	-0.2	0.7	2.0	1.7	1.5	1.6	2.0	2.0
Exchange Rate CVE/EUR	110.3	110.3	110.3	110.3	110.3	110.3	110.3	110.3	110.3
Real Exchange Rate, Index 2015=100 (1)	100.0	102.2	103.6	103.5	103.8	104.4	104.8	104.8	104.8
Revenue	26.9	26.6	28.5	29.3	28.5	30.7	30.2	30.2	30.2
Direct Taxes (Tax on Income & Profits)	6.1	6.1	6.5	7.0	6.7	7.8	8.0	8.0	8.0
Indirect Taxes (Taxes on G&S and Int'l Trade)	12.7	13.1	13.9	15.2	14.4	16.2	15.6	15.6	15.6
Grants	2.5	2.7	3.5	1.9	1.5	1.4	1.2	1.2	1.2
Other Revenue (incl. Other Taxes)	5.6	4.7	4.5	5.2	5.9	5.3	5.4	5.4	5.4
Expenditure	31.6	29.7	31.7	32.3	32.7	31.2	29.9	29.8	29.7
Compensation of Employees	11.0	11.1	10.7	11.6	11.3	11.3	11.3	11.3	11.3
Use of Goods & Services	4.7	4.6	3.8	5.1	4.3	4.2	4.0	4.0	4.0
Grants, Subsidies, and Social Benefits	6.1	6.2	6.6	6.9	7.4	7.0	6.7	6.7	6.7
Other Expenses	1.5	1.9	2.4	2.5	2.4	1.4	1.3	1.3	1.3
Interest Payments	2.6	2.5	2.6	2.9	2.9	2.6	2.3	2.2	2.1
Net Acquisition of Non-Fin.Assets	5.7	3.4	5.6	3.3	4.4	4.7	4.3	4.3	4.3
Primary Balance	-2.1	-0.5	-0.6	-0.1	-1.3	2.1	2.6	2.6	2.6
Overall Balance	-4.7	-3.0	-3.2	-3.0	-4.2	-0.5	0.3	0.4	0.5
Gross Borrowing Requirements	12.4	11.3	8.7	11.6	12.1	4.9	4.9	4.2	8.6
Overall Balance (+ indicates deficit)	4.7	3.0	3.2	3.0	4.2	0.5	-0.3	-0.4	-0.5
Amortizations Payments	4.5	4.8	4.8	3.4	2.7	2.9	4.2	4.5	9.0
Support to SOEs (Cap. & On-Lend.)	3.2	3.4	0.7	5.2	5.2	1.5	0.9	0.0	0.0
Net Acquisition of Fin.Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Borrowing Sources	12.4	11.3	8.7	11.6	12.1	4.9	4.9	4.2	8.6
Issuance of Domestic Debt (% share) (2)				40.0	40.0	40.0	40.0	40.0	40.0
Issuance of External Debt (% share)				60.0	60.0	60.0	60.0	60.0	60.0
Public Debt	126.0	127.8	126.1	129.8	131.3	125.3	117.8	109.6	102.9
Domestic Debt	29.0	31.7	33.1	34.9	37.5	37.0	35.5	33.8	29.7
External Debt	97.0	96.1	93.0	94.8	93.8	88.3	82.3	75.8	73.2

Notes:
(1) Real exchange rate defined as the CVE/Euro bilateral exchange rate times the ratio between int'l prices and domestic GDP deflator.
(2) Includes domestic debt issued for deficit fiancing and accumulation of government deposits and other financial assets.
Source: World Bank projections.

Annex 5: Public Debt Thresholds for Cabo Verde.

Projections of Cabo Verde's public debt under different scenarios can be confronted against *debt thresholds* reflecting prudent, safe levels of public debt. We estimate thresholds applicable to the public debt-to-GDP ratio using the econometric methodology underlying the 2012 version of the Debt Sustainability Framework for Low-Income Countries (LIC DSF) developed jointly by the IMF and the World Bank. Specifically, we seek for a *norm* or *threshold* level of public debt that, if exceeded, would imply a probability (risk) of experiencing debt distress deemed *high*. The norm gives due consideration to the specificities of Cabo Verde, most notably its strong policies and institutions and its growth prospects.

A simple probit model postulates that the probability of a country experiencing repayment problems over a one-year horizon depends on four variables: the public debt-to-GDP indicator, an interaction term between a Middle-Income Country dummy and the public debt-to-GDP indicator, the World Bank's Country Policy and Institutional Assessment (CPIA) score, and the real GDP growth (as a proxy for economic shocks). Repayment problems include: large arrears on public external debt; a debt negotiation with the Paris Club; a large IMF non-concessional financing package; and an episode of domestic debt default or restructuring, as listed in credit rating agencies, academic papers, and IMF staff reports.

Formally, the probit model is $P(Y_{it} = 1) = F(\beta_0 + \beta_1\, DEBT_{it} + \beta_2\, MIC_{it}\, DEBT_{it} + \beta_3\, CPIA_{it} + \beta_4\, GROWTH_{it})$, where the binary indicator Y_{it} equals 1 if the country *i* experiences debt distress episode in period *t*, and 0 otherwise. $F(.)$ is the cumulative density function of the standard normal distribution. The covariates to the right are self-explained and measured in the year preceding the debt distress episodes in order to mitigate endogeneity issues. The model is estimated using panel data for MIC and LIC in 1971-2007. The estimated parameters reported in IMF-IDA (2012, Table A8, column 2) are reproduced in the Table below.

Thresholds on the public debt-to-GDP indicator corresponding to different levels of probability (risk) of debt distress are calculated by *inverting* the probit model and setting values for Cabo Verde's MIC status, CPIA score, and real GDP growth. The threshold $\overline{DEBT}_{it}$ for an arbitrarily-chosen probability *P(debt distress)* is then calculated using $\overline{DEBT}_{it} = \Big(F^{-1}\big(P(debt\ distress)\big) - (\beta_0 + \beta_3\, CPIA_{it} + \beta_4\, GROWTH_{it})\Big)/(\beta_1 + \beta_2)$. The Table below reports thresholds on the public debt-to-GDP indicator corresponding to probabilities of debt distress ranging from 10 percent to 30 percent, given Cabo Verde's CPIA score of strong performer and a real GDP growth rate of 5 percent.

Table Anex IV. Debt Thresholds and Probit Model.

Explanatory variables	Coef.	Estimated value	Signif.
Public debt-to-GDP indicator (%)	β1	1.0080	***
MIC dummy * Public debt-to-GDP indicator (%)	β2	0.0214	
CPIA score (1 to 6)	β3	-0.5260	***
Real GDP growth (%)	β4	-6.1500	***
Constant	β0	0.3360	
No. of observ.		597	
Pseudo R-squared		0.138	

Sign. *** p<0.01, ** p<0.05, and * p<0.10

Source: IMF-IDA (2012)

Probability of debt distress (%)	Thresholds of public debt-to-GDP ratio (%)
10	77
15	101
20	120
25	136
30	151

Assuming: CPIA score of 4
Real GDP growth of 5 percent
Cape Verde MIC status

Source: World Bank estimates based on IMF-IDA (2012)

Cabo Verde's debt-to-GDP ratio at end-2017 was 126 percent and it is expected to decrease to 102 percent under the baseline outlook. According to the thresholds estimated, these levels of debt imply a probability of debt distress of 20 percent and 15 percent, respectively. Policies and reforms underlying the baseline outlook can then help Cabo Verde reduce the risk of running into repayment problems, by reducing the levels of public debt.

Nevertheless, it should be noted that debt-distress probabilities of around 15-20 percent are significant in view of the empirical evidence underlying the threshold estimation: In the 597 observations included in the sample, there are 37 cases of MIC undergoing debt distress and their estimated debt-distress probabilities range between 2 percent and 78 percent, with 11 cases having probabilities below 12 percent. This observation suggests that even small estimated distress probabilities might occur in countries that experience debt servicing difficulties. Therefore, with estimated distress probabilities around 15-20 percent, Cabo Verde is indeed facing a non-negligible risk of debt distress over the next few years under the Baseline Scenario.

Annex 6: Methodology for Computing Tax Potential in Cabo Verde

A panel econometric study was used to assess the tax potential of Cabo Verde and peer countries. The first approach was a *peer analysis* that compared the Cabo Verde tax revenue-to-GDP ratio to the sample average. The potential from the regression is the fitted residual, which averages to zero over the sample. The second approach relied on a *stochastic frontier analysis* (SFA) in which Cabo Verde's tax mobilization was compared to the maximum achieved by with similar characteristics.

The peer analysis was based on a standard random-effect GLS regression with robust standard errors to choose independent variables and see how robust they are in explaining tax revenues. The first regression served as a starting point for the SFA. The SFA approach used the Battese and Coelli (1995) model in which inefficiency effects are time-varying.

Mathematically, the SFA panel model is written as follows:

$$Yit = \alpha + \beta Xit + Vit - Uit$$

*Y*it represents the tax-to-GDP ratio in country I at time t. *X*it is the matrix of independent variables. Vit is a random error term that reflects such random factors as trade or weather shocks. *U*it is the inefficiency term that capture the gap between actual tax collection and maximum revenue potential. It follows a non-negative truncated normal distribution.

Following the economic literature, the independent variables are (1) GDP per capita in PPP; (2) the contribution of agriculture to GDP; (3) trade openness as measured by the import-to-GDP ratio; (4) control of corruption; (5) enrolment in secondary education; (6) the old-age dependency ratio; (7) a financial deepening measure, broad money as a percent of GDP; and (8) a policy variable, such as the VAT rate, and dummy variables for small island countries and fuel exporters.

As for data sources, (1) Tax-to-GDP ratios are extracted from OECD statistics when available, IMF's *Government Finance Statistics*, and the ADB statistical database. (2) The study drew on the WDI database for enrollment in secondary education, GDP per capita in PPP, share of agriculture in GDP, old-age dependency ratios, and broad money. (3) VAT rates come from private tax consultants such as PwC, E&Y, KPMG, and Deloitte. (4) the World Governance Indicators database was used for institutional variables like control of corruption. The sample consisted of 160 countries in the period 2000 and 2016.

Table AB.2

	Average	Stochastic frontier
ln(GDP per capita)	4.732***	0.778
	(1.256)	(0.527)
Share agriculture in GDP	0.0197	-0.0776*
	(0.060)	(0.042)
Share imports to GDP	0.0814***	0.0843***
	(0.019)	(0.012)
Control of corruption	0.0639***	0.117***
	(0.018)	(0.010)
Small Island dummy	-2.113	-3.220***
	(1.726)	(0.701)
VAT rate	0.280**	0.605***
	(0.104)	(0.046)
Old age dependency ratio	0.0836	0.169***
	(0.1140)	(0.0423)
Fuel exporters dummy	0.119	3.677***
	(2.8640)	(0.7970)
Enrollment in secondary education	0.0212	0.0968***
	(0.027)	(0.016)
broad_money	0.00227	0.00908*
	(0.004)	(0.005)
Constant	-36.19***	-14.70**
	(10.920)	(5.171)
N	683	683
R-sq	66%	

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.001

Annex 7: Checklist

- ☐ Is there an overall need to introduce a presumptive tax system, or can taxpayers and tax administration be expected to ensure compliance with the (reformed) standard tax system?
- ☐ Which taxpayers should be subject to presumptive taxation? Should the system only apply to individuals, or should small corporate taxpayers benefit from presumptive taxation too?
- ☐ What should be the tax base of the system? Can turnover be used to determine presumptive tax liability?
- ☐ Are there sufficient data available to estimate business profit based on turnover?
- ☐ What safeguards can be introduced to reduce the risk of turnover under-declaration (e.g. obligation to use the banking system for transaction above a certain limit; receipt lotteries)?
- ☐ What kind of incentives can be introduced to promote record keeping?
- ☐ What should be the upper threshold of the system? Can it be coordinated with the VAT registration threshold?
- ☐ Which taxes should the presumptive system replace? Should it be operated in lieu of income tax only or should it replace a broader range of taxes?
- ☐ Should subnational taxes be replaced by the presumptive system too? What are the consequences for the fiscal federalism system?
- ☐ How should the tax burden be determined? Should there be different standard deductions from turnover for different groups of taxpayers (e.g. for trading businesses and for service businesses)?
- ☐ Should taxpayers have an option to be taxed under the standard system? If yes, are there rules limiting the possibility to move back to presumptive taxation?
- ☐ Are there possibilities to prove losses (subject to sufficient bookkeeping) and avoid a tax liability during loss-making periods?
- ☐ Should a simple patent be introduced for micro businesses above the subsistence level?

Source: Engelschalk, Michael. 2007. Designing a tax system for micro and small businesses: guide for practitioners (English). Washington, DC: World Bank

Annex 8: Spending Momentum

The analysis of spending momentum and force is based on the methodology of Merotto et al. (2015), who nicely show which categories are the most important components of public spending using the language of physics (science). The starting point of their analysis is the concept of momentum, which is equal to mass times velocity:

$$p=m*v.$$

Acceleration is defined as a change in velocity over time, so:

$$a=(v1-v0)/t.$$

Newton's second law tells us that the net force (F) of an object is equal to the rate of change of its linear momentum, so:

$$F=\partial p/\partial t=\partial mv/\partial t=m\ \partial v/\partial t.$$

Translating this into economics, mass is the share in total spending and the velocity is simply the growth rate. Unlike physics, in economics, the mass (share of expenditures in total) may change. Therefore, force must be redefined as:

$$F=m*((1+v)/(1+\bar{v}))*\partial v/\partial t,$$

where $\bar{v}$ is the average spending growth for the category as a whole.

The force of the specific item is then defined as the product of the following:

- The share of the item in the category as a whole;
- Its growth rate in relation to total spending; and
- Its acceleration (change in the growth rate).

This approach allows for a neat depiction of the impulses driving expenditures, the "forces" behind growth in expenditures.
Source: Merotto et al. (2015

Annex 9: The ten causes of death with large variations (1990-2016)

	Annual compound rates of growth
Measles	-16,7%
Tetanus	-11,2%
Sexually-transmitted diseases excluding HIV	-11,2%
Intestinal nematode infections	-10,7%
Protein-energy malnutrition	-10,2%
Diarrheal diseases	-9,7%
Iodine deficiency	-8,8%
Whooping cough	-8,6%
Other unspecified infectious diseases	-7,6%
Other nutritional deficiencies	-7,3%
HIV/AIDS	2,6%
Drug use disorders	2,6%
Eating disorders	2,8%
Diabetes mellitus	3,2%
Peripheral artery disease	3,5%
Colon and rectum cancer	3,6%
Chronic kidney disease	3,9%
Dengue	3,9%
Prostate cancer	4,4%
Malaria	5,0%