



Fiscal Space for Health in Suriname

Final Report

A. Lorena Prieto, PhD Senior Economist

Washington DC. December 2018

Contents

I. Ge	neral background	1
1.1	Objectives	4
1.	.1.1 General objective	4
1.	.1.2 Specific objectives	4
1.2	Structure	4
II. Ge	neral context	4
2.1	Population and social context	4
2.2	Macroeconomic overview	б
2.3	Health status context	б
2.4	Health sector overview	2
2.	.4.1 System Resources	4
2.	.4.2 Financing	5
2.	.4.3 Health policies	8
III.	Fiscal space conceptual framework, methods and data	0
3.1	Basic condition: Economic growth and stability	3
3.2	New revenues	4
3.	.2.1 Taxes	4
3.	.2.2 Social security contributions for health	5
3.3	Efficiency gains	5
3.4	Reprioritization of health expenditure	б
3.5	Foreign aid	7
3.6	Borrowing	7
3.7	Printing money	7
IV.	Fiscal space estimates and analysis3	8
4.1	Economic growth	8
4.2	New revenue	3
4.	2.1 Taxes 4 A. Direct taxes 4 B. Indirect taxes 5 C. Indirect taxes: sin taxes 5	9 0
	D. Tax expenditure	

4.	.2.2 Social security contributions for health	
4.3	Efficiency gains	59
4.4	Reprioritization of health expenditure	60
4.5	Donations	61
4.6	Borrowing	63
V. Co	nclusions and recommendations	

List of Figures

Figure 1: Suriname's population pyramid, 2000 and 2015	5
Figure 2: Evolution of the human development index, Suriname and selected countries, 1990-2017	5
Figure 3: Real GDP per capita (constant 2010 US\$), Suriname and selected countries, 2000-2016	7
Figure 4: GDP annual growth, Suriname and selected countries, 2000-2016	3
Figure 5: Real GDP annual growth projections (starting after 2016 and 2017), Suriname and selected countries, 2000-2022)
Figure 6: Personal remittances received as percentage of GDP, 2000-201610)
Figure 7: General government revenue, expenditure, gross debt and net lending/borrowing as percentage of GDP, Suriname, 2000-2022	L
Figure 8: General government revenue and expenditure as percentage of GDP, Suriname and selected countries, 2000-2022	2
Figure 9: General government gross debt as percentage of GDP, Suriname and selected countries, 2000-2016	3
Figure 10: Tax revenue as percentage of GDP, Suriname and selected countries, 2000-2016	3
Figure 11: Tax revenue as percentage of GDP, Suriname and selected countries, 2000-2016	1
Figure 12: Participation rate as percentage of population ages 15+, 2000-201715	5
Figure 13: Life expectancy at birth (in years) by sex, Suriname, 1995-2015	5
Figure 14: Neonatal, infant and children under 5 years of age per 1,000 live births and maternal mortality ratio per 100,000 live births, 1990-201618	3
Figure 15: Maternal mortality ratio per 100,000 live births, Suriname and selected countries, 1990-2015)
Figure 16: Pregnant women receiving prenatal care as percentage of total pregnant women, Suriname and selected countries, 2000-201420)
Figure 17: Births attended by skilled health staff as percentage of total births, Suriname and selected countries, 2000-201421	L
Figure 18: Distribution of causes of death (percentage of total), Suriname and selected countries, 2000 and 2015	2
Figure 19: Overview of payers, providers and beneficiaries of the health system, 201123	3
Figure 20: Suriname's health sector financing	1
Figure 21: THE per capita (int\$, PPP, constant 2011), Suriname and selected countries, 1995-2014	5

Figure 22:	Distribution of health expenditure by sources, 2000-2015
Figure 23:	General government health expenditure versus out-of-pocket health expenditure, Suriname and selected countries, 2000, 2005, 2010 and 2015
Figure 24:	GDP growth (1976-2016) and GDP per capita (int\$, PPP, constant 2011) (1990-2016)
Figure 25:	GGHE, GHE and SSHE (annual growth and as percentage of GDP), Suriname, 1996-2015
Figure 26:	Annual growth of GDP versus annual growth of GGHE, GHE, SSHE, Suriname, 2001-2015
Figure 27:	Public revenues as percentage of GDP, Suriname and selected countries, 2001-2016
Figure 28:	Revenue by source as percentage of total revenue, Suriname, 2001-201245
Figure 29:	Revenue by source as percentage of GDP, Suriname, 2001-201245
Figure 30:	Revenue by source as percentage of total revenue, Suriname, 2012-201646
Figure 31:	Tax revenues as percentage of GDP, Latin American and Caribbean countries and some aggregates, 2012
Figure 32:	Tax revenue as percentage of GDP, Suriname and selected countries, 2001-2016
Figure 33:	Tax revenue by direct/indirect tax as percentage of GDP, Suriname, 2001- 2012
Figure 34:	Direct tax revenue as percentage of GDP, 2001-2012
Figure 35:	Indirect tax revenue as percentage of GDP, 2001-2012
Figure 36:	Distribution of indirect tax revenue, 2001-2012
Figure 37:	Revenue from sin taxes as percentage of total revenue, 2012-2016
Figure 38:	Alcohol sales trends, 2005-2011
Figure 39:	Sources of revenue as percentage of revenue, Suriname and selected countries, 2012
Figure 40:	Social security health expenditure as percentage of total health expenditure, Latin American and Caribbean countries, 2013
Figure 41:	Compulsory Financing Arrangements (CFA) as % of Current Health Expenditure (CHE), Suriname and selected countries, 2000-2016
Figure 42:	Social Health Insurance (SHI) as % of Current Health Expenditure (CHE), Suriname and selected countries, 2000-2016
Figure 43:	General government health expenditure as percentage of government expenditure, Suriname and selected countries, 1995-201461

Figure 44: External resources for health as percentage of total health expenditure,	
Suriname and selected countries, 1995-2014	62
Figure 45: External health expenditure (EXT) as percentage of current health expenditure (CHE) and as percentage of GDP, Suriname, 2000-2016	

List of Tables

Table 1: Employment and unemployment rate, Suriname, 2006 and 2016	15
Table 2: Life expectancy at birth, Suriname and selected countries, 1995 and 2015	17
Table 3: Income elasticities of health expenditure, health expenditure as % of GDP, annual change in percentage points (pp), average annual and cumulative fiscal space	42
Table 4: Suriname's excise tax structure, 2015	
Table 5: Sources of fiscal space for Suriname and recommendations	65

I. General background¹

With the approval of the strategy for universal access to health and universal health coverage (Res. CD53/5, Rev. 2) in the 53rd Directing Council of the Pan American Health Organization (PAHO), the countries of the Americas Region committed to move forward towards universal health, adopting the right to health, equity, and solidarity, as core values. Through an integral approach, the strategy articulates the conditions that will allow countries to focus and assess their policies and measure progress around four simultaneous, interdependent strategic lines:

- 1. Expanding equitable access to comprehensive, quality, people- and communitycentered health services;
- 2. Strengthening stewardship and governance;
- 3. Increasing and improving financing with equity and efficiency, and advancing toward the elimination of direct payments that constitute a barrier to access at the point of service; and
- 4. Strengthening multisectoral coordination to address the social determinants of health that ensure the sustainability of universal coverage.

PAHO's Department of Health Systems and Services (HSS) provides technical cooperation within this framework for countries of the region. Always with the understanding that each country has the capacity to establish its own action plan, taking into account its social, economic, political, legal, historical, and cultural context, as well as current and future health challenges.

Several countries are working on the implementation of a road map for universal health. Within this effort, health financing is critical since a minimal level of resources should be allocated to the health sector. This effort should be reflected in a fiscal prioritization of health observed as an incremented weight of public health spending as a proportion of total public spending. The goal of public expenditure on health equivalent to 6% of GDP is mentioned in the third strategic line, as a useful benchmark in most cases. In this sense, PAHO has started

¹ This section is based on the Terms of Reference (TORs) of this consultancy.

a line of work on the topic of fiscal space for health in an attempt to analyze potential sources to increase public investment in health that could be considered as policy options to sustain achievements in the direction of Universal health, including priority programs.

According to the World Bank classification of countries, Suriname is an upper-middle income country with a current per capita GDP of (current) (current international dollars)² that grew an average of 4.3 percent a year in the decade of 2004-2014. As many countries of the Americas, with the end of the commodity boom the country started to experience economic difficulties showing a GDP fall of 2.7% and 10.4% in 2015 and 2016, respectively. These figures place Suriname as one of the worst performing countries in the Region, even in a context of economic slowdown also shown by other countries. In terms of health expenditure, the latest official data available show a total health expenditure of 5.7% of GDP and a public expenditure in health of 2.9% of GDP, both well below the average of the Region (7.4% and 4.2% respectively).

A useful way to decompose the indicator of public expenditure in health as a percentage of GDP is expressing it as the product of two factors:

- 1. Total Fiscal Capacity, expressed as total public expenditure as a percentage of GDP
- 2. Fiscal Priority to health, expressed as public expenditure in health as a percentage of total public expenditure

Suriname shows a total fiscal capacity of 24.8% of GDP, with a fiscal priority for health of 11.8%. In the case of the second indicator, the country again is below the average of the Region (13.6%) without even reaching an international benchmark of 15% set as a target for African countries in the Abuja Declaration of 2001^3 .

As mentioned in PAHO's strategy for Universal Health it is imperative to "Increase and optimize public financing for health in an appropriate, efficient, sustainable, and fiscally responsible manner in order to expand access, reduce health inequities, increase financial protection, and implement efficient interventions". Also, a public expenditure on health

Source: World Bank, World Development Indicators available on-line at: http://databank.worldbank.org/data/reports.aspx?source=2&country=SUR (accessed August 14, 2017). For more information the Abuja declaration refer on to: http://www.who.int/healthsystems/publications/abuja report aug 2011.pdf?ua=1

equivalent to 6% of GDP is a useful benchmark in most cases and is a necessary –though not sufficient– condition to reduce inequities and increase financial protection within the framework of universal access to health and universal health coverage. Current times in Suriname are proving challenging for the government to advance in this direction, highlighting the need to assess potential sources of funds for the health sector, taking into consideration Suriname's context.

Suriname has gone through important policy reforms in the last years to advance in the direction of Universal Health. In 2014 the Basic Health Care Insurance Act came into effect with the aim of providing health insurance coverage for the population and intended to improve access to services across all levels of care. In 2016, due to financial difficulties shown by private insurance companies that managed part of the insurance scheme, the management of this entire public scheme was transferred to the State Health Insurance Foundation (SZF), currently covering around 75% of the population⁴.

The country's health sector is undergoing several financial challenges that were mentioned by various health providers during several PAHO missions to the country: Hospitals, The Regional Health Services (RGD), the Medical Mission and the public insurer, SZF. The need for an increased allocation of resources to the health sector was also mentioned by representatives of the Ministry of Health, but in the agreement that this must be accompanied by a change in the model of care and in the organization of health services. As a result, informing decision makers on potential options for increasing public funding for health appears timely.

The present study aims at conducting an assessment of fiscal space for health in the country, understanding fiscal space as "the availability of resources to finance an increase in public spending without compromising the sustainability of the government's financial position or the stability of the economy" (Heller, 2005a). The ultimate goal of the study is to inform decision makers on the issue and to serve as an input in the dialogue between different actors, specially between the Ministries of Health and Finance, on the need to increase and improve financing with equity and efficiency.

⁴ Data provided by qualified informants during several PAHO missions.

1.1 Objectives

1.1.1 General objective

The main objective is to identify the possible sources of additional financial resources for the government to allocate to health.

1.1.2 Specific objectives

The specific objectives are the following:

- Describe the methods to estimate fiscal space;
- Develop a method for the political viability analysis for each fiscal space source;
- Identify information requirements;
- Identify key players for the political viability analysis;
- Estimate fiscal space for each source based on the available information;
- Assess the political viability of each source; and
- Discuss results and present recommendations.

1.2 Structure

II. General context

2.1 Population and social context

In 2015 Surinam had population of 553,204, where 49.8% are women (Figure 1). Its population is also ethnically diverse, with the distribution of the main ethnic groups being: *Hindostani* (27%); *Maroon* (22%); *Creole* (16%); *Javanese* (13%); and *Mixed* (13%). In addition, indigenous *Amerindian*, most of whom live in the hinterland and hold much historical, environmental and cultural significance for the country, comprise about 4% of the population.

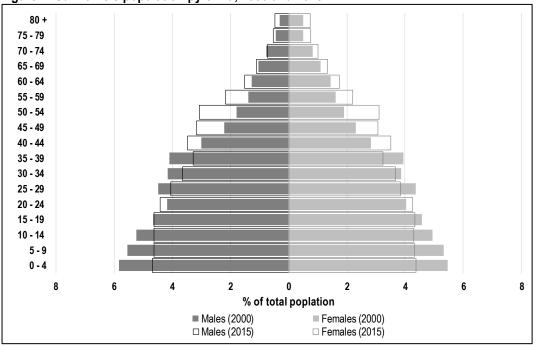


Figure 1: Suriname's population pyramid, 2000 and 2015

Source: United Nations Population Division (2017).

Surinam has ten administrative districts, but its population is concentrated in the two urban districts of *Paramaribo* and *Wanica* (66%). The remaining 34% is distributed among the six coastal rural and the two hinterland districts. The hinterland districts of *Brokopondo* and *Sipaliwini*, which comprise mainly Amerindian and Maroon villages, account for only 10% of the country's population. The skewed population distribution is related to significant disparities in living conditions among the urban, rural and hinterland areas."

According to World Bank (2018) the poverty headcount ratio at \$1.90 a day (2011 PPP) was 23.4% of population in 1999 (latest year available), and 42.8% at \$3.20 a day (2011 PPP). There is no official poverty data for Suriname. Suriname's Human Development Index (HDI) has persistently improved since 2004 (Figure 2), with a drop in 2009 the year of the international financial crisis. In 2017, Suriname's HDI was 0.720, slightly below Jamaica (0.732) (Figure 2). In that year it was ranked 100th country out of 189 countries.

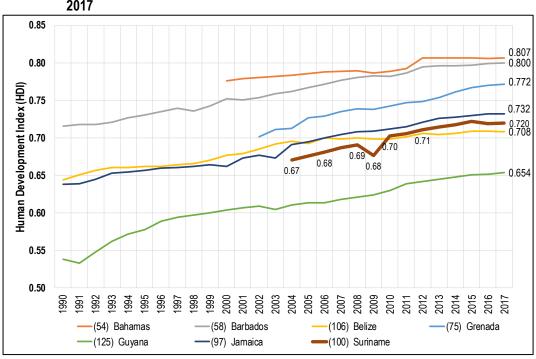


Figure 2: Evolution of the human development index, Suriname and selected countries, 1990-2017

Source: UNDP (2018).

2.2 Macroeconomic overview

The world economy grew at a 3.0% rate in 2017, in comparison to the 2.4% rate in 2016 (United Nations, 2018). Latin America and the Caribbean (LAC) grew at a 1.0% rate in 2017 but is projected to grow at 2.0% and 2.5% in 2018 and 2019. But English-speaking Caribbean economies do not fare as well. Countries like Suriname and Trinidad and Tobago (commodity exporters) continue to contract, especially if China's economy slows down.

United Nations (2018) projects that Caribbean countries will grow at a 1.8 and 2.0 rate in 2018 and 2019. But Suriname's projections are at 0.8% for 2018 and 2.2% in 2019.

According to Suriname Planning Bureau Foundation (2017) Suriname's economic growth between 2012-2016 was mostly determined by prices of key commodities, especially gold and oil. Suriname depends heavily on the mining sector (Caribbean Development Bank, 2014), where gold is the largest export product. Hence, when the world prices for gold and oil fell in 2015 and 2016, this reduced government's income drastically, followed by domestic consumption and public investments.

The public sector employs about 50% of the labor force, followed by agriculture with 11% (Caribbean Development Bank, 2014).

Figure 3 shows real GDP per capita of Suriname, and six selected countries. The countries for comparison were selected based on their region and the GDP per capita in 2016. Three have higher GDP per capita, and three have lower. The Bahamas, although has the highest GDP per capita it shows a permanent decreasing trend since 2002 with a significant drop after the international financial crisis. The rest of the countries show an increasing trend, including Suriname, except after 2014, its starts to fall.

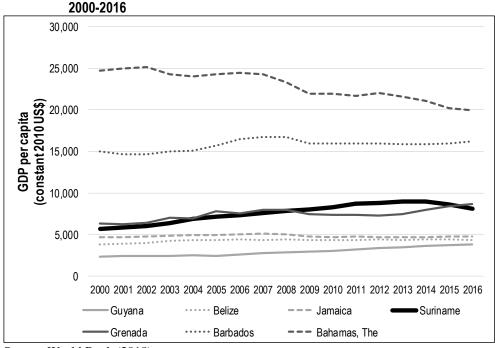


Figure 3: Real GDP per capita (constant 2010 US\$), Suriname and selected countries,

Figure 4 shows the annual growth rate. Suriname growth rate becomes negative (economic contraction) in 2014 and continues to drop until 2016, unlike any other of the countries considered.

Source: World Bank (2018).

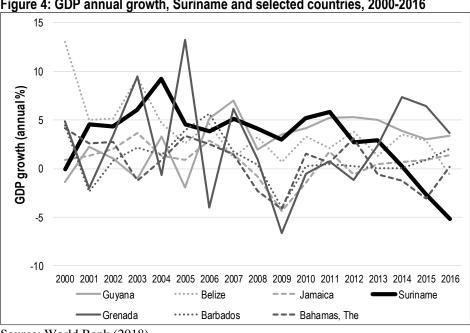


Figure 4: GDP annual growth, Suriname and selected countries, 2000-2016

According to IMF-WEO (2018) Suriname's lowest growth rate should be in 2016, and become positive starting 2017 (Figure 5). According to the Suriname Planning Bureau Foundation (2017) in 2017 Suriname grows by 0.9%, followed by 2.2% in 2018 and 1.2% in 2019, 1.4% in 2020, and 2.2% in 2021.

Source: World Bank (2018).

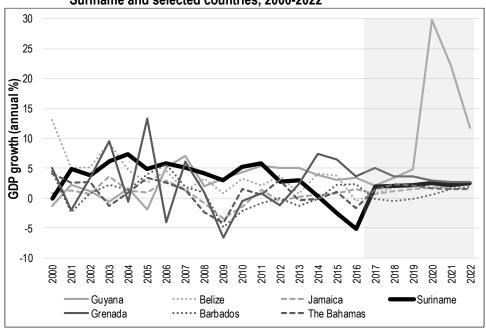


Figure 5: Real GDP annual growth projections (starting after 2016 and 2017), Suriname and selected countries, 2000-2022

The inflation rate reached 55.5% in 2016 then dropped to 22.3 in 2017 after a period f 4.3% between 2012-2015. According to IMF (2017) the loss in public revenue was due to the decision to freeze fuel pump prices and subsidize electricity prices. Local currency assets left the country, depreciating the currency. Oof (2016) warned that for Suriname to return to a sustained path for economic growth and development it needed a health macroeconomic policy with price stability.

There is limited information regarding the immigration profile of Suriname (IOM, 2015). In the 2015 report, in the period 2003-2012 the Central Bureau for Citizens Affairs of Suriname reported 4,571 people had emigrated, while the Central Bureau of Statistics of the Netherlands register 23,926 Surinamese immigrants. The top three countries where Surinamese choose to migrate are the Netherlands, France and the US.

Unlike other countries in the region, Suriname does not seem to depend on remittances according to data from the World Bank (Figure 6). Other sources estimated that

Note: Projections start after 2016 for Belize, Jamaica, Suriname, and The Bahamas; and they start after 2017 for Guyana, Grenada and Barbados. Source: IMF-WEO (2018).

approximately 85% of remittances come from the Netherlands, and estimates for 2011 were of USD 114 million, and in 2013 USD 113 million (IOM, 2015).

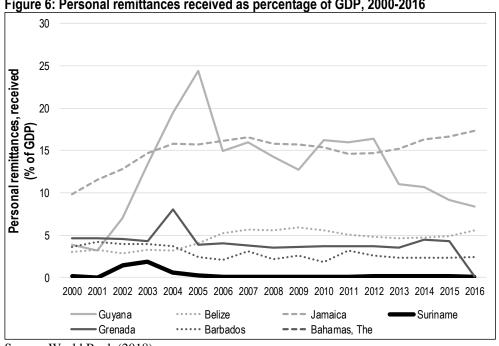
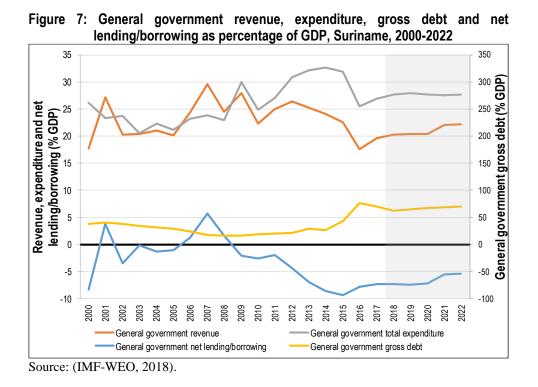


Figure 6: Personal remittances received as percentage of GDP, 2000-2016

There is limited public deficit (net lending/borrowing as percentage of GDP), or at least it is only available until 2012 (Figure 5). By 2015, the public deficit reached almost -10% of GDP, but the trend shows improvements starting as early as 2016.

Source: World Bank (2018).



In 2015, Suriname suffered the consequences of the drop in the prices of its key exports (gold and oil) and the closure of the alumina production in late 2015 (IMF, 2016), which translated into a hard drop in the government's revenues and expenditures (Figure 8). Despite these challenges, the opening of a new oil refinery and a new gold mine are considered in IMF estimates that will have a positive effect in the tax revenues, starting 2017.

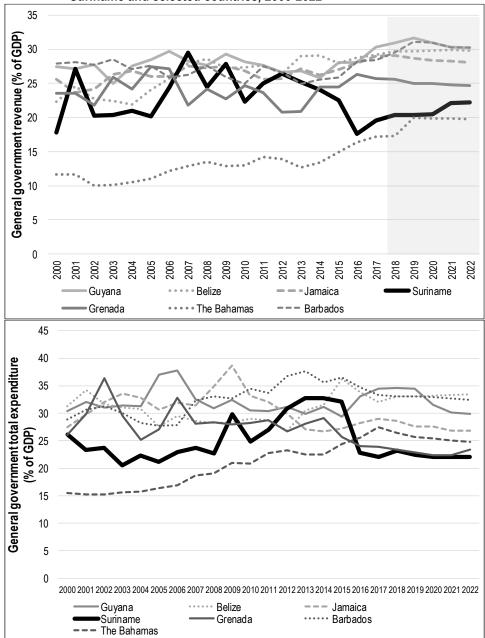


Figure 8: General government revenue and expenditure as percentage of GDP, Suriname and selected countries, 2000-2022

Note: Projections start after 2017. Source: IMF-WEO (2018).

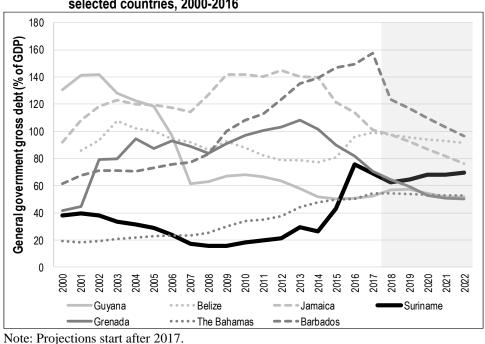


Figure 9: General government gross debt as percentage of GDP, Suriname and selected countries, 2000-2016

Note: Projections start after 201 Source: IMF-WEO (2018)

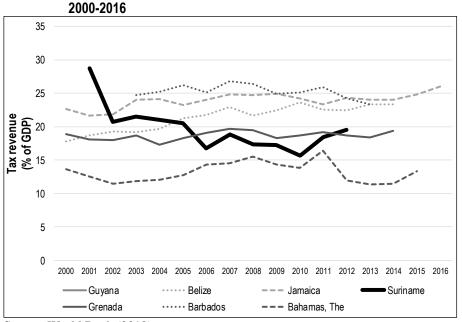


Figure 10: Tax revenue as percentage of GDP, Suriname and selected countries, 2000-2016

Source: World Bank (2018).

The economic context also translated into the employment numbers. In the last years, employability dropped from 50.6% in 2012 to 49.6% in 2017 (with IMF estimates for 2017). During this same period, the unemployment rate rose.

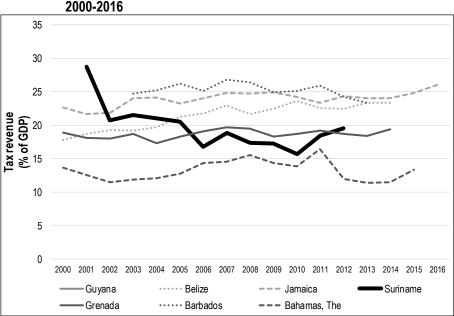


Figure 11: Tax revenue as percentage of GDP, Suriname and selected countries, 2000-2016

Suriname's labor force participation rate is the lowest among the selected countries. Its distributions is with 69.3% in services, 19.5% in industry and 11.2% in agriculture (IMF, 2014b).

According to IMF (2014b) Suriname may come from high dependence for growth of the extractive sector. The formal extractive sector is capital intensive and with moderate impact on job creation. However, the increase in the price of gold in recent years may have contributed to higher informal employment in the gold-mining sector and lower official labor force participation. Nonetheless, uncertain prices of Suriname's export commodities weigh on the employment outlook in the extractive sector. Labor-intensive sectors such as services, agriculture, and construction together with government account for the bulk of employment. However, growth has slowed in the agriculture sector, which is confronted with increased competition from other Latin American countries, and there are limits to increasing government employment.

Source: World Bank (2018).

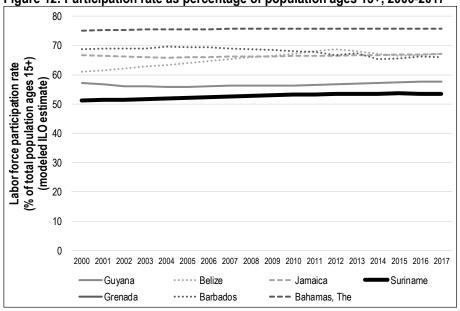


Figure 12: Participation rate as percentage of population ages 15+, 2000-2017

Year	Employment as a share of population aged 15 years and above		Unemployment rate	
	%	Annual % change	%	Annual % change
2006	49.3		12.3	
2007	49.2	-0.2	10.7	-13.0
2008	45.5	-7.5	9.4	-12.1
2009	48.8	7.3	8.7	-7.4
2010	49.7	1.8	7.6	-12.6
2011	50.1	0.8	8.0	5.3
2012	50.6	1.0	8.0	0.0
2013	51.5	1.8	6.0	-25.0
2014	50.4	-2.1	7.0	16.7
2015	50.3	-0.2	8.3	18.6
2016	49.8	-1.0	11.0	32.5
2017	49.6	-0.4	9.1	-17.3

Table 1: Employment and unemployment rate, Suriname, 2006 and 2016

Source: IMF

2.3 Health status context

Life expectancy at birth reached 71.3 years in 2015 (Figure 13), comparatively low (Table 2). Life expectancy rose more rapidly after the year 2000 for both sexes. This is part of the demographic change Suriname is already experiencing.

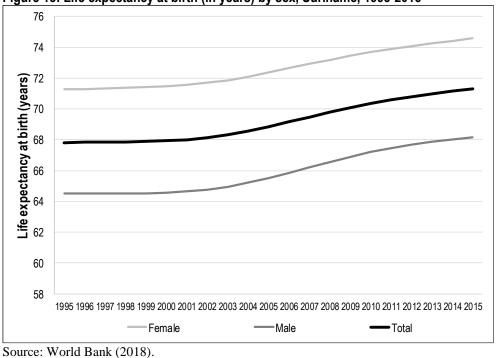


Figure 13: Life expectancy at birth (in years) by sex, Suriname, 1995-2015

Table 2 compares Suriname's life expectancy with that of selected countries for two years, 1995 and 2015. Although Suriname's GDP per capita lies in the middle of the other countries, it had a lower life expectancy than Belize and Jamaica in 1995 and remains below Jamaica's life expectancy in 2015.

Country	1995	2015	Change in years
Guyana	64.1	66.5	2.4
Belize	69.6	70.3	0.7
Jamaica	71.9	75.8	3.9
Suriname	67.8	71.3	3.5
Grenada	69.3	73.5	4.2
Barbados	72.3	75.6	3.4
Bahamas, The	71.3	75.4	4.1

 Table 2: Life expectancy at birth, Suriname and selected countries, 1995 and 2015

In the PAHO (2016) the burden of disease measured by number of disability adjusted lifeyears (DALYs) in 2010 was 168,200, where 58% was from non-communicable diseases, followed by 27% of communicable, maternal, neonatal, and nutritional disorders, and 15% from injuries. The risk factors identified were dietary risks, high blood pressure and high body-mass index.

Following the efforts around the world to reach the Millennium Development Goals in 2015, Suriname was able to lower the mortality rates associated with children (neonatal, infant and under five years of age) between 1990 and 2015 (Figure 14). The same cannot be said about the maternal mortality ratio (MMR) that rose between 1990 and 2002 from 127 to 271 deaths per 100,000 live births, respectively. Although after 2002 the MMR started decreasing, until 2015 it still remained above the 1990 rate.

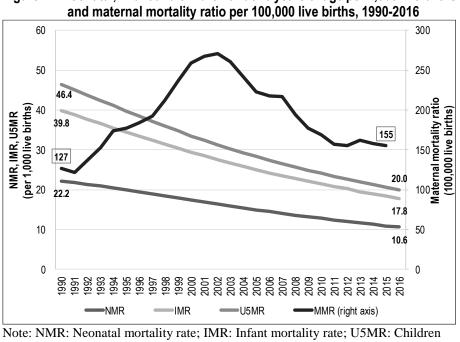


Figure 14: Neonatal, infant and children under 5 years of age per 1,000 live births

Figure 15 compares Suriname's the maternal mortality ratio with those of selected countries. Suriname only performs better in this indicator when compared to Guyana, which has a much lower GDP per capita.

under 5 years of age; MMR: Maternal mortality ratio Source: World Bank (2018).

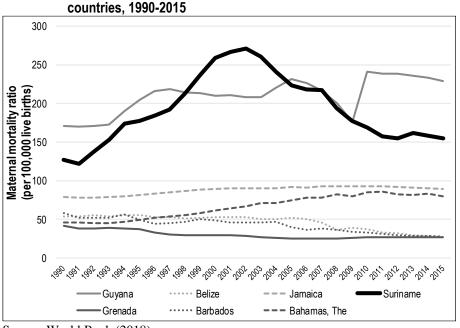


Figure 15: Maternal mortality ratio per 100,000 live births, Suriname and selected countries, 1990-2015

But, when analyzing access to prenatal care (Figure 16), Suriname reaches over 90% of pregnant women, which should not be considered a low coverage level. Regardless, compared to the selected countries, Suriname should aim at expanding access to prenatal care which is associated with lower maternal mortality.

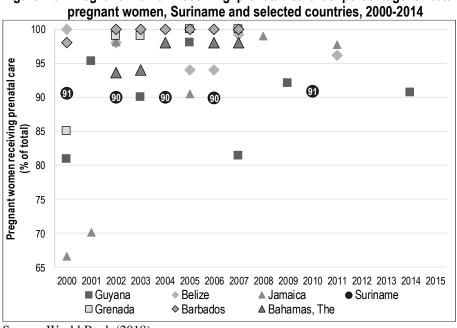


Figure 16: Pregnant women receiving prenatal care as percentage of total

In fact, Figure 17 shows that although coverage of births attended by skilled health staff in Suriname also reaches 90% of total births but remains well below the other countries in the region.

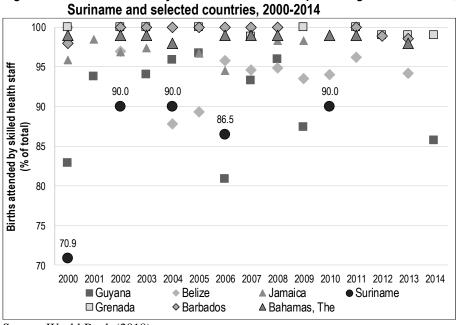


Figure 17: Births attended by skilled health staff as percentage of total births,

Like the other countries in the region, Suriname is facing the epidemiological change of a rising participation of non-communicable diseases as cause of death (Figure 18). In 2015, non-communicable diseases represented three-quarters of the deaths, similar to The Bahamas.

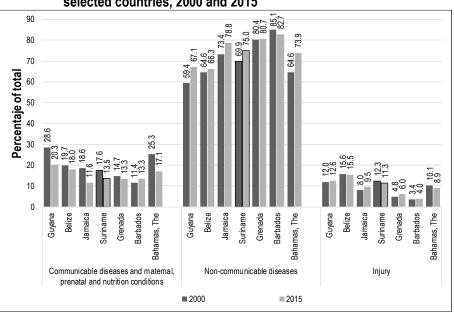


Figure 18: Distribution of causes of death (percentage of total), Suriname and selected countries, 2000 and 2015

2.4 Health sector overview

Larye, Goede, and Barten (2015) a review of the Surinamese health sector. Some of the key points are that the individuals' right to health is clear in the constitution. The Ministry of Health (MoH) leads the state's effort to protect the public health. As such, the primary tasks of the MoH include: 1) management of human and material resources, including pharmaceuticals and other medical supplies; 2) supervision of health institutions; 3) oversight of medical practice; and 4) monitoring compliance with legislation related to the environment and human health (Larye et al., 2015).

In their description (Larye et al., 2015), the MoH, through the Bureau of Public Health (BOG, per its name in Dutch) delivers and coordinates population-based programs for prevention and treatment of specific diseases. It also promotes the well-being of communities. On the other hand, the Regional Health Service (RDG, per its name in Dutch) provides preventative and health care at publicly funded clinics. RGD polyclinics offer a wide range of outpatient services, including diagnostics. Access to these polyclinics includes coastal population, poor and "near-poor" identified by the Ministry of Social Affairs (MSA).

The more urbanized areas in the coastal regions, the general practitioners (GPs) operate private clinics. Service payment at these providers are from private insurance or out-of-pocket payments. In the more rural areas in the interior regional, Medical Missions (MZ, per its name in Dutch) are non-governmental organization (NGOs) provide primary health care services.

Figure 19 shows an overview of the health system as discussed with experts in 2011 (Giovanella, Feo, Faria, & Tobar, 2012; MOH, 2011). The Ministry of Finance collects taxes, allocates budgetary resources to the MOH and it also managed SZF's contributions.

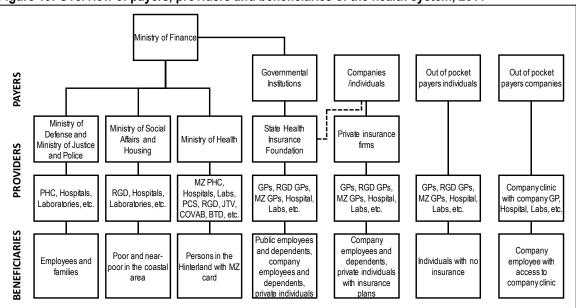


Figure 19: Overview of payers, providers and beneficiaries of the health system, 2011

Note: The dashed line represents the option of individuals to get health insurance coverage from SZF. For further details, see the sources below. Source: Giovanella et al. (2012); MOH (2011)

In November 2017, after the implementation of the 2014, Suriname's health sector financing changed to what is shown in Figure 20. SZF became a single fund for the Surinamese population. Although, the financing still comes from different subsectors.

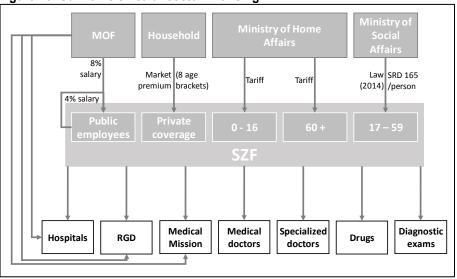


Figure 20: Suriname's health sector financing

Source: Author based on interviews in Suriname.

2.4.1 System Resources

In the case of health workers, according to the World Health Organization (WHO), a country requires a minimum of 10 physicians per 10,000 inhabitants and 25 health workers (physicians, nurses and obstetricians) per 10,000 inhabitants. In Suriname, the ratio was about 8 physicians in 2004. In the case of health workers, the ratio was 61 per 10,000 inhabitants in 2004. Yet, in the last years the government has subsidized the education of physicians that work in the public sector. Despite this effort, health workers are mainly concentrated in the coastal urban areas, particularly in Paramaribo.

According to PAHO (2017):

"It has been the policy of successive governments to scale up the number of health workers to address shortages. Concrete measures in training and education are under way. Between 2013 and 2015, enrollment doubled in the Medical Faculty of the Anton de Kom University of Suriname (29). In 2013, the Ministry of Health approved the development of a residency training program in family medicine and a revolving fund was established to support residents to continue their training abroad (mainly in the Netherlands). The Central Institute for Training in Nursing and Allied Professions (COVAB) (30) has increased specialized training for geriatric, diabetes, and dialysis nursing. Accredited courses for doctors, nurses, and other health professionals have been provided by the Foundation for Continuing Education of Medical Professionals (SPAOGS) for the past 10 years (31). In 2013, the Scientific Research Center of the Academic Hospital Paramaribo was established to improve research capacity among health workers (32)."

In terms of health infrastructure, according to MOH (2011) the installed capacity in 2011 was:

- 56 MZ primary health clinics and health posts
- 43 RGD Health Care Facilities
- 146 private clinics
- 5 hospitals 2 private and 3 public and 1 Psychiatric Hospital
- 40 dental units located in 26 of the RGD clinics
- 3 private medical laboratories and one medical laboratory in every hospital
- 10 retirement homes and two small nursing homes

The National Plan (MOH, 2011) also new investments in infrastructure. PAHO (2017) reports the same 43 PHC clinics in the coastal area (RGD Health Care Facilities) and 56 MZ clinics.

2.4.2 Financing

The total health expenditure (THE) in Suriname is below The Bahamas and Barbados, but higher than the other selected countries. THE is important to the extent it is an indicator of the investment on health which is in turn associated with the well-being of the population and economic growth (Hernández & Poulliler, 2007).

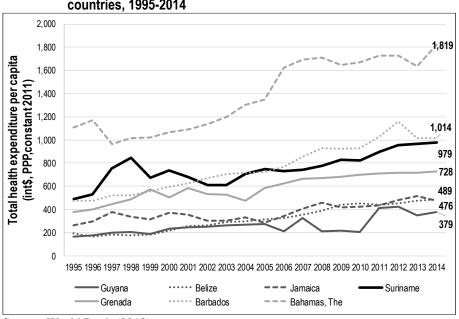


Figure 21: THE per capita (int\$, PPP, constant 2011), Suriname and selected countries, 1995-2014

Suriname is classified as a high-middle income country and its THE as a percentage of GDP was 5.7% in 2014, and as shown in Figure 21, its per capita health expenditure is at int\$ 979. The distribution of health spending shows that 36.6% of the expenditure is made by the government, 15% is social security expenses, 12% is out-of-pocket (OOP) expenses and 36.4% is other private expenses (expense in insurance premiums). The health insurance of the population is the mechanism that predominates in the financing of health, which generates low out-of-pocket spending of households and effective financial protection.

According to the National Health Accounts 2006, health expenditure was focused on curative care while the first level of care received the lowest allocation of monies: hospitals 35.0%, followed by private general practitioners with 12.6%, pharmaceuticals 11.5%, medical specialists 9.2%, laboratory services 4.8%, dentists 3.9% and the RGD 3.3% (MOH, 2011).

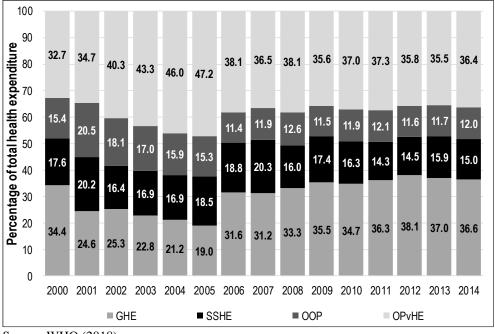


Figure 22: Distribution of health expenditure by sources, 2000-2015

Source: WHO (2018).

Comparing to the selected countries, Suriname has managed to maintain an OOP below 20% of total health expenditure with high private insurance and public spending that finances SZF for the "the poor and near-poor". According to Kromodihardjo (2018) SZF covered 151,891 in 2015 (29% of the population) and in 2018 it reached 351,870 (64% of the population).

Public spending is essential to improve equity. Low-income people would be able to allocate their resources to other basic needs instead of spending on health. If the financing is insufficient and the benefits package does not cover all the basic health needs, inequities towards the most disadvantaged will prevail.

Figure 23 shows the combination of OOP expenditure and general government health expenditure (GGHE) for Suriname and selected countries in four years. Considering that when OOP as percentage of THE rises above 20% the risk of incurring catastrophic health expenditures rises (Xu et al., 2010), it is a policy goal to reduce the participation of OOP in THE. On the other hand, according to Xu et al. (2010), the countries that had reached universal health coverage had at least a GGHE of 5-6% of GDP. Therefore, health financing policies should move towards the lower right quadrant (OOP<20% of THE and GGHE>6% of GDP).

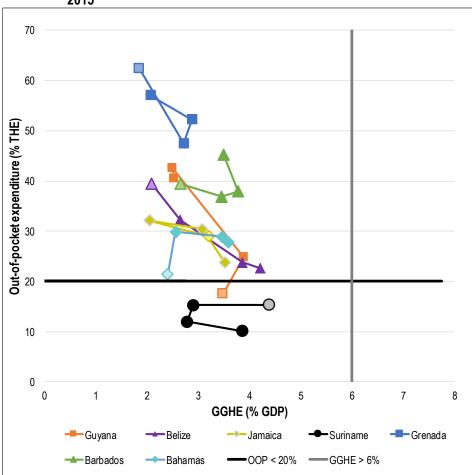


Figure 23: General government health expenditure versus out-of-pocket health expenditure, Suriname and selected countries, 2000, 2005, 2010 and 2015

Note: The year 2000 is represented as a lighter color of the series. Source: WHO (2018).

The selected countries have an OOP expenditure above the desired level, and a GGHE below the desired level in all four years. From the year 2000 to 2015 most try to move towards lowering OOP and raising GGHE, the figure clearly shows the challenges. Suriname, on the other hand, stands out as always have an OOP below 20% of THE. Although in 2005 and 2010 GGHE dropped it increased in 2015, but not to the level of the year 2000.

2.4.3 Health policies

The National Health Sector Plan (NHSP) 2011-2018 (MOH, 2011) addresses three strategic areas of intervention: i) prevention and reduction of the burden of non-communicable diseases, communicable diseases, mental diseases, and health over the life course; ii) for

health systems and services delivery prioritize leadership, stewardship and governance, health financing, human resources for health, health services, improving ha health information systems, and pharmaceutical and new technologies; iii) for determinants of health emphasis on environmental and occupational health, social and economic determinants of health, and emergencies and disasters.

In the case of health financing it states "Health financing policy requires decisions on how to raise funds, how to pool them, and how to use them equitably and efficiently." (MOH, 2011). The NHSP 2011-2018 called for assessments to increase resources but at the same time it acknowledges the need to make decisions about service priorities including service realignments and moving resources to where they will do the most good.

A milestone in health policy was the passing of the Basic Health Insurance Law in 2014. According to PAHO (2017) this law ensures that "every resident has "access to basic health insurance." According to the Law, the government subsidizes children under 16, those over age 60, and pregnant women (ILO, 2014). Employees pay up to 50% of the premium and employers cover the other half; the government pays the coverage of those unable to pay. The basic health care package includes access to primary health care services, secondary care, and a defined package of tertiary services (e.g., oncology, renal dialysis, cardiology, and surgery). The law sets payment caps for specialized services such as renal dialysis, MRI, cancer medication, etc. This limits accessibility to the full treatment course for some diseases, forcing patients and their families to spend considerable amounts of money to initiate or continue lifesaving treatments (PAHO, 2017).

The social security system underwent an important reform in 2014. The transformation of SZF implied a social insurance model that overlaps with what used to be the Ministry of Social Affairs (MSA) public health insurance.

In 2016, WHO and the government of Suriname set as a key policy:

"Health system's organization and management - may cause the system to perform below its potential for reducing health inequities due to e.g.: fragmentation, weak administrative and managerial capacity. *Proposed policy options include*: Enhanced and coherent coordination of the different subsystems of the national health system; enhanced evidence-based managerial effectiveness towards health inequity reduction goals; enforcing Primary Health Care (PHC), including intersectoral action, referral system, telemedicine and the integration of preventive services."

The concern to improve equitable access of the population to health is on the agenda of the country and the health financing policy is consistent with this purpose. The need to achieve greater efficiency in the system and in general to achieve the right to health is highlighted.

III. Fiscal space conceptual framework, methods and data

Heller (2006) provides this definition of fiscal space:

"the capacity of government to provide additional budgetary resources for a desired purpose without any prejudice to the sustainability of its financial position".

This definition highlights two key issues: first, fiscal space means *additional* resources, which means new resources; second, fiscal space has an upper bound defined by the financial sustainability of those resources in time.

Tandon and Cashin (2010) provide the following definition of fiscal space for health:

"the ability of governments to increase spending for the sector without jeopardizing the government's long-term solvency or crowding out expenditure in other sectors needed to achieve other development objectives."

When analyzing and estimating fiscal space, it is important to understand all the components of health expenditure and of public health expenditure. For example, total health expenditure (THE) includes both private and public spending. We breakdown these components below.

Private health expenditure (PvHE) includes out-of-pocket health expenditure (OOP) and other private spending. OOP is what households spend when they receive care.⁵ This includes physician's fees, hospital fees, drugs purchased, etc. In case there is some health insurance coverage, OOP should be net of any reimbursements. OOP is the most inefficient and inequitable way of spending for health. Demand for health care, or health service seeking behavior, should be based on need for care and not on the household's ability to pay. To the

⁵ See Xu (2005) for a more detailed explanation.

extent people hold back their demand for care, the health problem could get worse and later require more or more expensive services. From the equity point of view, if demand depends on the household's ability to pay, higher income households will demand and receive more care than lower income households, making it inequitable.

Public health expenditure or general government health expenditure (GGHE) includes: social security health expenditure (SSHE) and government health expenditure (GHE). SSHE resources come from mandatory contributions that are linked to formal workers, while GHE resources come from general taxes. So, in this context, general government includes the public institution that manages social security contributions for health. These resources may only be used for it social security beneficiaries. In some circumstances social security funds may also be complemented with public resources (from general taxation).

Tandon and Cashin (2010) present their fiscal space analysis based on the government's intertemporal budget constraint. The left-hand side represents the use of public resources in all sectors, while the right-hand side represents the sources of public resources. The equation is:

$$G_t + r_t B_{t-1} = T_t + B_t + A_t + O_t$$

Where:

 G_t : government non-interest spending in period t: $r_t B_{t-1}$: non-discretionary debt interest payments T_t : taxes, fees and other public income including seigniorage B_t : government borrowing (net of use of deposits) A_t : external aid

 O_t : other sources (e.g. sale of assets)

They also consider the fact that within the public sector, the health sector also faces another constraint set by the government's priorities. The priority for health can be expressed as:

$$H_t^{Gov} = k_t G_t$$

Where,

 H_t^{Gov} :government health spending

 k_t :proportion of overall government budget

The government's priority for health is represented by k_t . An important issue is that k_t can either be fixed or vary. An analysis of overall government's fiscal space implies changes in G_t ; while an analysis of reprioritization implies changes in k_t .

Social security health expenditure could be represented as:

$$H_t^{SS} = C_t$$

Where,

 H_t^{SS} : social security health spending

C_t: contributions to social security

The formulas above provide a general framework for fiscal space analysis.

Heller (2005b, 2006) describes six sources for fiscal space: 1) reprioritization of health sector spending; 2) efficiency gains; 3) raising revenue; 4) borrowing (from internal and foreign sources); 5) foreign aid; y 6) monetary expansion (seigniorage or inflation).

Heller (2006) discusses limitations or key considerations associated with these sources. For example, increasing foreign debt or foreign aid could have a negative macroeconomic impact through the exchange rate.⁶ This is an example of how the analysis of each source must include the possible impacts it may have on other areas.

Another key issue Heller (2006) emphasizes is that the creation of fiscal space must be analyzed within a financial sustainability framework. The very definition of fiscal space is subject to not compromising financial sustainability. Financial sustainability implies the ability of the government to finance its programs and to comply with debt payments in the future. This means that the creation of fiscal space must consider the following:

⁶ An inflow of foreign resources increases the supply of foreign currency which con decrease the Exchange rate making Suriname's exports more expensive, imports cheaper, resulting in a negative impact on Surinam's trade account. This in turn has a negative impact on the aggregate demand and a slowdown in the economy. If the new resources are partially spent on imports this could decrease the impact on the exchange rate.

- 1) A rise in expenditure in the short and long run must be financed with revenues in the short and long run;
- 2) The analysis of the programs that require financing must include the implications in the medium term; and
- The medium-term analysis must consider the government's priorities in the medium term.

Hence, a complete fiscal space analysis must include:

- 1) The program that requires financing is a one-time expenditure. For example, training of human resources in the public sector could be a one-time only commitment.
- The program does imply new expenditure commitments in the future. For example, building a hospital commits the government to later finance the necessary equipment, personnel, and maintenance.
- 3) The program has impacts on other sectors. For example, financing a raise in salaries of health sector personnel (physicians, nurses and others) could put pressure on the government to raise salaries in other sector, i.e., education (teachers).

In what follows, we discuss the basic condition for fiscal space, i.e., economic growth and stability, followed by a conceptual framework for each of the main space sources.

3.1 Basic condition: Economic growth and stability

Economic growth is a necessary (but not sufficient) condition for the creation of fiscal space (FS) (Heller, 2005a, 2005b, 2006). Macroeconomic policy should aim at achieving economic growth and stability. International organizations, like the International Monetary Fund (IMF), work with countries to define basic conditions to reach these goals. Lack of compliance with these types of commitments could affect the flow of foreign aid and loans (Heller, 2006).

In some studies, economic growth was considered as a source of fiscal space. In this analysis, we consider economic growth as a basic necessary condition, because it is an endogenous variable of the economy on health expenditure, this means it is not a specific policy to create fiscal space. Also, growth itself does not generate more resources, it must also be stable in time.

Although GHE as a percentage of GDP could rise whether GDP rises or not, Heller (2006) limits the creation of fiscal space to the economic sustainability and stability. This is equivalent to assuming a sound economic situation. Hence, growth does not need to be extraordinary, only stable (Durán-Valverde & Pacheco, 2012).

We measure the relationship between a sustained growth in GDP and GHE using the expenditure-revenue (measured as GDP) elasticity using the equation:

$$E = \frac{\Delta\% GHE}{\Delta\% GDP}$$

If the elasticity is greater than one implies an increase in GHE, values less than one implies a decrease in the GHE as percentage of GDP. When the elasticity is equal to one, the changes in GHE follow the changes in GDP, i.e., k_t is constant, and hence GHE as percentage to GDP stays the same. So, if GDP increases by 5%, GHE also increases by 5%.

We use the World Bank (2018) series to compute the expenditure-revenue elasticity of GHE. The GDP series is available for the period 1960-2015. Although generally it is preferable to use the same source for the projection, the WB does not provide GDP projections. We use IMF's GDP projections which are available until 2022 (IMF-WEO, 2018).

3.2 New revenues

Fiscal space generated from new revenues refers to the changes in policies that generate revenues by sector. In the case of GHE, it refers to the revenues the government generates through tax collections. In the case of SSHE it refers to contributions to social security for health. We break down these sources below.

3.2.1 Taxes

Tax revenues are based on the tax base, the tax rate, and the tax collection management. Tax collection also depends on economic growth, although we consider the rise in income due to economic growth is considered as an endogenous effect in this analysis (see section 3.1).

In this section we discuss the tools to create fiscal space with exogenous changes. For example, changes in a tax rate on personal income, expanding the tax base for a specific tax, changes in the management of tax collection or creating a new tax.

Direct taxes refer to taxes on income, while indirect taxes are taxes on consumption (i.e., value-added tax or VAT). There are also taxes that target the consumption of some specific good or service, which the literature denominates "sin taxes". This is the case of taxes on gambling, tobacco, alcoholic beverages, sugar or processed foods. Some countries choose to allocate revenues generated from these taxes to specific sector. For example, to the extent that the health sector bears the burden of tobacco consumption, the revenues from the tobacco tax could be allocated to the health sector. This means that the government is earmarking the collection of this tax.

Some studies argue that the size of the informal sector in the labor market also has an impact on the ability to collect taxes (Durán-Valverde & Pacheco, 2012; Gordon & Li, 2009; Rao & Seth, 2009; Tandon & Cashin, 2010). We discuss informal workers in the next section.

3.2.2 Social security contributions for health

Social security for health is generally a fund generated by contributions from employers and/or workers and the funds may only be used to finance health services for social security beneficiaries. Beneficiaries may be only the workers, and, in some cases, beneficiaries may include workers' families.

Tandon and Cashin (2010) link the level of contributions to the proportion of workers in the formal sector, salaries, poverty rates, average family size and the dependence rate. As in the case of taxes, the tools to generate changes in revenues from contributions are changes in the contribution rates or implementing policies to raise formality. Expanding coverage does not to family members only raises expenditures without accompanying it with the equivalent rise in revenues. In any case, contribution rates should be determined by actuarial studies so that they cover the expected expenditure of the service coverage provided.

3.3 Efficiency gains

Improving efficiency in the public spending also creates fiscal space (Heller, 2005a, 2005b, 2006; Tandon & Cashin, 2010). It is important to point out that this source does not increase government revenues, it only reflects a better way of spending the limited resources. In terms of creating fiscal space, it means doing the same with less resources, in such a way, that resources become available for the health sector.

Efficiency gains do not have to come from the health sector, it could be obtained from any sector. Studies propose different ways to improve efficiency in public spending, including:

- Policies that reduce corruption;
- Policies that improve governance;
- Improve the coordination and conditions of foreign aid; and
- Improve the execution of public spending.

When efficiency gains are specific to the health sector, it may keep those gains within the sector as its own fiscal space. The argument for allocating efficiency gains from other sectors to the health sector, could be trickier and requires political support.

There are different ways the health sector could improve its efficiency. For example, the provider payment mechanisms have different incentives for efficiency. A fee-for-service payment could provide an incentive towards overuse of services. A per capita payment transfers the risk to the provider and provides an incentive towards more use of preventive care, which could be more cost-effective (efficient).

We base our analysis of efficiency gains either on studies that estimate efficiency gains in Suriname or from general estimates available. This limits the scope of this analysis.

3.4 Reprioritization of health expenditure

Reprioritization, by definition, does not generate new resources. It changes the allocation of existing resources by changing the criteria for prioritization. Tandon and Cashin (2010) link the priority of the health sector to the country's income level. Countries with higher income, give the health sector a higher priority.

Any sector's priority can be measured as its participation in the general governments expenditure. Reprioritization can occur in two ways: reducing the resources allocated to a sector and reallocating them to the health sector; or allocating more to the health sector when new resources become available.

Heller (2005b, 2006) argues that reprioritization should imply a reduction of inefficient or unproductive programs. This criterium should not be confused with improving efficiency. It does not imply being more efficient, it simply eliminates inefficient or unproductive programs or activities. Implicit to this source of fiscal space is the need for assessments of programs regarding their effectiveness and the attainment of goals.

3.5 Foreign aid

Foreign aid is an important source for fiscal space in line with the Millennium Development Goals (MDGs) and now the Sustainable Development Goals (SDGs). A key issue is the sustainability and predictability of the future flows of foreign aid. Short-term commitments must be accompanied by an assessment of future financial sustainability of the spending it is linked (Heller, 2006).

Another key issue is that it is a source that depends on decisions and priorities of third parties, and although it should be considered as a source for fiscal space, it must be done so with caution.

3.6 Borrowing

Borrowing is another source of fiscal space, but it is obviously linked to future repayment of the debt. Unlike foreign aid, debt is linked to future payments. Special attention should be given to whether the way these resources are spent will generate the necessary returns to fulfill the payment of the debt, so that the commitment is in fact sustainable and does not jeopardize the government's financial situation (Heller, 2005b, 2006). Programs that increase human capital could be associated with greater development in the future. The two key factors to consider are whether the program generates new returns or if it will have an impact in the government debt payment commitments. This means that the revenue raised from debt it is not recommended that it be allocated to current expenditure.

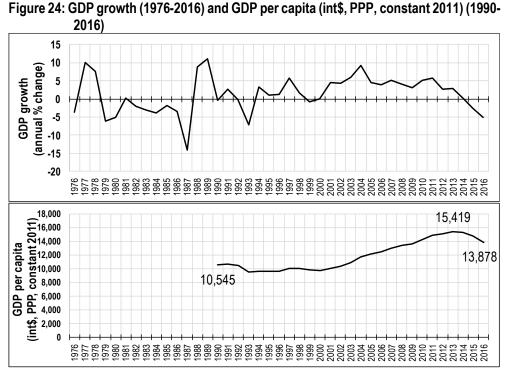
3.7 **Printing money**

Printing money or increase monetary supply may generate new resources for fiscal space. This source of financing is known as seigniorage. But, it has a negative impact on the economy because it generates inflation which could in turn affect the economy's real growth. It is also important to keep in mind that the poor population bears the burden of inflation, which means it is an equitable source of financing. We include it to be thorough conceptually, but it is never recommended.

IV. Fiscal space estimates and analysis

4.1 Economic growth

The estimate of fiscal space generated by economic growth is based on the evolution of GDP and GHE. Figure 24 shows two key variables: GDP annual growth and GDP per capita (measured as international dollars (int\$) adjusted by purchasing power parity (PPP) constant using 2011 as the base year). Between 1975 and 2000, GDP growth in Suriname shows large fluctuations. Between 2000 and 2014, the growth rate stayed positive and averaged 2.0%. But, in fact, starting 2011, the GDP growth rate fell from 5.8% in 2011 to -5.1% in 2016.



Source: World Bank (2018).

Data on the GDP per capita is available only starting 1990. As expected, its fluctuations follow the GDP growth rate. As mentioned above, GDP per capita starts increasing 2000 when it was int\$9,731 reaching int\$15,419 in 2013 and then dropping to int\$13,878 in 2016.

Figure 25 shows the annual growth of GGHE, GHE and SSHE on top, and these health expenditures expressed as percentage of GDP on the bottom. Both GGHE and GHE move in the same direction during the period 1996-2015, while SSHE moves in the opposite direction. This happens whether reviewing the expenditure indicators measured as annual growth rates or as percentage of GDP.

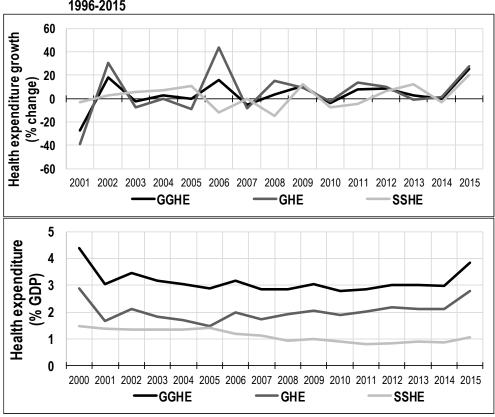


Figure 25: GGHE, GHE and SSHE (annual growth and as percentage of GDP), Suriname, 1996-2015

Source: IMF-WEO (2018); WHO (2018).

Figure 26 also shows the annual growth rates of these three health expenditure indicators from the public sector relative to the annual growth rate of GDP, keeping in mind that the annual growth rate (percentage change) of the expenditure over the annual growth rate represents the income elasticity of the expenditure. If we consider all the estimates of expenditure-revenue elasticity for the period, the average elasticity for GGHE is -0.008, for GHE is 0.510 and for SSHE is -0.657.

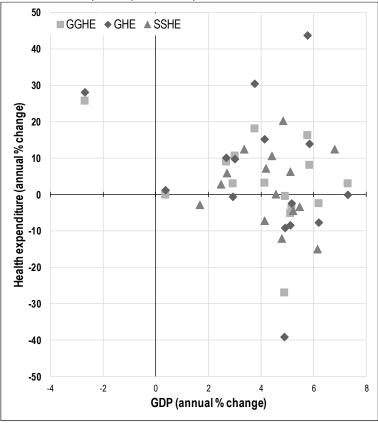


Figure 26: Annual growth of GDP versus annual growth of GGHE, GHE, SSHE, Suriname, 2001-2015

Source: IMF-WEO (2018); WHO (2018).

Generally, not all the observations should be used in estimating the average elasticity. Some observations should be treated as outliers. We consider three scenarios following the literature: an optimistic, a neutral and a pessimistic. These scenarios have different implications for the fiscal sustainability (Hay & Williams, 2003). Of the 15 observations for the elasticity, we eliminate 5 observations to build the following scenarios:

Pessimistic scenario: We eliminate the five highest elasticities (positive values).

Neutral scenario: We eliminate 3 of the lowest and 2 of the highest elasticities. This scenario should generate the more "stable" average elasticity.

Optimistic scenario: We eliminate the five lowest elasticities (negative values).

To project health expenditures we proceed with the computations we describe below. First, we calculate the percentage change of the health expenditure using the IMF annual GDP growth projections (IMF-WEO, 2018):

 $\Delta\%$ Expenditure = EExpenditure $\cdot \Delta\%$ GDP

 $Expenditure_t = Expenditure_{t-1} \cdot (1 + \Delta\% Expenditure_t)$

We calculate the health expenditure for every year until the year 2022. The fiscal space for 2022 is the difference between the expenditure in the year 2022 minus the expenditure of the base year, 2015.

$$Fiscal \ Space_{2016-2022} = \frac{Expenditure_{2022}}{GDP_{2022}} - \frac{Expenditure_{2015}}{GDP_{2015}}$$

We present the results of these estimates in Table 3 for the three health expenditures (GGHE, GHE and SSHE). For each scenario we show the average expenditure-elasticity and the annual projections of the expenditure (as percentage of GDP) and the annual change in percentage points (pp).

As mentioned before, GGHE is the sum of GHE and SSHE, and there it is also the combination of both effects. GGHE has a negative elasticity in the pessimistic scenario. With a negative elasticity a rise in GDP (positive economic growth) translates into a fall in GGHE as a percentage of GDP. Because GDP falls drastically in 2016, GGHE as percentage of GDP rises from 3.857% in 2015 to 5.028%. Since the economy's projections are positive in the following years, GGHE stars decreasing. The average annual change in percentage point in the pessimistic scenario is 0.037 pp. This means that between 2015 and 2022 GGHE as percentage of GDP would drop 0.261pp.

The neutral scenario has a positive but lower than one elasticity (0.765). This means that a 1% growth in GDP increase GGHE in 0.765% with means that GGHE as the percentage of GDP falls. GGHE rises between 2016 and 2017, but then drops in the rest of the projected period. This means that the average change in percentage points of the neutral scenario is only 0.002, and the cumulative change 0.013. By 2022, GGHE would be 3.87% which leaves Suriname at 2.13 percentage points from the target of 6% of GDP.

Finally, the optimistic scenarios, shows a drop in GGHE in 2016, and period of recuperation between 2017 and 2020, and then a drop again between 2021 and 2022. This means that in 2022 GGHE as percentage of GDP could reach 3.983% of GDP, only slightly higher than the neutral scenario.

ſ	Elasticity	2016	2017	2018	2019	2020	2021	2022	Average	Cumulative
GGHE										
Pessimistic										
GGHE (%GDP)	-1.588	5.028	4.086	3.854	3.775	3.688	3.641	3.595		
Δpp		1.172	-0.943	-0.232	-0.079	-0.087	-0.047	-0.046	-0.037	-0.261
Neutral										
GGHE (%GDP)	0.765	3.963	3.974	3.963	3.946	3.923	3.897	3.870		
Δ pp		0.106	0.011	-0.011	-0.017	-0.023	-0.026	-0.027	0.002	0.013
Optimistic										
GGHE (%GDP)	1.739	3.522	3.928	4.008	4.017	4.020	4.003	3.983		
Δpp		-0.335	0.406	0.080	0.008	0.003	-0.017	-0.020	0.018	0.127
GHE										
Pessimistic										
GHE (%GDP)	-1.854	3.717	2.803	2.613	2.569	2.525	2.520	2.519		
Δpp		0.933	-0.914	-0.190	-0.044	-0.043	-0.005	-0.002	-0.0379	-0.265
Neutral										
GHE (%GDP)	1.226	2.710	2.703	2.710	2.721	2.737	2.754	2.773		
Δpp		-0.074	-0.007	0.007	0.011	0.016	0.017	0.019	-0.0016	-0.011
Optimistic										
GHE (%GDP)	3.087	2.102	2.643	2.769	2.814	2.865	2.895	2.926		
Δ pp		-0.682	0.541	0.126	0.045	0.051	0.030	0.031	0.0203	0.142
SSHE										
Pessimistic										
SSHE (%GDP)	-2.362	1.496	1.217	1.134	1.098	1.055	1.025	0.995		
Δ pp		0.423	-0.279	-0.083	-0.036	-0.043	-0.030	-0.030	-0.011	-0.077
Neutral										
SSHE (%GDP)	0.225	1.170	1.181	1.170	1.153	1.131	1.106	1.081		
Δ pp		0.098	0.011	-0.011	-0.017	-0.023	-0.024	-0.026	0.001	0.008
Optimistic										
SSHE (%GDP)	1.408	1.021	1.164	1.186	1.179	1.165	1.144	1.120		
Δpp		-0.051	0.143	0.022	-0.008	-0.013	-0.022	-0.024	0.007	0.048

Table 3: Income elasticities of health expenditure, health expenditure as % of GDP, annual change in percentage points (pp), average annual and cumulative fiscal space

Source: IMF-WEO (2018); WHO (2018).

As mentioned earlier, if we separate the funds, the projections of each fund behave differently. The range of the elasticities of GHE for the three scenarios is wider than in the case of GGHE. The estimated elasticities are -1.854, 1.226 and 3.087 for the pessimistic, neutral and optimistic scenarios. In both the pessimistic and neutral scenarios, the GHE as percentage of GDP in 2022 is lower than the baseline year (2015). This is mainly driven by the drop in GDP growth in 2016.

Unlike GHE, SSHE is countercyclical to GGHE. With a much large (in absolute terms) negative elasticity in the pessimistic scenario, SSHE shows a cumulative decrease of -0.077

percentage points between 2015 and 2022. The neutral scenario leaves SSHE at the same level compared to the baseline.

These results must be interpreted with caution. IMF projection include the expectations of future economic policies, if any. Also, it is important to keep in mind that economic growth is a necessary, but not a sufficient condition to create fiscal space. These results show that Suriname must generate the necessary conditions to stabilize the economy and this must also be combined with other actions so create the necessary fiscal space.

4.2 New revenue

Figure 27 shows revenue data from the IMF from the period 2001 to 2012 for Suriname and to 2016 for selected countries. Up until 2012, Suriname's government revenue was high compared to other countries in the region. Between 2002 and 2006 government revenue as percentage of GDP grew at a stable rate, and then it spiked in 2007 and began a more volatile trend. In 2007 government revenue represents 29.4% of GDP and it dropped to 21.7% in 2010 and has slowly risen since then.

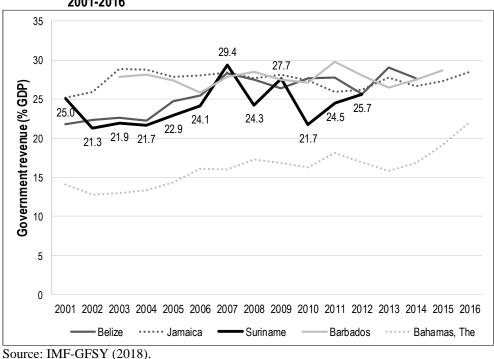


Figure 27: Public revenues as percentage of GDP, Suriname and selected countries, 2001-2016

An article by EIU (2017) that analyzes the economy in Suriname states how the revenue decreased in 2016 to 13.8% of GDP. This translated into drops in direct, indirect and non-tax revenue. This is the period of recession and devaluation of the Surinamese dollar. The expectation is an improvement in the economy in 2018 driven by mining output and exports, because of the investments in 2017. This should translate in an improvement of government revenues.

The same database from IMF, shows that Suriname's government revenues was mainly based on taxes (Figure 28 and Figure 29). According to this source, social contributions are zero in this period.

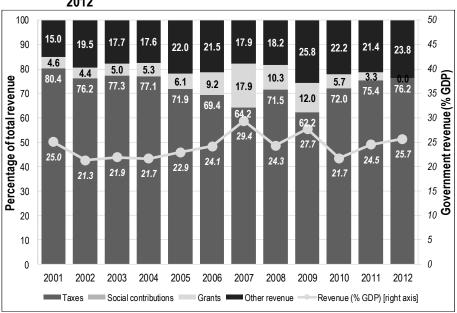
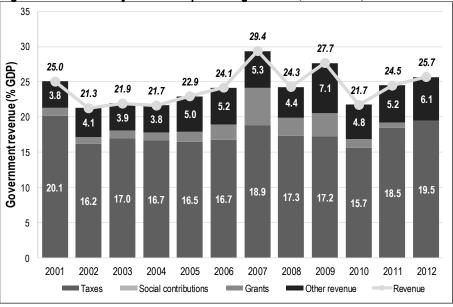


Figure 28: Revenue by source as percentage of total revenue, Suriname, 2001-2012

Note: Suriname does not show revenues from social contributions. Source: IMF-GFSY (2018).





Suriname's Income Tax Law includes a 36% tax rate for companies in the country. The only withholding tax applicable in Suriname is dividend tax of 25% on the dividend payments

Source: IMF-GFSY (2018).

made to shareholders. Personal taxation includes personal income tax including wage tax, dividend tax, and wealth tax. Imported goods are subject to import duties. By Decree of the Minister of Finance, investors in the production sector can request an exemption of the import duty to a maximum of 75% to the import of investment goods (heavy equipment).

The mineral sector has tax incentives including: import duties exemption (results in a reduction of investment costs), accelerated depreciation, and reinvestment reserve.

Social security contributions for health include 4% of salary paid by the employer, starting with a 2% base rate that rises with income until the employee reaches 60 years of age. For self-employed, the contribution rate is 4% and rises with income. The information on social security contributions appears to have a problem of underreporting which may be linked to the reporting from the private sector. This is discussed further in section 4.2.2.

In accordance to the information from the IMF, the main source of revenues for the government comes from taxation (Figure 30). Direct taxes have a higher participation compared to indirect taxes. This suggests that revenues may be progressive, i.e., people with higher incomes pay proportionately more that people with lower incomes.

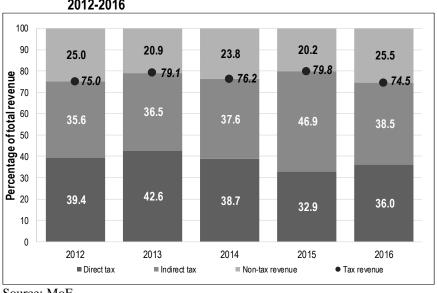


Figure 30: Revenue by source as percentage of total revenue, Suriname, 2012-2016

Source: MoF.

4.2.1 Taxes

Heller (2005b) suggests that low income countries should aim a collecting at least 15% of GDP from taxation. Figure 31 compares tax revenues as percentage of GDP among Latin American and Caribbean countries in 2012.⁷ In this year, Suriname's tax revenues was 19.5% above those countries with similar GDP per capita like Brazil with a tax revenue of 13.7% and Mexico with a tax revenue of 9.9%. But, when compared with countries in the Caribbean, Suriname's tax revenue is comparative low. Caribbean small states have a tax revenue of 22.6% of GDP, while Barbados' reaches 24.2% of GDP.

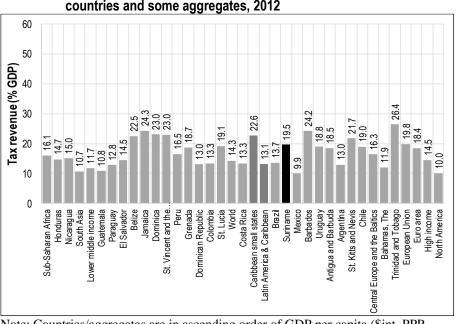


Figure 31: Tax revenues as percentage of GDP, Latin American and Caribbean countries and some aggregates, 2012

Note: Countries/aggregates are in ascending order of GDP per capita (\$int, PPP, Constant 2011). Source: World Bank (2018).

Figure 32 shows the evolution of tax revenue as percentage of GDP for Suriname and selected countries. Suriname's tax revenues fall during the period of the international financial crisis (2008-2010) and rise right after until 2012.

 $^{^{7}}$ We compare 2012, because that is the last year with information available from Suriname in World Bank (2018).

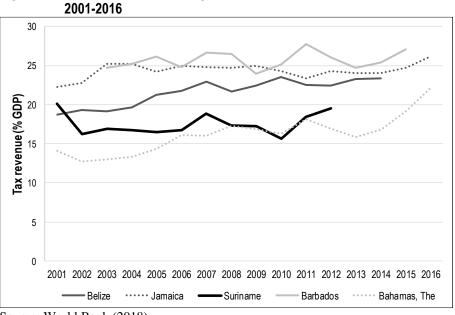


Figure 32: Tax revenue as percentage of GDP, Suriname and selected countries, 2001-2016

Source: World Bank (2018).

Suriname has a similar tax system as that of most countries in the world, with a general structure of direct and indirect taxes. Direct taxes include taxes on personal income and profits from businesses and enterprises. Indirect taxes include those on consumption like value added tax, import duties, and other specific taxes on consumption.

Figure 33 shows tax revenue by type of tax as percentage of GDP for Suriname between 2001 and 2012. Revenues from indirect taxes reached 11.3% of GDP in 2012, while revenue from direct taxes was 8.2% of GDP. Throughout the period the participation of indirect taxes in revenue is larger than direct taxes. This suggests that tax collection may be regressive, although some authors argue that taxes on good and services are not necessarily regressive (Ebrill, Keen, Bodin, & Summers, 2002).

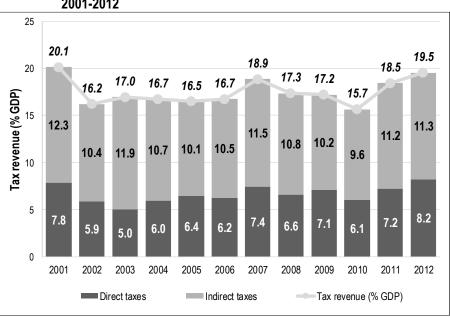


Figure 33: Tax revenue by direct/indirect tax as percentage of GDP, Suriname, 2001-2012

A. Direct taxes

Direct taxation tends to be progressive. Figure 34 shows the types of direct taxes as percentage of GDP between 2001 and 2012 in Suriname. As the figure clearly shows, the most important direct tax is on income, profits and capital gains. Property tax generates only a very small portion of direct tax revenue.

Source: IMF-GFSY (2018).

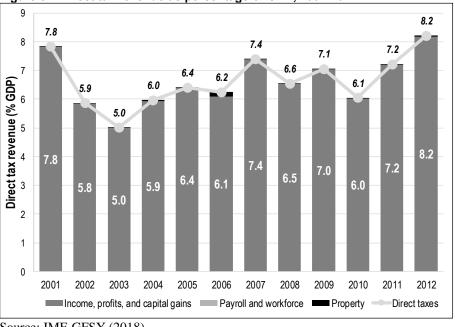


Figure 34: Direct tax revenue as percentage of GDP, 2001-2012

B. Indirect taxes

Figure 35 shows the different types of indirect tax revenues as percentage of GDP. The international financial crisis also had an impact in this type of revenue with indirect tax revenue falling between 2007 and 2010.

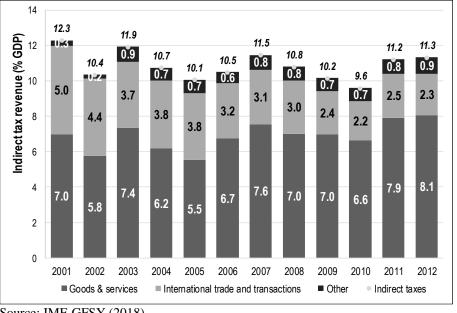


Figure 35: Indirect tax revenue as percentage of GDP, 2001-2012

Figure 36 shows the participation of each type of indirect tax in indirect tax revenue. During the period between 2001 and 2012, revenue from trade taxes decreased its importance from 21.2% in 2001 to 17.0% in 2012. Taxes on specific services rose from 15.1% to 23.6% and general taxes on goods and services also rose from 31.3% to 37.5%.

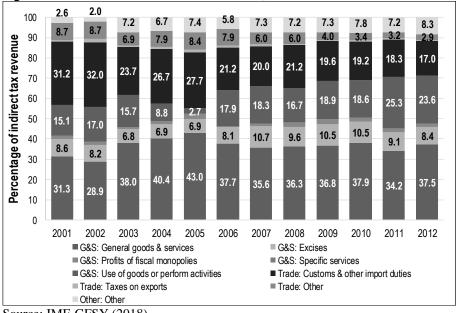


Figure 36: Distribution of indirect tax revenue, 2001-2012

C. Indirect taxes: sin taxes

Figure 37 shows the participation of sin taxes revenue as a percentage of total government revenue based on information provided by the Ministry of Finance. According to his information, between 2014 and 2016, the excise on tobacco and cigarettes almost doubled, while the excise on beer maintained its participation in the total revenue.

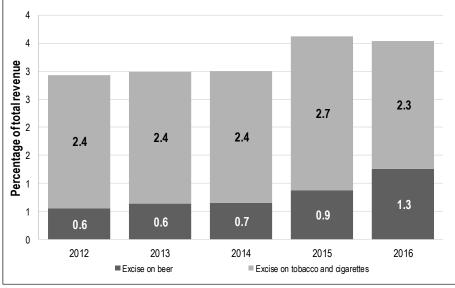


Figure 37: Revenue from sin taxes as percentage of total revenue, 2012-2016

Source: Ministry of Finance.

In a 2015, Suriname's Minister of Health, in a presentation showed that "Suriname committed to ratifying and implementing the World Health Organization's Framework Convention on Tobacco Control (FCTC) in 2008." (Blokland, 2015). Research presented showed that:

- 2007 National Household Drug Prevalence Survey found nearly 40% of males and 10% of females currently smoked
- •2009 GYTS and GSHS survey found that half of all adolescents surveyed are subject to second hand smoke
- •2011 indoor air quality testing exceeded WHO standards by 29 times

Finally in 2013, the Legislation S.B. 2013 no. 39 was passed which included (Blokland, 2015):

- Smoking ban in indoor public places
- Tobacco advertising ban
- A ban on the sale of tobacco products to minors and the use of vending machines
- A ban on electronic cigarettes
- Pictorial health warnings required on packaging

- The development, implementation, and monitoring a national tobacco control strategic plan
- Promote epidemiological surveillance
- Promote inter-sectoral collaboration for legislation implementation
- Establishment of Tobacco Bureau to promote research and strengthen cessation programming
- Compliance and enforcement regulations
- Strict penalties for non-compliance
- Allows for the development of future regulations to ensure full implementation of the law

Blokland (2015) also presented the case of alcohol taxation in Suriname. First, as general background, laws on alcohol pricing and taxation have existed since 1891. These laws had minor changes in 1953, 1994 and 2000. In 2004, the excise tax was increased. In 2008, excise stamps for alcohol and tobacco were implemented with the help of a newly established Special Excise Stamp Control Unit. Finally, in 2011, the new administration announced that the excise tax would be raised from 33% to 68% as part of other fiscal measures.

In 2015 alcohol taxation was:

- Duties (50%)
- VAT (10%)
- Statistic Tax (1.5%)
- Consent Tax (0.5%)
- Excise Tax (based on alcohol type and % of alcohol, see table below)

Table 4: Suriname's e	xcise tax structure,	2015
-----------------------	----------------------	------

	Excise tax		
Alcoholic beverages	Tariff per liter		
Whisky	US\$ 6.75		
Rum	US\$ 2.00		
Category 1: 0-30 vol. % alc.	US\$ 3.30		
Category 1: 0-30 vol. % alc.	US\$ 4.50		
Category 1: 0-30 vol. % alc.	US\$ 6.75		
Category 1: 0-30 vol. % alc.	US\$ 8.25		
Wines	US\$ 0.12 per vol. % alc.		
Beers	US\$ 50.00 per hectoliter (US\$ 0.50 per liter)		
0 D1 11 1 (0015)			

Source: Blokland (2015).

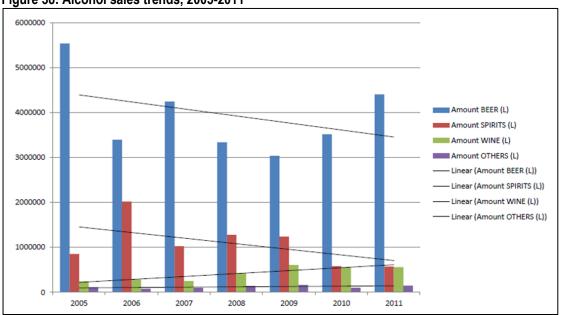


Figure 38: Alcohol sales trends, 2005-2011

Source: Blokland (2015).

There are other sin taxes that could be considered to create fiscal space, for example, on sugars.

D. Tax expenditure

Tax expenditure is the estimated revenue losses from special exclusions, exemptions, deductions, credits, deferrals, and preferential tax rates in income tax law. It can include subsidies. In Suriname's Title IV consultation with the IMF (IMF, 2014a) states that the focus

of the consultation was "on measures to strengthen fiscal sustainability and external stability, as well as policies to enhance the financial sector resilience, structural competitiveness and inclusive growth". Their analysis showed a large long run fiscal sustainability gap that needed to be addressed. One of the key issues was to implement spending restraint as part of the adjustment effort. In this sense, they agreed to the need of improving the targeting electricity and water subsidies that represented over 2% of GDP in 2014, if 15% is allocated to health this would be at least an additional 0.3 percentage points for health.

4.2.2 Social security contributions for health

Figure 39 presents information from the IMF regarding the sources of revenue for seven countries including Suriname in 2012. According to this information, Suriname and the other selected countries do not have revenue from social security contributions. Their revenue comes from taxes, grants (sporadically) and other types of revenue. Figure 40 shows the participation of SSHE in THE for countries in the region in 2013. Suriname's SSHE represents 29.6% of total health expenditure.

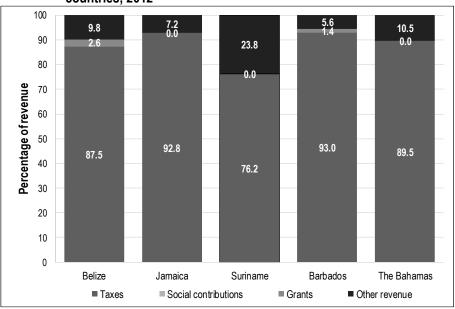
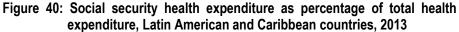
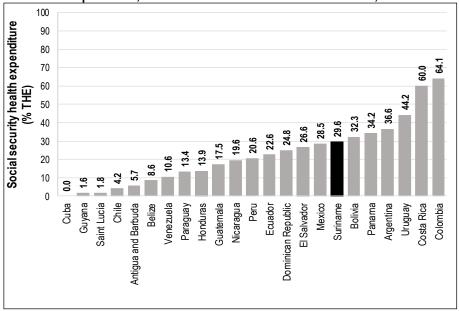


Figure 39: Sources of revenue as percentage of revenue, Suriname and selected countries, 2012





Source: World Bank.

WHO's new methodology of System Health Accounts 2011 (SHA 2011) (OECD, Eurostat, & WHO, 2011) is being used to estimate health expenditures and the data has been published

since last year in the Global Health Expenditure Dataset. The GHED includes Compulsory Financing Arrangements (CFA) as % of Current Health Expenditure (CHE). CFA includes government schemes and compulsory prepaid schemes. Figure 41 shows how after the Insurance Law of 2014 the CFA in Suriname raised its participation in the CHE from about 38.8% to 70.2%. This rise has been driven by the Social Health Insurance component (Figure 42).

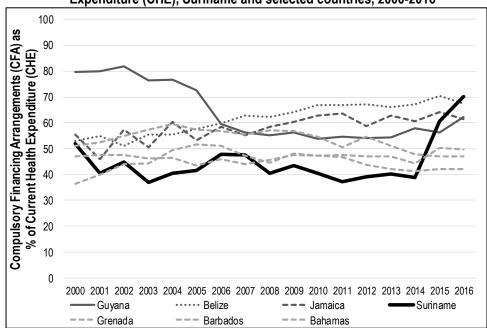


Figure 41: Compulsory Financing Arrangements (CFA) as % of Current Health Expenditure (CHE), Suriname and selected countries, 2000-2016

Source: WHO (2018).

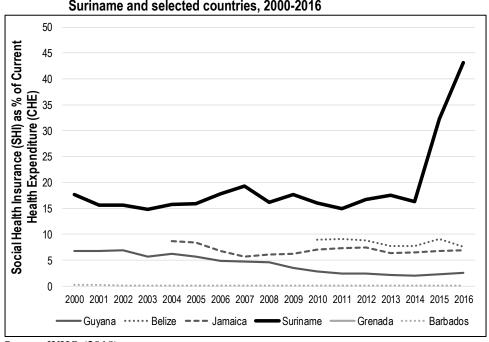


Figure 42: Social Health Insurance (SHI) as % of Current Health Expenditure (CHE), Suriname and selected countries, 2000-2016

Source: WHO (2018).

Social security contributions for health should not necessarily be considered as part of the resources for fiscal space. Generally speaking social security funds for health cannot be spent on non-beneficiaries. Hence, if either the base (and therefore the number of beneficiaries) is expanded or the contribution rate (by either employer or employer) is increased, the new resources would still be only for the social security beneficiaries.

The sustainability of the health social security should be assessed. If revenues are not projected to cover expected costs of coverage, this could strain the public sector to finance the difference. So, it is important for this subsector to be self-sustained.

On the other hand, if health social security increases its population coverage, this could reduce the resource needs for the public subsector.

4.3 Efficiency gains

One of the most attractive sources to create fiscal space is efficiency gains. The health sector in Suriname is moving towards a single fund system that could generate important efficiency gains in the future. To the extent SZF can generate the payment mechanisms necessary to improve health results, there is a possibility of efficiency gains within the health sector.

- Payment mechanisms to physicians
- Payment mechanisms to hospitals
- Strengthening primary health care
- Drug procurement

In 2018 a "...mission was organized at the request of Miriam Naarendorp, Head of the Pharmaceutical Inspectorate, with the objective of reviewing and establishing the required procedures for BGVS to procure key health products through the PAHO Strategic Fund. As part of the adoption process, it was decided to start a pilot project and use the Fund to procure Cytotoxic, Immuno-Biologicals, ARV and selected high cost medicines and after successful conclusion of the pilot, review the possibility to expand the list of medicines to be procured through PAHO and assess the possibility of requesting technical cooperation on Supply Chain Management." (PAHO, 2018).

4.4 Reprioritization of health expenditure

Reprioritization is another possible source of fiscal space. Figure 43 the participation of general government health expenditure as the percentage of total government expenditure. Suriname's health sector maintains a stable participation since 2007 within the government's budget. The Bahamas and Belize are increasing the priority of the health sector, but Suriname still has a higher allocation to health than the other countries.

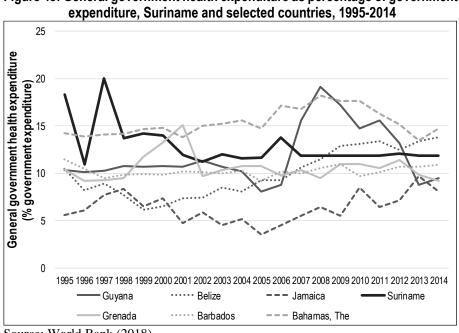


Figure 43: General government health expenditure as percentage of government

Source: World Bank (2018).

A key challenge when assessing reprioritization is the allocation of resources towards health sector workers and to physicians.

Alternative, to the extent that Suriname can increase its government revenue, reprioritization could be implemented by allocation those new resources towards the health sector. This would avoid reallocating resources from other sectors to the health sector.

4.5 **Donations**

Creating fiscal space based on donations is generally not recommended (Escobar, 2010; Heller, 2006; Sharma, 2016). Donations are based on third party decisions, which may not be predictable. This could generate uncertainty and instability for the health sector. It is important to keep in mind that the creation of fiscal space should always consider the sustainability of the source of new resources.

Figure 44 compares the participation of external resources for health as the percentage of total health expenditure. Suriname used to be highly dependent on external sources, but it has been able to decrease this dependence to levels below 10% of total health expenditure since 2002 and to levels below 5% of total health expenditure since 2011.

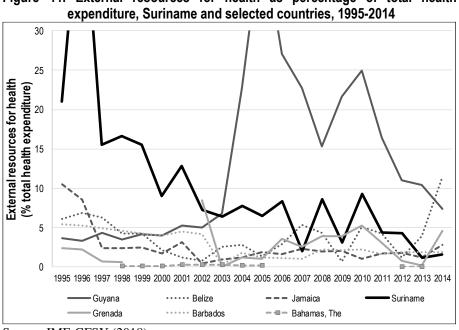


Figure 44: External resources for health as percentage of total health

According to the GHED data from WHO (Figure 45) shows that many of the peaks in the previous figure were related to investments with external resources. SHA 2011 separates investments in health from current health expenditures. The tendency in any case for Suriname has been to decrease its dependence on external resources to less than 2% of the current health expenditure. In terms of GDP, external resources began a clear downward tendency in 2010, and remains below 0.1% of GDP since 2012.

Source: IMF-GFSY (2018).

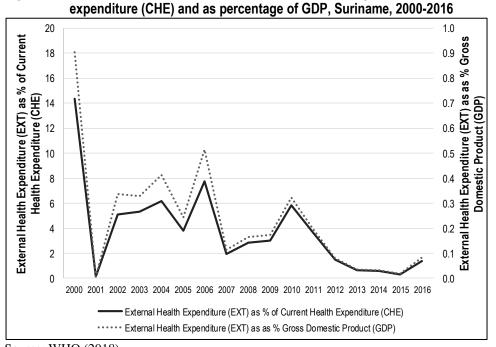


Figure 45: External health expenditure (EXT) as percentage of current health expenditure (CHE) and as percentage of GDP. Suriname, 2000-2016

Source: WHO (2018).

In sum this does not seem like a source of financial space that could have a significant impact in the total health expenditure in Suriname. Another issue associated with external source is that it could crowd out the allocation of government revenue to the health sector.

4.6 Borrowing

The case of borrowing for health is also not a recommended source of fiscal space (Heller, 2006; Tandon & Cashin, 2010). One argument is that if the country is highly indebted, it shouldn't increase its debt. In the case of Suriname, as seen above, the macroeconomic policies implemented are in line with constraining the public debt and moving towards fiscal sustainability, especially against external shocks.

V. Conclusions and recommendations

The goal of this report is to provide an analysis of the fiscal space for health in Suriname. We presented the conceptual framework for the analysis and followed with the analysis and tentative estimates. In general, most cases show that governments have the capacity to

generate fiscal space. Suriname has been recuperating from a recent economic crisis and has a positive outlook for the coming years.

Economic growth is one of the sources with the greatest potential and, together with the increase in efficiency in health spending, are the most politically feasible.

These results must be interpreted with caution (Table 5). IMF projection include the expectations of future economic policies, if any. Also, it is important to keep in mind that economic growth is a necessary, but not a sufficient condition to create fiscal space. These results show that Suriname must generate the necessary conditions to stabilize the economy and this must also be combined with other actions so create the necessary fiscal space. There is a positive outlook in economic growth in the near future.

As a main issue to be addressed is the reduction of the fiscal deficit. While 2014 was bad, 2015 was worse, with a current account deficit swelled to 16% of GDP and a fiscal deficit of 8.8% of GDP. Also, inflation needs to be brought under control and wage increases held in check. The IMF also called for a reform of the country's civil service and a more aggressive central bank, raising interest rates to slow the pace of currency depreciation and to restore confidence in the local currency (MacDonald, 2017).

There is an increasing pressure under the Insurance Law, because they already must meet their commitments in pension payments since workers earn their right to pension with only 10 years of contributions.

A reduction and improved targeting of tax expenditures appears to be the most relevant source, but that also implies a strong commitment from the government in light of the political resistance it may bring. In this sense, targeting the subsidies so that the most vulnerable populations are not affected is a key policy.

External financing is that Suriname has been moving away from at least as part of the current expenditure. This is a reasonable policy and hence is not a desirable source for fiscal space.

Going from the current level of public spending on health to 6% of GDP defined as a goal implies a considerable effort, after the crisis the new measures being considered are in line with the possibility of increasing the resources allocated to health.

Sources	Technical	Recommendation	
Economic growth	Low, only in the optimistic scenario there is a slight rise in GGHE in the first years, but then it drops	Economic growth is key	
Reprioritization	Medium, it is subject to the ability of the government to raise its revenue, these new resources could be allocated towards the health sector.	Is in line with fiscal sustainability measures	
New revenues			
General taxation	Medium, restructuring of tax system in line with fiscal sustainability goal	Assess inequities in taxation	
Sin taxes	Medium, Suriname is committed to improve taxation of goods that have a negative impact on health. Should consider taxing sugar products	Assess a new tax	
Social security contributions	Low, most of the funding is coming from the governments	Improve system to collect contributions	
Tax expenditures	High, a targeting of electricity and water subsidies could generate at least 0.3 percentage points for health	Assess	
Efficiency High, mainly from improving payment to providers and physicians		Provider payment mechanisms through SZF	
Donations	Low	Not recommended	
Borrowing	Low	Not recommended	

Table 5: Sources of fiscal space for Suriname and recommendations

Source: Author.

References

- Blokland, D. M. (2015). Decisive action on Prevention Suriname sets a regulatory framework for effectively reducing tobacco use and increasing alcohol taxes. Paper presented at the Forum of Key Stakeholders on NCD Issues in the Caribbean, Barbados.
- Caribbean Development Bank. (2014). *Country strategy paper 2014/2018. The Republic of Suriname. Staff Report:* Caribbean Development Bank. Retrieved from:
- Durán-Valverde, F., & Pacheco, J. F. (2012). Fiscal space and the extension of social protection: Lessons learnt from developing countries: Bolivia, Botswana, Brazil, Costa Rica, Lesotho, Namibia, Thailand and South Africa. *ESS Extension of Social Security N, 33*. doi:<u>http://bit.ly/1iM3tAd</u>
- Ebrill, L., Keen, M., Bodin, J.-P., & Summers, V. (2002). The Allure of VAT. *Finance & Development*, 39(2). Retrieved from http://www.imf.org/external/pubs/ft/fandd/2002/06/ebrill.htm#author
- EIU. (2017). Suriname: Fiscal deficit narrows gradually. *The Economist Inteligence Unit*, 2. Retrieved from The Economist Inteligence Unit: Suriname: Economy: Forecast website: <a href="http://country.eiu.com/article.aspx?articleid=1835351767&Country=Suriname&topic=Economy&subtopic=Forecast&subsubtopic=Fiscal+policy+outlook&u=1&pid=1506600134&oid=1506600134&uid=1# Retrieved from <a href="http://country.eiu.com/article.aspx?articleid=1835351767&Country=Suriname&topic=Economy&subtopic=Forecast&subsubtopic=Fiscal+policy+outlook&u=1&pid=1506600134&uid=1506600134&uid=1835351767&Country=Suriname&topic=Economy&subtopic=Forecast&subsubtopic=Fiscal+policy+outlook&u=1&pid=1506600134&uid=1506600134&uid=1#
- Escobar, L. E. (2010). *Honduras: espacio fiscal para la inversión social y productiva* (Vol. 4). Tegucigalpa, Honduras: PNUD-Honduras.
- Giovanella, L., Feo, O., Faria, M., & Tobar, S. (2012). *Health Systems in South America: Challenges to the universality, integrality and equity* (pp. 836). Rio de Janeiro: ISAGS-UNASUR. Retrieved from:
- Gordon, R., & Li, W. (2009). Tax structures in developing countries: Many puzzles and a possible explanation. *Journal of public Economics*, *93*(7), 855-866.
- Hay, R., & Williams, G. (2003). *Fiscal space and sustainability from the perspective of the health sector*. Presented at the High-Level Forum for the Health MDGs, Selected papers.
- Heller, P. S. (2005a). Back to Basics-Fiscal Space: What it is and how to get it. *Finance and Development-English Edition*, 42(2), 32-33.
- Heller, P. S. (2005b) Understanding fiscal space. International Monetary Fund.
- Heller, P. S. (2006). The prospects of creating 'fiscal space' for the health sector. *Health Policy* and *Planning*, 21(2), 75-79. Retrieved from <u>https://heapol.oxfordjournals.org/content/21/2/75.full.pdf</u>

- Hernández, P., & Poulliler, J.-P. (2007). Gasto en salud y crecimiento económico. *Presupuesto y Gasto Público, 4*(49), 20.
- Suriname: National Basic Health Insurance Law (No. 114 of 2014), Law No. 114 of 2014 C.F.R. (2014).
- IMF-WEO. (2018). *World Economic Outlook*. Retrieved from: <u>http://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx</u>
- IMF. (2014a). 2014 Article IV Consultation: Staff Report; Press Release; and Statement by the Authorities of Suriname. IMF Country Report No. 14/316. Washington, D.C.: International Monetary Fund. Retrieved from:
- IMF. (2014b). Suriname: Selected Issues Paper. IMF Country Report No. 14/317. Washington, D.C.: International Monetary Fund. Retrieved from:
- IMF. (2016). IMF Executive Board Approves US\$478 Million Stand-By Arrangement for
Suriname [Press release]. Retrieved from
https://www.imf.org/en/News/Articles/2015/09/14/01/49/pr16251
- IMF. (2017). *Executive Board Concludes 2016 Article IV Consultation*. Retrieved from: <u>https://www.imf.org/en/News/Articles/2017/01/24/PR1714-Suriname-IMF-</u> Executive-Board-Concludes-2016-Article-IV-Consultation
- IOM. (2015). Suriname Migration Profile: A study on emigration from, and immigration into Suriname (pp. 172). Georgetown, Guyana/Paramaribo, Suriname: International Organization for Migration/Ministry of Foreign Affairs of the Republic of Suriname. Retrieved from: <u>https://publications.iom.int/books/suriname-migration-profile-study-emigration-and-immigration-suriname</u>
- Kromodihardjo, R. (2018). *The State Health Foundations' progress towards Universal Health Coverage*. Paper presented at the 12th Caribbean Conference on National Health Financing Initiatives, Paramaribo, Suriname.
- Larye, S., Goede, H., & Barten, F. (2015). Moving toward universal access to health and universal health coverage: a review of comprehensive primary health care in Suriname. *Revista Panamericana de Salud Pública, 37*, 415-421. Retrieved from <u>https://scielosp.org/article/ssm/content/raw/?resource_ssm_path=/media/assets/rpsp/ v37n6/v37n6a07.pdf</u>
- MacDonald, S. B. (2017). Suriname's Economic Crisis. Retrieved from <u>https://www.csis.org/analysis/surinames-economic-crisis</u>
- MOH. (2011). *Suriname: National Health Sector Plan 2011-2018* (pp. 100). Paramaribo: Ministry of Health. Retrieved from:
- OECD, Eurostat, & WHO. (2011). A System of Health Accounts: 2011 Edition (2011 ed. Vol. 2011): OECD Publishing.

- Oof, G. (2016). *Inflation and economic activity*. Paramaribo: Centra Bank Van Suriname. Retrieved from:
- PAHO. (2016). Disease and condition Master sheets for HiAP-National Consensus Workshop Suriname. Health in All Policies. Washington, DC: PAHO. Retrieved from: <u>https://www.paho.org/sur/index.php?option=com_content&view=article&id=494:he</u> alth-in-all-policies-suriname&Itemid=563
- PAHO. (2017) Health in the Americas. Washington, D.C.: Pan American Health Organization.
- PAHO. (2018). Suriname: Increasing Access to medicines and Health Technologies-PAHO Strategic Fund [Press release]. Retrieved from <u>https://www.paho.org/sur/index.php?option=com_content&view=article&id=520:in</u> <u>creasing-access-to-medicines-and-health-technologies-paho-strategic-</u> fund&Itemid=563
- Rao, M. G., & Seth, A. (2009). Fiscal Space for Achieving the Millennium Development Goals and Implementing the Tenth Plan in Bhutan. *Economic and Political Weekly*, 44(35), 51-59. Retrieved from <u>http://www.jstor.org/stable/25663493</u>
- Sharma, J. (2016). An assessment of fiscal space for health in Bhutan. *The International journal of health planning and management*, 31(3), 296-308. doi:10.1002/hpm.2295
- Suriname Planning Bureau Foundation. (2017). *Policy development Plan 2017-2021. Part 1. Development priorities of Suriname.* Paramaribo: Government of the Republic of Suriname. Retrieved from:
- Tandon, A., & Cashin, C. (2010) Assessing public expenditure on health from a fiscal space perspective. *Health, Nutrition and Population Discussion Paper*. Washington: World Bank.
- UNDP. (2018). Human Development Index Retrieved from <u>http://hdr.undp.org/en/data#</u>. Retrieved November 2017, from UNITED NATIONS DEVELOPMENT PROGRAMME <u>http://hdr.undp.org/en/data#</u>
- United Nations. (2018). *World economic situation and prospects 2018*. New York, NY: Naciones Unidas. Retrieved from: <u>https://www.un.org/development/desa/dpad/document_gem/global-economic-monitoring-unit/world-economic-situation-and-prospects-wesp-report/</u>
- United Nations Population Division. (2017). Quinquennial Population by Five-Year Age Groups Male & Female Retrieved from _ https://population.un.org/wpp/Download/Standard/Population/. Retrieved November 2018. from United Nations https://population.un.org/wpp/Download/Standard/Population/
- WHO. (2018). Global Health Expenditure Database.
- World Bank. (2018). *World Development Indicators*. World Development Indicators. Retrieved from: <u>http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators</u>

- Xu, K. (2005). Distribución del gasto en salud y gastos catastróficos: metodología. *FER/EIP Discussion Paper*. <u>http://www.who.int/iris/handle/10665/85626</u> Retrieved from <u>http://www.who.int/iris/handle/10665/85626</u>
- Xu, K., Saksena, P., Jowett, M., Indikadahena, I., Kutzin, J., & Evans, D. B. (2010). Exploring the thresholds of health expenditure for protection against financial risk. World Health Report (2010) Background Paper,(19). Retrieved from <u>http://www.who.int/healthsystems/topics/financing/healthreport/19THE-thresv2.pdf?ua=1</u>