



Centrale Bank van Aruba

Sustainable government policies

RECOMMENDATIONS TO THE GOVERNMENT OF ARUBA FOR THE PERIOD 2017-2021

DECEMBER 2017

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List of abbreviations

ABB	Algemene Bestedingsbelasting (general spending tax)
Afl.	Aruban florin
AOV	Algemene Ouderdomsverzekering (general old age pension system)
APFA	Stichting Algemeen Pensioenfonds Aruba (civil servants pension fund)
ATA	Aruba Tourism Authority
AWW	Algemene Weduwen- en Wezenverzekering (general widowers and orphans insurance)
AZV	Algemene Ziektekostenverzekering (general health insurance)
BAZV	Bestemmingsheffing AZV (the so-called health levy)
BBO	Belasting op Bedrijfsomzetten (turnover tax)
BOP	Balance of payments
CAFT	College Aruba Financieel Toezicht
CARICOM	Caribbean Community
CARTAC	Caribbean Regional Technical Assistance Center
CBA	Centrale Bank van Aruba (central bank of Aruba)
CBS	Centraal Bureau voor de Statistiek (central bureau of statistics)
DeMPA	World Bank's Debt Management Performance Assessment
DF	Department of Finance
DMA	Debt management office
DPI	Debt performance indicator
DRH	Departamento di Recurso Humano
ECCU	Eastern Caribbean Currency Union
ELMAR	Naamloze Vennootschap Electriciteitsmaatschappij Aruba (the publicly owned electricity provider)
FCCA	Fundacion Cas pa Comunidad Arubano
FDA	Fondo Desaroyo Aruba
FDI	Foreign Direct Investment

FMSA	Fuels, Marketing and Sales Aruba
FTE	Full-time equivalent
GDP	Gross domestic product
GOA	Government of Aruba
ILO	International Labour Organization
IMF	International Monetary Fund
LAFT	Landsverordening Aruba Financieel Toezicht (State Ordinance Aruba Financial Supervision)
LIDCs	Low-income developing countries
MTB	Medium-term budget estimates
NCPF	National Commission on Public Finance
NFA	Net foreign assets
OGD	Open Government Data
PAYG	Pay-as-you-go system
PPP	Public Private Partnerships
RA	Revenue Authority
RDA	Refineria di Aruba
SDGs	Sustainable development goals
SEPB	Stichting Educacion Profesional Basico
SETAR	Servicio di Telecomunicacion di Aruba (Setar) N.V. (a publicly owned telecommunications company)
SOGA	Stichting Onroerend Goed Aruba
SVB	Sociale Verzekeringsbank (social security bank)
TADAT	Tax Administration Diagnostic Assessment
TPEF	Tourism Product Enhancement Fund
USA	United States of America
VAT	Value added tax
WEB	Water en Energie Bedrijf Aruba N.V. (the publicly owned water and power company)

Executive summary and recommendations

In this report, the Centrale Bank van Aruba (CBA) presents policy recommendations to the new Government of Aruba (GOA) for the period 2017-2021. It focuses on the soundness of Aruba's public finances, sustainability of Aruba's balance of payments, and good governance in the public sector. Sound public finances, sustainable balance of payments, and good governance are prerequisites for macroeconomic and financial stability, as well as sustainable economic development and inclusive economic growth. In the following, the main recommendations are discussed for each of the three topics.

Public finance

This report indicates that the government of Aruba (GOA) has a number of fiscal challenges. Though the GOA managed to comply with the fiscal rules of the *Landsverordening Aruba Financieel Toezicht* (LAFT) in 2015 and 2016, in part because of incidental revenues, several structural weaknesses in the government finances were not addressed. Consequently, the fiscal outlook shows consistent fiscal deficits and a continued growth in the government debt to GDP ratio to more than 90 percent in 2021 and more than 100 percent in the long-term in a scenario without additional measures. Building fiscal space is important to cope with adverse macroeconomic developments over the economic cycle and to be able to address possible implicit liabilities related to aging, like pensions and health care funds.

The main fiscal challenges are the following:

1. The fiscal burden of Aruba is one of the highest among a number of selected Caribbean countries.
2. The intensification of the collection of tax arrears boosted government revenues in the period 2013-2017. However, the expectation is that the added gains from these efforts will lessen going forward.
3. The large share of personnel costs in total expenditures remains a problem, as these expenses crowd out spending in other important areas.
4. The completion of several PPP-projects puts additional pressure on future government budgets.
5. The expected rise in the health care costs is projected to result in growing transfers of the GOA to the General Health Insurance (AZV)
6. Rising interest expenses squeezes out spending in other areas.

Against this background, most of the suggestions provided in the CBA's 2013 report "A roadmap to fiscal sustainability in Aruba: policy recommendations to the Government of Aruba for the period 2013-2017" remain relevant, while new recommendations emerge. In general, GOA's medium-term budgetary policies should focus on reducing the government debt burden to more sustainable levels, promoting sustained non-inflationary inclusive economic growth, and focusing government expenditure on providing essential public goods and services, such as education, infrastructure, health care, public safety, and social protection. The recommendations presented in this report include, among others, revenue-enhancing and spending reduction measures.

Revenue-enhancing measures

The CBA recommends the GOA, among others, the following steps to boost its revenues:

1. Introduce a new governance regime, i.e., a 'sui generis' status, for the Tax Department (i.e., 'Departamento di Impuesto') with the aim of further increasing the efficiency and effectiveness of tax collection and promoting a high level of compliance. This would limit the necessity for the introduction of new and/or the increasing of existing taxes and social security contributions to the most necessary changes to prevent a further rise in the fiscal deficit.
2. Assess the relative strengths and weaknesses of the administration of Aruba's tax system by applying the Tax Administration Diagnostic Assessment Tool (TADAT). TADAT is a partnership between the International Monetary Fund (IMF), the World Bank and donors contributing to the TADAT initiative. A TADAT assessment provides country authorities with a better understanding of the health of the system of tax administration, the extent of reform required, the relative priorities for attention, and the basis on which to develop plans for future reform initiatives.
3. Increase the effectiveness of the collection of and compliance with the AZV and SVB premiums and the tourism levy by giving the General Health Insurance (AZV), Social Security Bank (SVB) and the Aruba Tourism Authority (ATA) the responsibility for the collection, control and audit of their revenues. In these cases, the Tax Department should serve only as the front office for the collection of these incomes
4. Broaden the tax base by shifting from direct to indirect taxes, possibly by introducing a general spending tax (ABB) (replacing the current turnover tax (BBO)). The ABB is relatively easy to implement while the administrative burden is less compared to a value added tax (VAT) system.
5. Simplify the tax system by limiting the number of tax brackets.
6. Reduce the higher income tariff to make it more attractive for skilled labor in order to promote innovation.
7. Replace the motor vehicle tax by a rise in the excises on gasoline.
8. Eliminate various small, inefficient and/or international controversial taxes.

9. Digitize further the tax administration (introduce e-Taxes).

Spending reduction measures

The CBA suggests to the GOA, among others, the subsequent measures to contain and/or reduce government expenditures:

1. Contain and/or reduce the wage bill by, among others,
 - a. establishing a link between the creation of FTE's and the approved personnel budget,
 - b. implementing a ceiling on wages and/or employment,
 - c. limiting the time a person can spend in the redundancy pool (the so-called "overtolligheidspoel"),
 - d. depoliticizing the hiring of government employees,
 - e. limiting the number of employees that can be seconded from the government departments to the offices of the Ministries,
 - f. ensuring merit based recruitment and promotion and discontinuing the automatic indexation or periodical increases of civil servants' wages by introducing a performance based system.
2. Reform the AZV further by, among others, introducing co-payments for a number of health care services, further expanding the exploitation of regional medical centers for treatments that cannot be performed in Aruba, and facilitating data exchange between organizations for auditing and control purposes, as well as expanding AZV's authority and responsibility for the collection, control and audit of the AZV premium and the BAZV.
3. Strengthen the general old age pension system (AOV) further by, among others, linking the AOV-pension age to the average life expectancy, as well as expanding SVB's authority for the collection, control and audit of the premiums.
4. Maintain a limit on PPP-projects and other contingent liabilities.
5. Maintain at a minimum a balanced budget going forward in order to reduce the debt to GDP ratio to a more sustainable level and also the ensuing interest expenses.
6. Ensure a public debt management strategy in accordance with best practices.
7. Apply an e-government strategy, using advanced information technology, for improving public service delivery, thereby contributing to better-informed decision making as well as the efficient use of resources.

Despite the fiscal constraints, the CBA encourages the GOA to increase its capital expenditures as well as other expenditures (such as in education) that promote economic growth. To this end, the GOA could contemplate creating a sovereign wealth fund with money from the incidental and/or windfall revenues, including possible revenues generated from the exports of natural resources. The monies in the

sovereign wealth fund should be used exclusively for debt reduction or otherwise growth enhancing expenditure outside the general budget. Moreover, the CBA suggests the GOA to introduce a minimum target for (capital) expenditures with large estimated growth effects, such as expenditures in education.

Balance of payments

CBA's forecasts illustrate expected deficits on the current account of the balance of payments as well as on the overall balance of the balance of payments. These anticipated deficits are projected to result in a downward trend in the international reserves. However, adequate international reserves, and therefore sustainable balance of payments, are a prerequisite for maintaining the current peg of the Aruban florin (Afl.) with the US\$. To reverse this development, it is of utmost importance that the government takes measures swiftly.

To improve the sustainability of Aruba's balance of payments, the CBA presents the following recommendations:

1. Lower government expenditures by implementing the measures related to government finances mentioned earlier.
2. Reduce further government debt to achieve a decline in interest payments abroad.
3. Restructure government debt to get lower interest rate on its outstanding and new debt.
4. Increase excises on oil products to contain domestic spending hereof.
5. Raise import duties on luxury goods.
6. Promote local agriculture industry to reduce imports of goods.
7. Promote foreign direct investment for projects that could potentially generate foreign funds in the long run.
8. Lower wage and income tax to attract highly skilled labor to stimulate the exports of services.
9. Increase fuel efficiency by, among others, promoting the use of electric cars by 2030.

Good governance in the public sector

According to the IMF, good governance refers to the management of government in a manner that is essentially free of abuse and corruption, and with due regard to the rule of law. Good governance is important for better informed and longer-term decision making, more efficient use of resources, and creating safeguards for achieving policy objectives.

Regarding good governance, the CBA recommends the GOA to focus on:

1. Improving fiscal governance by introducing fiscal rules beyond 2018 and deciding on a fiscal council after 2018.
2. Embracing the philosophy of Open Government Data, i.e., a philosophy – and increasingly a set of policies – that promotes transparency, accountability, and value creation by making government data available to all. Note that policy on openness of information is an anti-corruption strategy.
3. Ensuring a data driven digital transformation, thereby contributing to better-informed decision making as well as the efficient use of resources.
4. Adopting, in close collaboration with relevant stakeholders, a holistic (island-wide) anti-corruption strategy, focusing, among others, on creating the right incentives, tackling the vulnerable sectors, promoting transparency, building shared values and strengthening the controlling institutions.
5. Create a department, under the responsibility of the prime minister, in charge with good governance.

1 Introduction

This report presents recommendations of the Centrale Bank van Aruba (CBA) to the new Government of Aruba (GOA) for the period 2017-2021. It focuses on the soundness of Aruba's public finances, sustainability of Aruba's balance of payments and good governance in the public sector. Sound public finances, sustainable balance of payments and good governance are prerequisites for macroeconomic and financial stability as well as sustainable economic development and inclusive economic growth. Building fiscal space is important to be able to cope with adverse macroeconomic developments over the economic cycle and to address possible implicit liabilities related to aging, like pensions and health care funds. Adequate international reserves, and therefore sustainable balance of payments, are a prerequisite for maintaining the current peg of the Aruban florin (Afl.) with the US\$. Good governance is important for better informed and longer-term decision making, more efficient use of resources, and creating safeguards for achieving policy objectives.

The report starts with a discussion of the fiscal outlook for the medium and long term in a scenario without additional measures (i.e., a so-called unchanged policy scenario) in Chapter 2. Next, Chapter 3 elaborates on reforms in fiscal revenues and tax administration to boost government revenues. Given the high wage bill, Chapter 4 reviews possible avenues to redesign government compensation and employment. Since the fiscal outlook shows increasing GOA's transfers to the General Health Insurance (AZV) in the medium to long term in an unchanged policy scenario, Chapter 5 explores possible measures to contain these transfers. Though the projections show decreasing surpluses in the general old age pension fund (AOV), Chapter 6 presents possible strategies to strengthen further the position of this fund. Chapter 7 argues that despite the existing and anticipated fiscal constraints, it is important to promote capital expenditures and other growth enhancing expenditures. Chapter 8 reviews the current debt management practices against best practices to show a number of possible points of improvements. Next, Chapter 9 reviews the key drivers of the balance of payment and discusses possible measures to improve the balance of payments position. Finally, Chapter 10 discusses some thoughts on promoting good governance in the public sector.

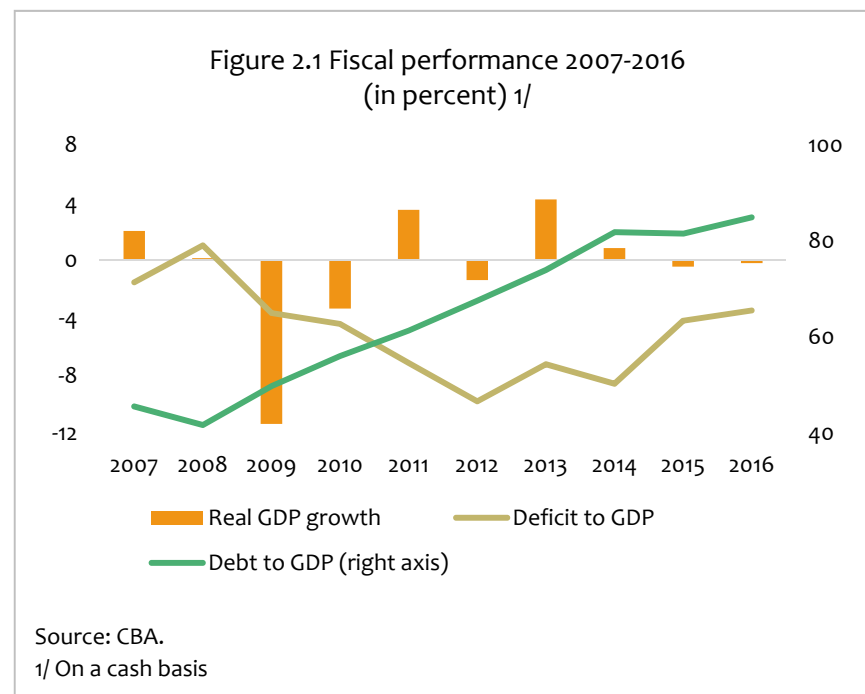
2 Fiscal outlook

This chapter elaborates on the fiscal outlook, showing projections of Aruba's public finances in the medium and long term. It starts with a brief analysis of the fiscal performance in the past decade in section 2.1, followed by a discussion of the fiscal outlook in an unchanged policy scenario as well as a brief review of debt sustainability in section 2.2. Section 2.3 presents some concluding remarks, highlighting the challenges in the medium to long term.

2.1 Fiscal performance

Since obtaining its Status Aparte in 1986, Aruba has been incurring fiscal deficits¹ for most years with some exceptions which are largely due to incidentals. This outcome is related in part to the high economic vulnerability of Aruba as a small open economy, which makes its economy and also its public finances susceptible to both internal and external shocks. Nevertheless, expansionary fiscal policy contributed largely to a worsening in the underlying fiscal balances (CBA, 2013).

Looking back at the past 10 years (i.e., the period 2007-2016)², the GOA recorded fiscal deficits in most years (see Figure 2.1), with the exception of 2008. In 2007, the fiscal deficit (on a cash basis) stood at 1.5 percent of GDP, despite the introduction of the *Belasting op Bedrijfsomzetten* (BBO, i.e., the turnover tax) and a boost in government revenues following a strong performance in the tourism sector as well as a rise in consumption (CBA, 2008). This result is due largely to growing costs related to the General Health Insurance (AZV) as well as rising personnel and interest costs. In 2008, thanks to the proceeds of the sale of the Plant Hotel, the government ended the year with a financial surplus of 1.0 percent of GDP. However, in the following years, the effects of the global financial crisis



¹ Fiscal deficit (surplus) and (government) financial deficit (surplus) are used interchangeably in this report.

² The 2016 expenditure figure includes the statistical difference for comparability reasons.

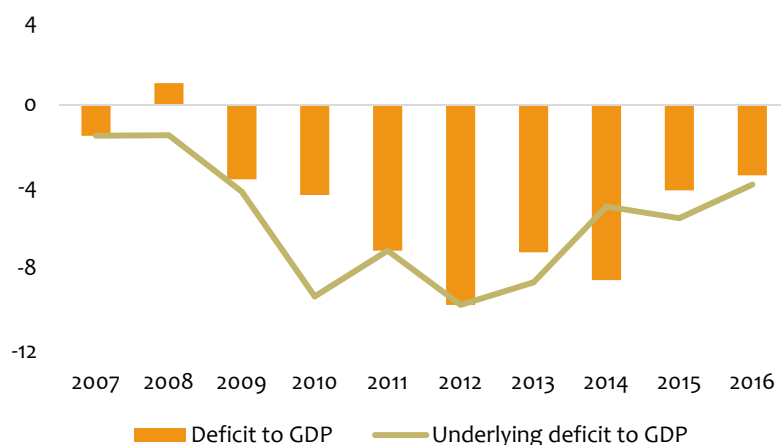
of 2008 and the closure of the oil refinery severely weakened Aruba's economy, worsening the issues already present in Aruba's public finances. As such, the government decided to implement an expansionary fiscal policy in order to help boost the economy³. However, this led to an increase in expenditure over the next few years, and a growing debt level. All in all, the fiscal deficit to GDP ratio peaked over this ten year time span (2007-2016) in 2012 at 9.8 percent, while the government debt to GDP ratio expanded by 22.0 percentage points to 67.6 percent in 2012 compared to 2007.

Concerns about Aruba's debt level started to arise. With added pressures from the Council of Ministers of the Dutch Kingdom, the government decided to take actions in order to rein in costs and increase revenues. The emphasis was initially on reaching a balanced budget and lowering the debt to GDP ratio. In 2013, a Balanced Budget Agreement, which aims at reducing gradually the government financial deficit till reaching a balanced budget in 2016, was signed by the Council of Ministers of Aruba. In addition, medium term budget estimates were introduced in 2014. Furthermore, in 2014, the government introduced several reforms to the social security funds, i.e., the AZV and the general

old age pension system (AOV), and the civil servants pension fund (APFA) in order to guarantee their sustainability, and reduce any explicit or implicit government liabilities associated with these funds. In 2015, the state ordinance *Landsverordening Aruba Financieel toezicht (LAFT)*, which incorporates norms for the fiscal balance in the period 2015-2018, was passed in Parliament and the *College Aruba Financieel Toezicht (CAFT)* was founded. CAFT's task is to oversee Aruba's compliance with the fiscal norms set out in the LAFT as well as to advise the GOA and report to the Council of Ministers of the Dutch Kingdom.

Although, it is noticeable that the growth in the debt level has diminished in the last couple of years due in part to mentioned reforms and the introduction of the LAFT-norms, the debt level has continued to rise, reaching a debt to GDP ratio of 84.9 percent at the end of 2016. Moreover, at the end of 2016, interest expenses had increased by 105.8 percent when compared to 2007. Looking at the underlying deficit (see Figure 2.2), it can be noted that incidentals have played a significant role in the fiscal

Figure 2.2 (Underlying) fiscal deficits 2007-2016
(in percent) 1/



Source: CBA.

1/ On a cash basis.

³ Source: Ontwerplandsverordening tot vaststelling van Begroting van de begroting van de ministeries van het Land voor het dienstjaar 2011.

outcome over the period. The average deficit to GDP ratio over the past ten years was 4.7 percent, while the average underlying deficit to GDP ratio was 5.3 percent.

2.2 Outlook in an unchanged policy scenario

After the global financial crisis of 2008, public finance has been at the forefront worldwide, and in Aruba this has been particularly the case in the last few years. Persistent gaps between government revenues and expenditures, as well as less favorable economic conditions, led to a growing government debt burden in recent years. This persistent increasing pattern is worrisome as it can render government finances unsustainable.

Sustainable public finances and smaller public debt burdens are important elements to ensure sufficient fiscal space to cope with adverse macroeconomic developments over the economic cycle. Over a longer term perspective, building fiscal space is important to be able to address possible implicit liabilities related to aging, like pensions and health care funds. With this in mind, a medium term outlook, by itself, is not sufficient to evaluate the health of the current fiscal policy. Looking at a longer term horizon, one is better able to assess if the current government fiscal policy is sustainable.

As such, the CBA has estimated a government finance outlook for the central government, under an unchanged policy scenario, up to the year 2032 that covers the central government. Naturally, projecting economic and public finance variables for any time horizon is difficult, and a longer time frame is subject to even more uncertainties. The analysis is not intended to be a forecast of what will happen over the next 15+ years. However, it can provide a useful estimate of the financial benefits and costs associated with the current fiscal policy, and serve as a tool for policy change.

Main assumptions⁴

The government finance outlook takes place under the assumption that there are no changes to the current fiscal policy. As such, the 2017 approved budget is taken as the starting point, rolling it forward under certain economic expectations. The estimates of government revenues are based largely on the nominal GDP forecast of the CBA, taking into account that the intensification in the collection of tax arrears will slowly wind down in the coming years. Moreover, the outlook acknowledges increased compliance and efficiency gains in recent years.

⁴ Please note that the 2016 figures in section 2.2 are on a cash basis (source: Government finance statistics of the CBA).

Note, however, that compliance rates are in general still below par. Dividend income from the Refineria Di Aruba (RDA) are also accounted for.

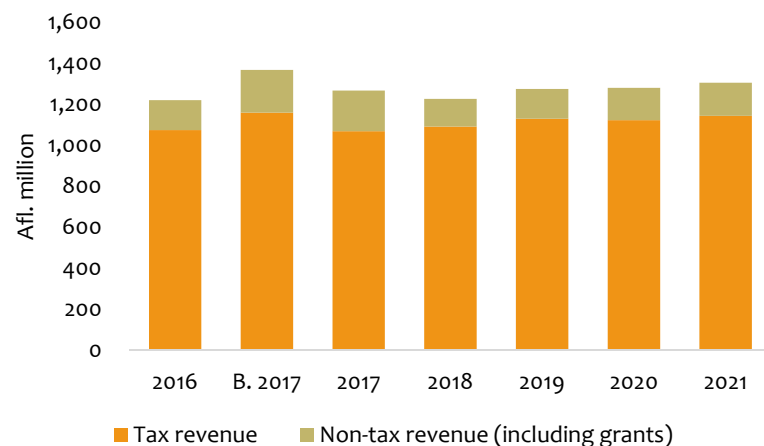
This outlook has the following presumptions with regard to government expenditures. Personnel expenses are estimated to grow with 2 percent annually, accounting for the automatic periodical increases in the civil servants' salaries. Outlays on goods and services as well as other expenditures are expected to grow in line with inflation. Payments related to PPP⁵-projects are according to the medium term estimates of the GOA and are maintained constant after 2020. Interest payments are based on the repayment schedule of the Department of Finance⁶, assuming an interest rate of 4.5 percent for new domestic loans and a rate of 6.5 percent for new external loans. Government investments are projected to remain fixed at a 5-year average (2010-2014) of GOA's transfers to the Fondo Desaroyo Aruba (FDA). Furthermore, this outlook takes into account the SVB projections for the AOV fund for the period 2017-2030, which show declining AOV surpluses in mentioned period. Consequently, the CBA projects small deficits for the AOV fund in 2031 and 2032. Transfers to the AZV are estimated as the difference

between the expected revenues of the AZV as estimated by the CBA (in line with the economic growth) and the anticipated expenditures as projected by the AZV itself. Lending minus repayment are held constant at 2017 budgeted figure.

Medium term outlook: 2017-2021

Revenues are anticipated to grow by 7.0 percent by 2021, when compared to 2016 (see Figure 2.3). The 2017 estimate includes some large incidentals, totaling Afl. 67 million, related to the Valero Settlement Agreement as well as the proceeds from the pending sale of the Fuels, Marketing and Sales Aruba (FMSA). If these are not materialized, it would result in significantly lower non-tax revenues for 2017. Going forward, non-tax revenues are anticipated to remain at a lower level than currently budgeted throughout the medium term period.

Figure 2.3 Government revenues 1/



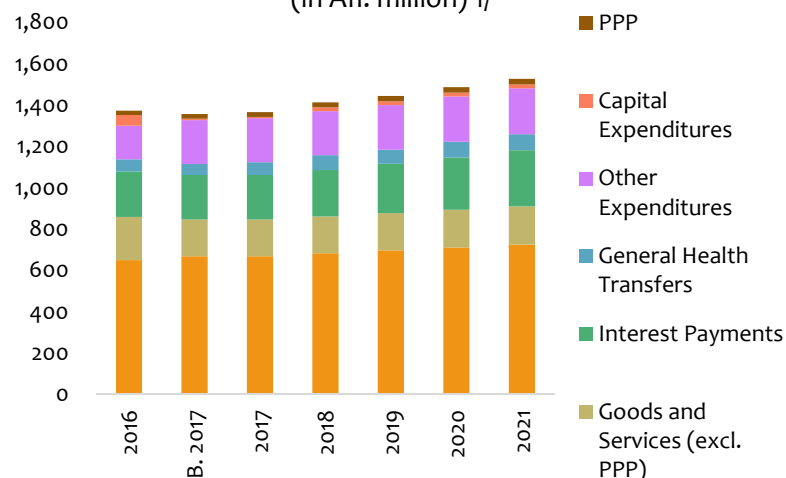
Source: CBA.

1/ B.2007 refers to the 2017 budget.

⁵ Public Private Partnerships.

⁶ Version of August 2017.

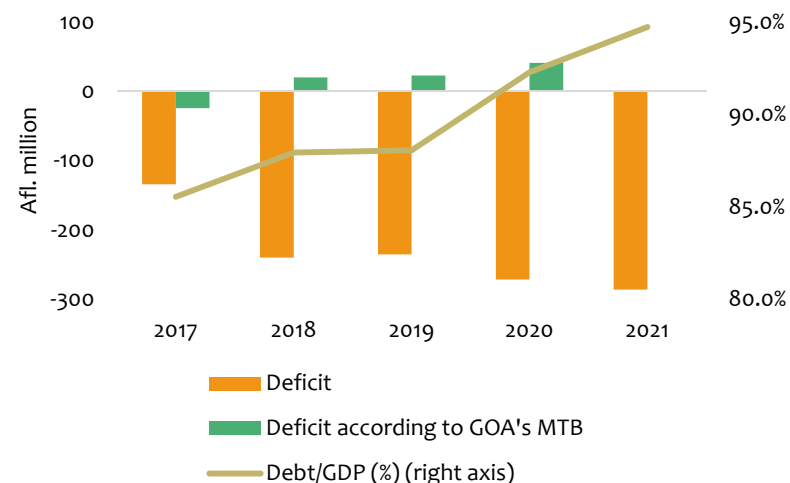
Figure 2.4 Government expenditures
(in Afl. million) 1/



Source: CBA.

1/ B.2007 refers to the 2017 budget.

Figure 2.5 Fiscal outlook 2016-2021



Source: CBA.

Expenditures are expected to increase by 13.9 percent in 2021 compared to 2016 (see Figure 2.4). The main driver behind the growth in total expenditures is personnel expenses, followed by other expenditures and interest expenses. Personnel expenses are anticipated to continue to rise, unless there is a structural change in the way the salaries are increased periodically. Rising healthcare costs, especially in 2018, due to the additional costs related to the renovation of the Horacio Oduber Hospital and the radiotherapy facility at the Imsan, are projected to result in an expansion in AZV's deficit and lead to expanding health transfers by the GOA. Furthermore, the completion of several PPP projects entails that the GOA will have to start paying for these finished projects, and hence push up the total burden of the PPP projects on the budget. Lastly, persistent government financial deficits will continue to drive up interest expenses.

When looking at the outcome (see Figure 2.5), it is noticeable that in 2018 there is a significant increase in the government financial deficit. This continues in the medium term, albeit, at a slower pace, while the gap between the medium-term budget estimates⁷ (MTB) and the

⁷ Source: Supplementary budget of the Government of Aruba for the year 2016.

unchanged policy scenario continues to widen. The debt to GDP ratio is expected to increase to 94.7 percent in 2021. The latter shows the need for further structural fiscal policy changes in order to achieve the medium term budget targets.

Long term outlook

Looking at the longer term, it is evident that the pattern over the medium term is exacerbated (see Figure 2.6), since the growth in revenues does not compensate for the rise in expenditures. Compared to 2016, revenues are anticipated to expand by 47.2 percent by 2032, while expenditures are projected to increase by 65.2 percent, resulting in a continuously increasing government financial deficit over time. Over the long-term period, the three main pressures on the budget are interest rates, general health transfers, as a result of rising healthcare costs primarily due to the aging of the population, and personnel costs. As a result, the debt level is expected to continuously rise due to the issuing of new debt to cover the financial deficits. Consequently, the debt-to-GDP ratio is anticipated to increase to 125.0 percent at the end of 2032, from 84.9 percent in 2016 (see Figure 2.7).

Figure 2.6 Government revenues, expenditures and deficit 2017-2032 (in percent of GDP) 1/

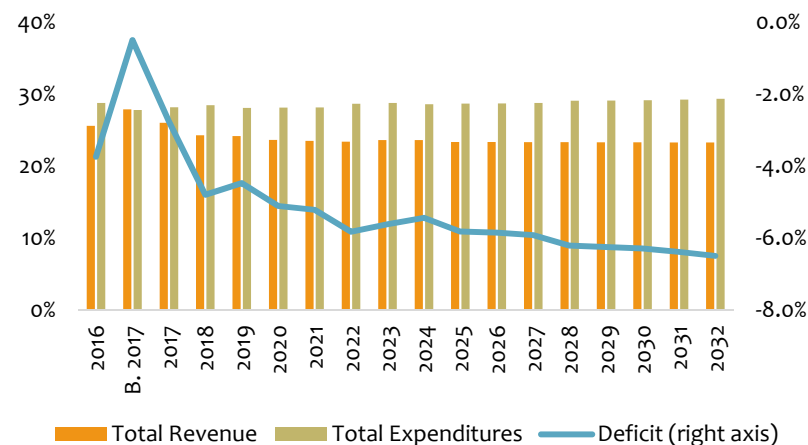
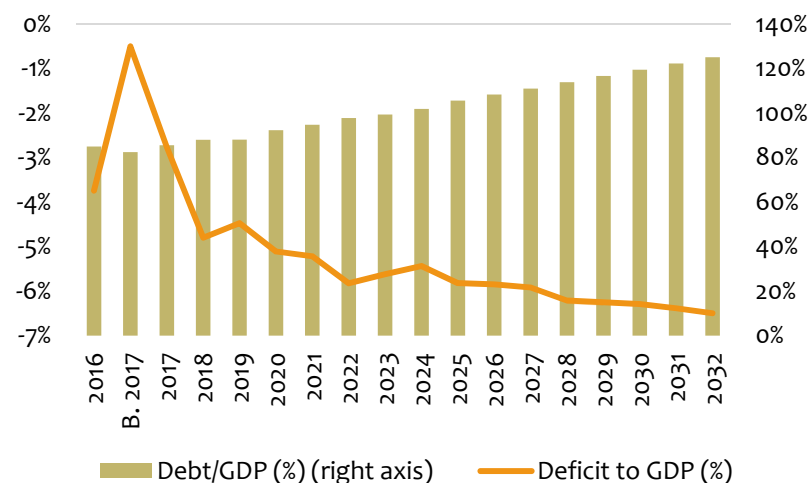
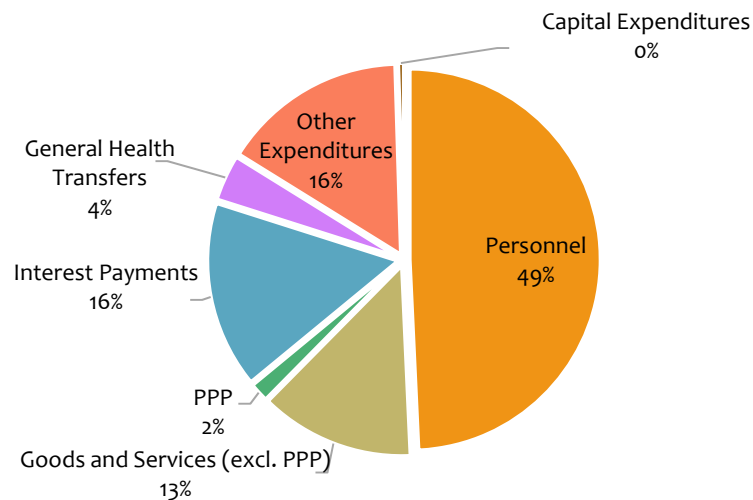


Figure 2.7 Government debt and deficit (in percent)



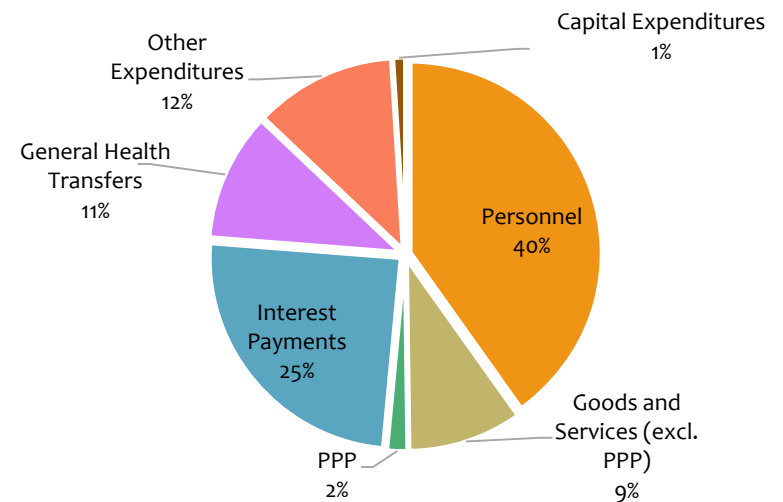
The composition of expenditure shows that personnel costs account for almost half of total expenditure in the Budget 2017, followed by interest costs, and other expenditures (See Figure 2.8). In 2032, however, one can see that as interest payments rise over the period, the share of interest payments takes a larger share of total expenditure, while personnel costs' share reduces over the period (see Figure 2.9).

Figure 2.8 Expenditure according to the 2017 budget



Source: CBA.

Figure 2.9 Expenditure 2032

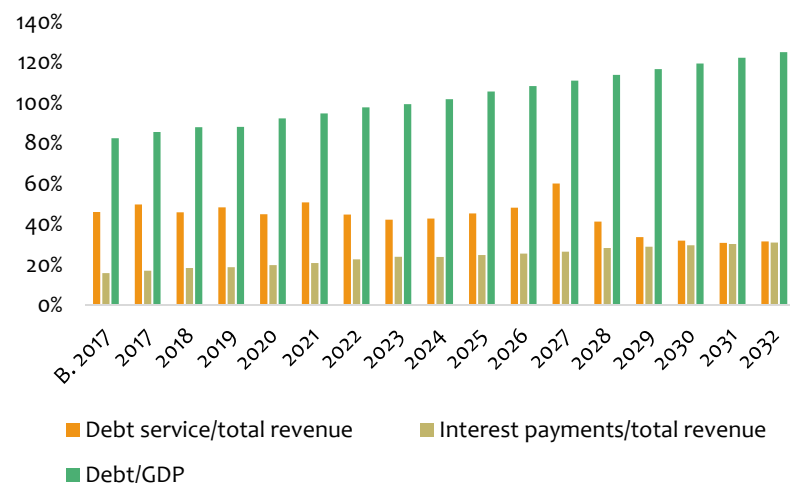


Source: CBA.

Debt sustainability

Assessing debt sustainability is important, since debt sustainability is crucial to a government's ability to achieve or maintain fiscal sustainability. It implies that a government can continue servicing its public debt without requiring an unrealistically large correction to its future revenue or primary expenditure path, entailing stable taxes in the future. A high debt level impairs the government's ability to respond effectively to future economic shocks and adverse events, thereby exacerbating an economy's vulnerability to shocks. The higher the initial debt level, the greater the impact of a given increase in interest rates or of a decline in the economic growth rate on the primary surplus needed to maintain debt stable. In addition, over the long term, rising government debt crowds out private capital formation and thus reduces

Figure 2.10 Debt indicators 1/



Source: CBA

1/ Please note that this scenario assumes a debt maturity of at least 15 years for new borrowings as of 2018.

productivity growth. Furthermore, continuously raising taxes in order to keep the debt sustainable is also not desirable, as it creates distortions in the market. It is thus critical for public debt to be sustainable, and to establish and execute a strategy for managing the government's debt in order to raise the required amount of funding, achieve its risk and cost objectives, and to meet any other public debt management goals the government may have set.

However, debt sustainability is an elusive concept and is not a straightforward matter, though debt indicators can be used for assessing debt sustainability. When looking briefly at a few common debt indicators, it can be noted that the constant increasing debt level in a no policy change baseline scenario (see Figure 2.10), is not sustainable on the long-term.

The debt service to government revenue indicator, which measures the government's ability to pay with domestic sources, surpasses the suggested level for this indicator. According to the IMF, the suggested level for this indicator (for emerging economies) should not surpass the

range between 25.0 and 35.0 percent. As can be noticed, the ratio will be above the upper limits levels for the majority of the baseline scenario period. Note that the scenario assumes a debt maturity of at least 15 years for new government borrowings from 2018 onwards. If the debt maturity would be 10 years instead, then the debt service to government revenue indicator would surpass the suggested level for this indicator during the whole period.

The interest payment to government revenue indicator measures the financial cost in relation to the tax revenue, and is generally used as a measure of the public income tolerance to an increase in unproductive expenditure. This indicator should be between 7.0 and 10.0 percent for emerging economies as advised by the IMF. In the case of Aruba, this ratio will be above the aforementioned threshold for the entire long term outlook.

Aruba's debt to GDP ratio has risen considerably in the last ten years, as mentioned previously, to levels well above the 60.0 percent indicative benchmark the IMF uses in its public debt sustainability analysis framework. Furthermore, the IMF has advised Aruba in its past

article IV reports to lower this ratio to levels under 60.0 percent. The outlook in an unchanged policy scenario shows a further expanding debt to GDP ratio.

2.3 Challenges in the medium to long term

Despite several measures taken by the government in the past years, government debt still amounted to nearly 84 percent of GDP in March 2017, while the fiscal outlook shows a continued growth in the government debt to GDP ratio to more than 90 percent in 2021 and more than 100 percent in the long-term in a scenario without additional policy measures. Moreover, it should be noted that recent budgets and outcomes have been in accordance with the LAFT mandate, partly as a result of incidental revenues. However, the absence of such incidentals in the future combined with no additional structural reforms, poses a risk to reaching a balanced budget in the (near) future.

The fiscal outlook shows a number of challenges in the medium-term. First of all, the intensification of the collection of tax arrears boosted government revenues in the recent years. However, the expectation is that the added gains from these efforts will lessen going forward. Second, personnel costs account for the largest share of total expenditures, crowding out spending in other important areas. Third, the completion of several PPP-projects will put additional pressure on future government budgets. Fourth, the expected rise in healthcare costs is projected to result in growing transfers of the GOA to the AZV, while the returns from BAZV will carry less of the burden going forward. Fifth, the rising debt level is expected to contribute to the expansion of interest payments, nearly reaching a quarter of total expenditure in the long term, squeezing out spending in other areas. Sixth, the declining financial surpluses of the AOV fund, leading to small deficits in last couple of years over the long term period, show that there is no space to reduce or relax the general pension measures implemented over the last few years. Lastly, the measures implemented in the last few years have shown significant improvement in government finances. Nonetheless, the long-term baseline scenario highlights the need for further structural fiscal consolidation in order to reach sustainable government finances in the (near) future.

3 Reforming fiscal revenues and tax administration

This chapter presents several recommendations for reforming the Aruban tax system in such a way that it will generate sufficient revenues while making it less distortive, as well as suggestions for strengthening the Tax Department (i.e., Departamento di Impuesto) to increase its capacity to generate more revenues. These proposals consider lessons learned from fiscal consolidation exercises around the globe. First, most countries concentrate on broadening the tax base by fighting tax evasion, reducing tax exemptions, or increasing coverage. Second, countries that have broadened their tax base limit the use of tax expenditures (e.g., deductions and exemptions) under the personal income tax. Third, the focus should be on increasing the reliance on user charges (i.e., individual payments for services provided, e.g., on transport, water, and waste collection). Fourth, countries aiming for higher tax revenues have developed a tax administration regime that makes it easy for taxpayers to comply, have reformed their tax administration operations, and increased the collection of tax arrears. Furthermore, these advices contemplate the experience of a number of countries around the globe with an alternative governance regime for their tax administration.

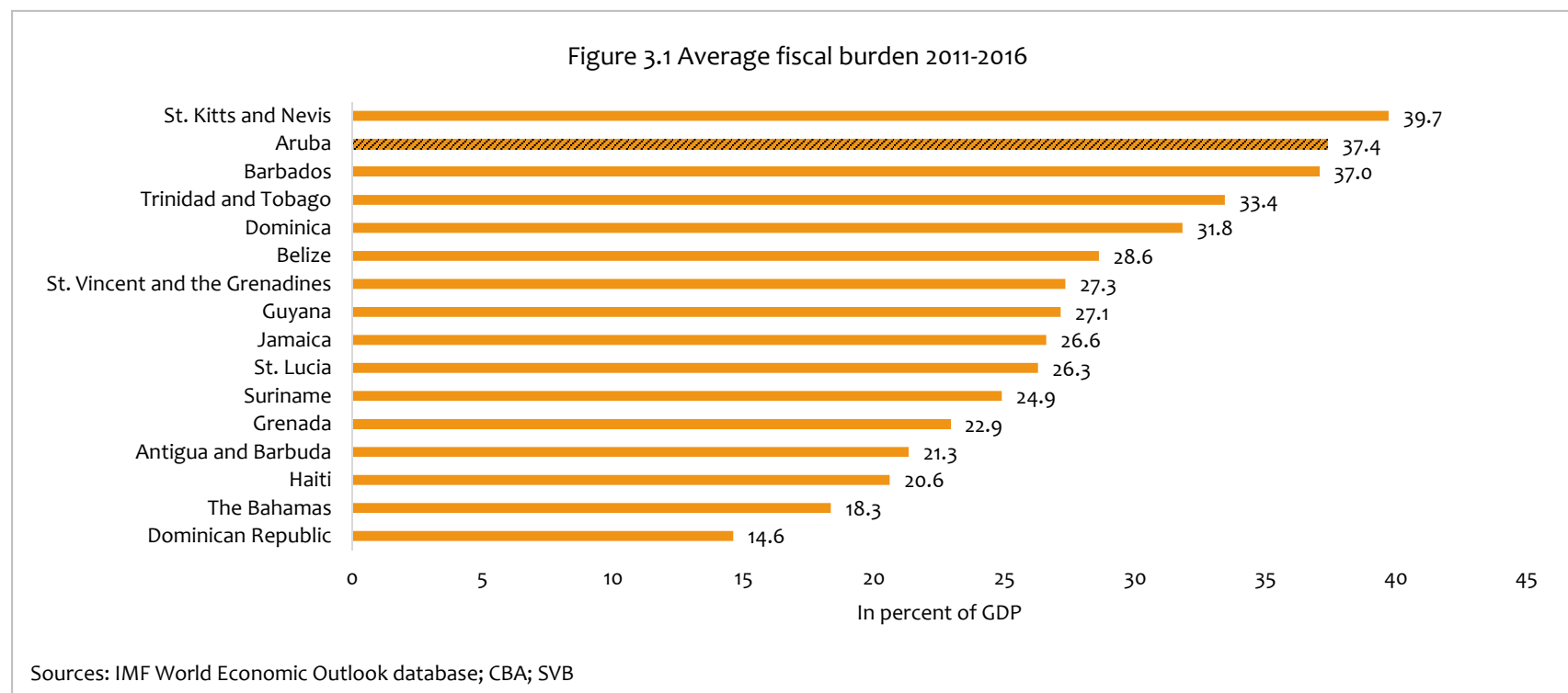
The remainder of this chapter is organized as follows: section 3.1 discusses possible reforms in the Aruban tax system, while section 3.2 elaborates on an alternative governance regime for the Tax Department. Finally, section 3.3 presents some concluding remarks.

3.1 Reforming the Aruban tax system

When augmenting taxes, the government should be mindful of which taxes it raises. The top rates of the wage tax are already very high (the highest rate is 58.95 percent), so increasing these further would make it more difficult for Aruba to attract high skilled labor (IMF, 2013). Moreover, at some point higher tax rates may cause taxpayers to look for more ways to evade the tax, which could cause tax revenues to drop rather than expand as intended. In addition, increasing the profit tax is not desirable since that would deteriorate the competitive position of enterprises in Aruba and make Aruba less attractive for potential new companies.

Moreover, the government should consider the already high fiscal burden of Aruba as compared to its Caribbean peers. Government tax revenues in Aruba were 20.8 percent of GDP during the period 2011-2016. In comparison to its Caribbean peers such as Curaçao (25.4 percent), Barbados (26.7 percent) and Trinidad and Tobago (25.5 percent), this ratio is rather low. However, an analysis of the fiscal burden, i.e., the share of government tax and nontax revenues as well as social security contributions as a percent of GDP, shows that Aruba has the second

highest fiscal burden (i.e., on average 37.4 percent in the period 2011-2016) among sixteen selected Caribbean countries (see Figure 3.1).⁸ European countries such as Cyprus and Malta, which are considered peer countries by Standard & Poor's, have somewhat higher government revenue to GDP ratios (on average slightly over 38 percent in 2011-2016). This higher revenue could be the result of Cyprus and Malta's being part of the euro area and therefore obliged to harmonize their tax rates with the generally higher level of the euro area. The ratio of the developed countries is in general substantial higher as they tend to have a larger social security system. For instance, the average fiscal burden of the Netherlands in this period was 43.4 percent.



⁸ Included in the fiscal burden for Aruba are tax and nontax government revenues, premium incomes SVB and AZV, BAZV, tourism levy and travel promotion levy.

While the tax to GDP ratio of Aruba in comparison to its Caribbean peers may suggest ample room to raise taxes, total government revenues (including social security contributions) to GDP in Aruba appears to be higher than most other Caribbean countries. Consequently, not a lot of space exists to increase government revenues (including social security contributions) relative to GDP, as increasing revenues risks curtailing economic growth. Therefore, merely introducing and/or increasing existing taxes and other nontax revenues as well as social security contributions should be limited to the most necessary changes in the very short term to prevent further rise in the fiscal burden.

Instead of increasing tax rates, the GOA could consider boosting tax revenues by broadening the tax base by shifting the center of gravity of the tax system towards indirect taxation. Indirect taxes are imposed upon transactions instead of persons. In general, the consumers (including tourists) are taxed instead of the persons or companies that earn money. Generally, it is argued that a greater reliance on indirect taxes is more efficient because (1) savings are more lightly taxed which tends to increase the growth rate of the economy, (2) it reduces the disincentive effect on labor supply, and (3) indirect taxes on specific goods can be designed to correct externalities, as in the case of environmentally related taxes (OECD, 2007, p. 33). In the case of Aruba, a shift from direct to indirect taxes would broaden the tax base, since residents who currently do not pay income taxes will have to pay tax under a tax regime that includes some kind of tax on purchases. In addition, tourists visiting Aruba will contribute when they pay for goods and services on the island. The necessity of a shift to indirect taxes was also recommended by the IMF in various Article IV reports. Currently, Aruba has various indirect taxes. The most important ones are the import duties, excises and the turnover tax (BBO). In 2016, indirect taxes generated 45.3 percent of the total tax revenue of the central government. In comparison, in the European Union this ratio for 2015 is 50.7 percent (in individual countries it ranges between 35 and 77 percent).⁹

A shift towards indirect taxes has to be effectuated by replacing the current turnover tax (BBO) by a robust alternative. Note that the introduction of the BBO in 2007 has not been spotless, while the implementation (especially during the first years) showed shortcomings (Kavelaars et al., 2013, p. 282). Currently, the BBO is levied in conjunction with the BAZV which was introduced in December 2014 to finance the health care system. The current BBO/BAZV rate is 3.5 percent. A major disadvantage of the BBO/BAZV is its cascading effect. This is one of reasons IMF (2010) advocates to replace the BBO by a VAT¹⁰-based system. More recently, preparations were started to implement a general spending tax (“ABB”). Despite positive advice from the CAFT (CAFT, 2016), it was put on hold in 2016. The possible options, VAT and ABB, are discussed in Boxes 3.1 and 3.2.

⁹ Eurostat tax revenue statistics (data from 24 November 2016).

¹⁰ Value added tax.

Box 3.1 Towards a Value Added Tax system?

Since the 1990s, and particularly during the last decade, the introduction of the VAT has been a driving force in the modernization of the tax systems in the Caribbean (Schlotterbeck, 2017). Countries in the region have traditionally relied, and continue to rely, on import duties as revenue sources. The VAT has been considered the best instrument to replace a myriad of inefficient taxes, broaden the tax base, and generate a stable source of revenue.

The Caribbean Community (CARICOM) member states, or associate members,¹¹ have carried out tax administration reforms with the support of the Fiscal Affairs Department of the IMF and the Caribbean Regional Technical Assistance Center (CARTAC). Most of them, among which the countries belonging to the Eastern Caribbean Currency Union (ECCU),¹² have introduced a VAT in recent years. This reshaped the structure of tax revenues as the VAT replaced several other taxes on consumption and hotel accommodations. Consequently, revenues from taxes on goods and services (mainly VAT, consumption, and excise taxes) grew from 8.1 percent of GDP in 2001 to more than 10 percent of GDP in 2008, making it the largest source of tax revenue for the ECCU countries. Most of the ECCU countries adopted a standard rate of 15 percent along with a lower rate of 10 percent on tourism industries. Other CARICOM countries have similar VAT rates, while the rates in Central America are generally lower (on average 12.5 percent) (Schipke et al., 2013).

Nonetheless, VAT systems have several weaknesses, most notably exemptions and the treatment of tourism services (Cebotari et al., 2013). The problem with exemptions is that they narrow the tax base, and the list of exemptions tends to expand over time. In addition to exemptions, most countries in the world that have a VAT apply a zero rate to items such as basic foods and a defined portion of monthly household electricity consumption. The objection against a lower rate for tourism services is that it reduces revenues. The justification often given for the lower rate in the Caribbean region is that the demand for tourist services has a high price elasticity, so these rates are necessary to attract tourists who have the option of other destinations. However, it is also argued that while price elasticity in isolation may be high, elasticity is probably much lower for the region as a whole. Since many Caribbean countries have a VAT, a higher rate would not hurt the tourism industry. Moreover, having multiple VAT rates makes administration and compliance more complicated and creates opportunities for abuse.

The implementation of a VAT requires significant preparation time and should be prepared carefully. A successful introduction can only be accomplished with a concurrent improvement of compliance management and further development of a tax paying culture. Furthermore, a relative high registration threshold is essential in order to reduce the collection costs for the tax administration and to diminish the administrative burden for the small enterprise sector of Aruba.¹³

¹¹ Comprising of the following countries and dependent territories: Anguilla, Antigua and Barbuda, the Bahamas, Barbados, Belize, Bermuda, the British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Turks and Caicos.

¹² The ECCU consists of Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines.

¹³ For instance, Barbados has a threshold of US\$ 100,000.

Box 3.2 Or introduce an ABB?

As an alternative for the VAT, a so-called general spending tax (ABB - “*algemene bestedingsbelasting*”), comparable to the one that is currently levied on the BES islands (Bonaire, Sint Eustatius and Saba), can be introduced. This idea was also formulated by the *Commissie Vermeend* in March 2015 (Vermeend et al., 2015). For goods imported into Aruba, the ABB can be levied at the border. This has the advantages that it is relatively easy to implement, difficult to evade, it requires little extra effort from both the Tax Department as well as business administrations while there are no cascading effects. Goods and services produced on Aruba could be levied directly at their manufacturer or supplier.

The CBA recommends pursuing a quick introduction of an ABB replacing the BBO/BAZV, because the ABB is relatively easy to implement while the administrative burden is less compared to a VAT-based system, noting that part of the ABB receipts should be earmarked to finance the health care system (as replacement of the BAZV).

To compensate for the loss of purchasing power caused by an increase in indirect taxes, the average income tax rate could be reduced. The emphasis herewith should be on reduction of the higher income scales to make it more attractive for skilled labor to remain on or to migrate to Aruba. At the same time, it should be considered to simplify the tax system by limiting the number of brackets and to digitize the income tax statement made by the tax payers. In addition, the profit tax could be lowered to offset the potential loss of competitiveness (through higher costs of imports) for businesses and to attract foreign investors. In order to limit the loss of profit tax proceeds, it is advised to refrain from giving new exemptions while existing exemptions should not be renewed. Similar proposals were already in 2011 formulated by the Committee Tax Reform Social Dialogue (Oosterwijk et al., 2011).

In addition to a shift towards indirect taxes, the government of Aruba should consider applying the user-pays principle¹⁴ with respect to the motor vehicle tax, by replacing the motor vehicle tax by increasing the excises on gasoline, while simultaneously introducing a license plate that does not have to be changed every year. This would mean that this tax would also have an indirect character. This recommendation was already proposed twenty years ago by the Committee Modernization Revenue Sources Government (Timmer et al., 1997), while the representatives of the employers in the Committee Tax Reform Social Dialogue (Oosterwijk et al., 2011) and the *Commissie Vermeend* (Vermeend et al., 2015) made the same suggestion. The advantage of this new system is that revenues are much simpler to collect. No longer do people have to waste time standing in line at the tax office. The tax office frees up man-hours that are used each year to collect the motor vehicle tax. In addition, this system will broaden the tax base as tourists also contribute directly as will the persons who do not pay the motor

¹⁴ The user-pays principle signifies that a user of a service or resource pays directly for the amount they use, rather than the cost being shared equally by all users or a community.

vehicle tax under the current system. Moreover, a heavier burden is placed on drivers who drive more miles and make more use of the road infrastructure. Another consequence of such a regime could be that over time drivers might switch to hybrid or more fuel efficient vehicles. This switch would be desirable from an environmental point of view. Reducing fuel imports would benefit Aruba's international reserve position. However, the degree to which such a shift would occur depends on the price elasticity of demand for fuel in the long term, a figure unknown. A disadvantage of the proposed system of excises would be that certain economic activities such as public transportation would see an increase in costs. Often the tariffs for these activities are limited by the government and could be revised (as also pointed out by the Committee Tax Reform Social Dialogue).

The motor vehicle tax revenues in 2016 were Afl. 23.1 million; thus, this is the amount that the increase in the excise on gasoline would have to generate at a minimum. Based on the Afl. 72.8 million in revenues from the excise on gasoline received in 2016 and the excise rate of Afl. 0.714 per liter, the excise rate would have to increase by about Afl. 0.23 per liter to recuperate the amount lost by the elimination of the motor vehicle tax. This calculation assumes that the demand for gasoline is inelastic, at least in the short-term.

Also, the government of Aruba should consider to eliminate various small, inefficient and/or international controversial taxes. Aruba currently has several taxes that generate a low revenue and/or are time-consuming for both tax payers as well as the Tax Department or are internationally controversial. It is considered to be much more efficient to eliminate these taxes. The (often limited) loss of proceeds could well be compensated for by taking it into account when determining the tariff for the new indirect tax. Currently, the stamp duties and succession tax generate very low revenues. They could be eliminated without large consequences. Their combined annual revenue is on average Afl. 3 million. Moreover, since its inception, Aruba has levied a license fee on the purchase by residents of foreign exchange, which is considered by the IMF not to be in line with Article VIII of the Articles of Agreement of the IMF. In subsequent missions, the IMF has repeatedly pointed out this discrepancy. Lastly, they explicitly stipulated that "Aruba maintains an unapproved exchange restriction". Therefore, the government of Aruba should anticipate on the possibility that the foreign exchange tax should be eliminated. A possible alternative is to include it when determining the new rate for the indirect tax, e.g., the ABB as suggested by the CBA.

Finally, the CBA suggests the GOA to assess the relative strengths and weaknesses of the administration of Aruba's tax system by applying the Tax Administration Diagnostic Assessment Tool (TADAT) by TADAT accredited assessors. TADAT is a partnership between the IMF, the World Bank and donors contributing to the TADAT initiative. A TADAT assessment provides country authorities with a better understanding of the health of the system of tax administration, the extent of reform required, the relative priorities for attention, and the basis on which to develop plans for future reform initiatives. A TADAT assessment entails an evaluation of the performance of a country's tax administration by looking at nine outcome areas, namely: the integrity of the registered taxpayer base, the extent of understanding about the compliance risks in the tax system, the quality of support provided to taxpayers to promote voluntary compliance, the extent to which taxpayers meet

their filing obligations, the extent to which taxpayers meet their payment obligations, the accuracy with which taxpayers declare their tax obligations, the adequacy of tax dispute resolution, the efficiency of tax administration, and the level of accountability and transparency.

3.2 Introducing a revenue authority in Aruba¹⁵

Many countries have adopted a revenue authority, i.e., an alternative governance model, for improved revenue administration. A revenue authority (RA) is a governance regime for an organization engaged in revenue administration that provides more autonomy than that afforded a normal department in a ministry (Kidd & Crandall, 2006). In this context, autonomy refers to the degree to which a government department or agency is able to operate independently from government, in terms of legal form and status, funding and budget, and financial, human resources, and administrative practices. However, the RAs remain accountable to the government and should execute its tax policy. More autonomy could be given in the following areas: (i) human resource management; (ii) financial resource management; and (iii) general management.

In general, giving a revenue administration more autonomy than a normal department in a ministry has a number of benefits. For instance, Crandall and Kidd (2010) note that more autonomy can lead to better performance by removing impediments to effective and efficient management while maintaining appropriate accountability and transparency. Taliencio (2004) argues that more autonomy can solve administrative and corporate governance problems, such as low pay and low quality staff as well as patronage-based staff appointments, undue political influence, adequate funding such as a percentage-based cost-of-collection formula. The latter could provide hard incentives to increase collections. In addition to the earlier mentioned advantages, Mann (2004) lists the following advantages: enhanced revenues, greater efficiency, reduced corruption, comprehensive accounting for tax revenues, and integration of databases. An IMF Survey (Kidd & Crandall, 2006) among countries with RAs shows that low effectiveness of tax administration and poor levels of compliance were the main reasons these countries adopted RAs.

However, RAs should not be seen as quick-fix remedies to tax administration inefficiencies. Opponents of RAs argue that the improvement in tax administration could be achieved within already existing government departments and that what really matters is professionalization or good management, not autonomy per se, noting that special treatment to the tax agency could have negative externalities throughout the rest of the government (e.g., Taliencio, 2004; Mann, 2004).

¹⁵ This section is based largely on Chapter “4 Introducing a revenue authority in Aruba” included in CBA (2013). Please refer to mentioned publication for more details.

Figure 3.2 Tax department revenues in percent of government revenues



Source: CBA staff estimates.

In the case of Aruba, the GOA could consider converting the Tax Department (i.e., 'Departamento di Impuesto') into an RA. The conversion into an RA could be accomplished by introducing a new governance regime, i.e., a 'sui generis' status for this department, with the aim of further increasing the efficiency (costs versus revenues) and effectiveness (tax goals) of tax collection and promoting a high level of (voluntary) compliance. Specifically, this department should be given more autonomy, particularly in the areas of human resource management, financial resource management, and general management. GOA has already gained positive experience with the 'sui generis' model of the CBA and the Aruba Tourism Authority (ATA), which could be used as a basis for the new governance structure of this department. A 'Departamento di Impuesto' *Sui Generis* could serve as a catalyst to enable the necessary reforms in revenue administration to support economic growth through proactive review of tax policies and rules, to promote a high level of (voluntary) compliance (through education and enforcement programs, and making

tax-filing convenient and easy), and to strengthen internal capabilities. The expected benefits of these reforms would more than compensate for the expected cost increase for hiring the required personnel and enhancing technological capabilities. Note that the Tax Department generated about 60 percent of total government revenues in 2016 (see Figure 3.2).

Prior to introducing an RA in Aruba, a full review of the problems at the Tax Department and a cost/benefit analysis should be made. The earlier mentioned TADAT-assessment is a main part of this full review. For instance, it is important to determine whether the conditions for success and sustainability are present. Critical success factors include, among others things, strong political support, senior management commitment and determination, the provision of adequate resources, a strong project management approach for implementation, and the development of a sound policy framework. It is also important to bear in mind that the implementation process is time consuming and could take about two years.

3.3 Finding the right approach

In conclusion, when considering revenue-enhancement measures, the government of Aruba should aim to avoid raising the fiscal burden on the economic agents who are already paying their fair share. This could be achieved primarily by broadening the tax base by shifting the burden of taxation away from direct to indirect taxes. A shift to indirect taxes is probably the only way to enable a reduction in income tax and profit tax, which will make Aruba more attractive for the high skilled labor and (foreign) companies. Also, simultaneously, the government should focus on measures to further improve the effectiveness of tax administration (eliminating the backlog of tax-processing work) and the levels of compliance to ensure that every taxpayer contributes his fair share. To achieve this, long term efforts are required. These efforts include strengthening the organization and management of the Tax Department by giving it a ‘sui generis’ status, implementing robust collection systems and building capacity in core tax administration functions (registration, filing and payment enforcement, debt collection, audit, taxpayer services, and processing of appeals) (Russell, 2010), including digitizing further the tax administration (introduce e-Taxes). Moreover, digitization has the potential for improving the enforcement capacity of tax authorities by providing more possibilities for verifying the true economic outcomes of taxpayers and allows governments to implement more sophisticated tax systems (Jacobs, 2017). As part of the reinforcement of the Tax Department, this department should act exclusively as the front office for the collection of the AZV and SVB premiums and the tourism levy, while the AZV, SVB, and the Aruba Tourism Authority (ATA) become responsible for the collection, control, and audit of their income. Additionally, reform of the legal framework and judiciary often is necessary to ensure that the required powers, penalty regimes, and dispute resolution processes are in place.

4 Redesigning government compensation and employment

This chapter provides guidance on how to effectively manage the wage bill in Aruba by redesigning government compensation and employment policies. Mentioned policies play an important role in providing public services, which are crucial for the functioning of economies and the level of well-being experienced by societies. An important factor here is the government's spending on the wage bill. In general, government spending on the wage bill is determined by the government's role in priority sectors, as well as variations in the level of economic development and resource constraints.

Increasingly, countries are experiencing mounting pressures on wage bill spending. Whether it is associated with the fiscal challenges related to aging populations and the need to reduce high public debt levels in advanced economies, or the pressures to expand the coverage of public service in the context of revenue and financing constraints and the need for higher public investment. Therefore, effective management of the wage bill is necessary to ensure that desired public services are delivered in a way that is both cost-effective and fiscally sustainable. This has proven to be a challenge in countries across all income levels and it is no different for Aruba.

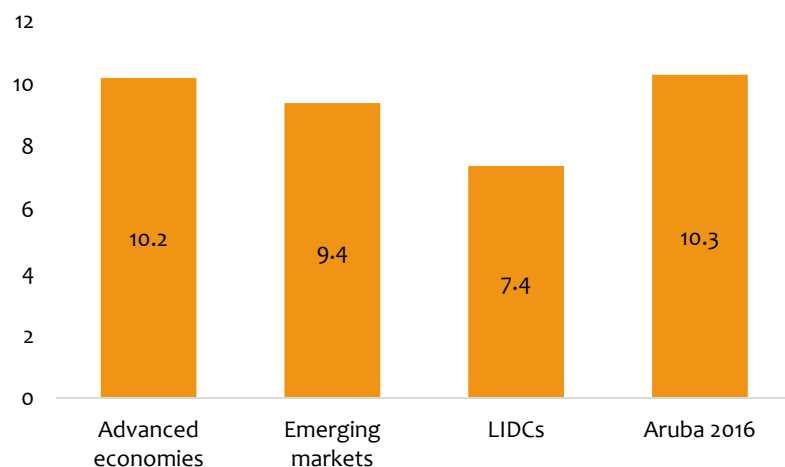
The structure of this chapter is as follows. First, it discusses the trends in compensation and wage bill spending in Aruba in section 4.1.¹⁶ Subsequently, section 4.2 presents recommendations to effectively manage the wage bill in Aruba. Some concluding remarks are presented in section 4.3.

¹⁶ Please note that the international comparisons related to the trends and drivers and macroeconomic implications of the wage bill in this section and also section 4.2 are largely based on IMF (2016b).

4.1 Trends in government compensation and employment in Aruba

The government wage bill plays a critical role in the ability of the government to provide public services. This is reflected in the large share of government spending constituted by the wage bill across countries. On average, wage bill spending by the general government sector varies between 10 percent of GDP in advanced economies to around 7.5 percent of GDP in low-income developing countries (LIDCs), with emerging market economies in between (IMF, 2016b). In Aruba, wage bill spending of the central government stood at 10.3 percent of GDP in 2016 (see Figure 4.1).¹⁷ Note that the general government in Aruba includes the central government, the AZV, the SVB, the Serlimar, the Aruba Tourism

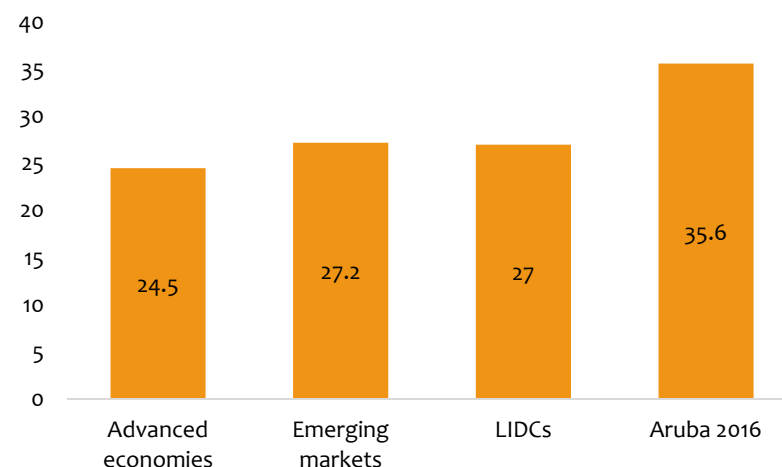
Figure 4.1 Wage bill in percent of GDP 1/



Source: IMF (2016b); CBA.

1/ IMF data is for 2015 or latest available.

Figure 4.2 Wage bill in percent of total expenses 1/



Source: IMF (2016b); CBA.

1/ IMF data is for 2015 or latest available.

¹⁷ It should be noted that this number excludes the wage subsidy payments to the foundations for educators, because these foundations (with the exception of the SEPB) are not part of the general government sector.

Authority (ATA), the University of Aruba, and the Stichting Educacion Profesional Basico (SEPB).¹⁸ When the wage costs of the AZV and the SVB are included, the percentage goes up to 10.9 percent.

As a share of total government spending, the wage bill is higher at 27 percent in emerging markets and LIDCs compared to 24 percent in advanced economies (IMF, 2016b).¹⁹ The difference in the relative size of wage bill spending primarily reflects the choices of countries regarding the role of government in service delivery. As a share of total central government spending, wage bill spending in Aruba stood at 35.6 percent at the end of 2016 (see Figure 4.2). Compared to international standards, this is extremely high.

The government wage bill is also affected by short-term cyclical factors, such as cyclically-induced upswings or downswings in revenues or fiscal consolidation. Wage bill spending appears to be pro-cyclical in many countries, more so in advanced economies compared to emerging markets and LIDCs. Additionally, wage bill spending reacts differently in advanced economies during upswings and downturns, with a larger increase in the wage bill during upswings than the decrease during downturns. Data for Aruba show that wage bill spending does grow at a higher rate in periods of economic growth than in periods of economic downturn. However, the evidence for pro-cyclicality does not appear to be very strong.

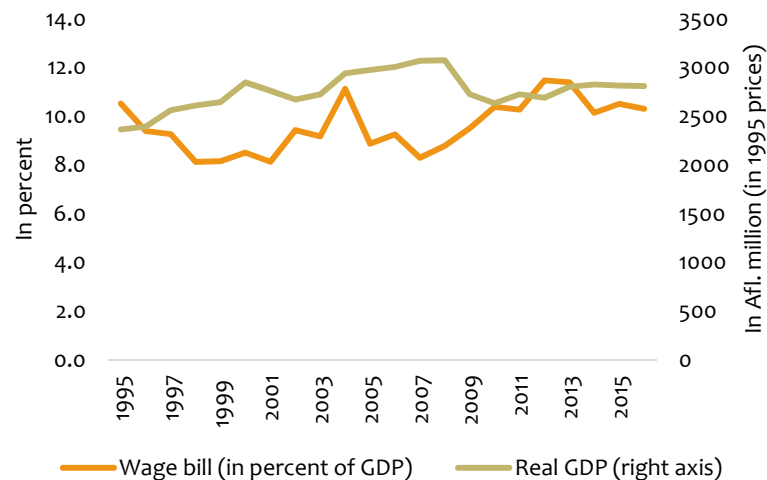
Over a longer period of time, economic development is typically associated with an increase in wage bill spending as a percentage of GDP. According to IMF (2016b), an analysis of long-term trends in wage bill spending shows a 10 percent increase in per capita GDP associated with a 1 percent increase in wage bill spending as a share of GDP, particularly in emerging markets and LIDCs. However, the IMF finds that this relationship weakens in advanced economies, suggesting that the share of the wage bill in GDP stabilizes at higher levels of development. The government wage bill in Aruba has increased over time as is to be expected with economic development, with real GDP trending upwards until emergence of the global financial crisis (see Figure 4.3). However, the wage bill has grown at a faster pace than GDP and its share in GDP is relatively high.

When it comes to the number of government employees in Aruba (i.e., central government plus AZV and SVB), these represented 4.9 percent of the working age population in 2016. In comparison, in advanced economies general government employment amounted to 11.6

¹⁸ Wage data for the complete general government sector were not readily available for use in this chapter. The general government definition for Aruba used here was defined by the Central Bureau of Statistics.

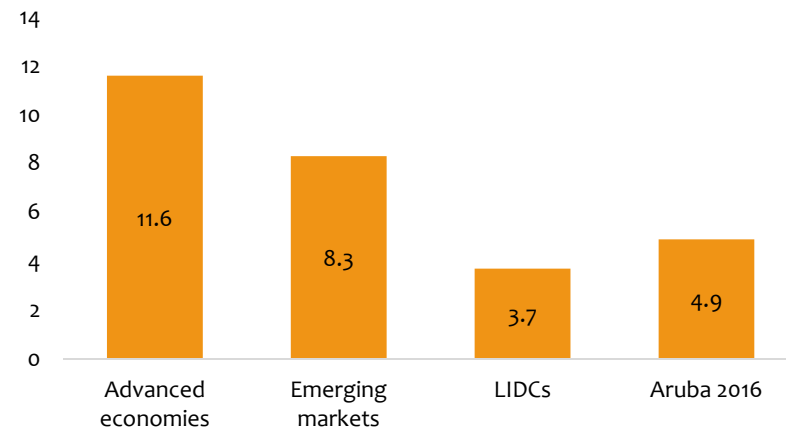
¹⁹ It is worth noting that there are important issues of comparability of data across countries. This can correspond to whether the data covers the general government wage bill or the non-financial public sector, or the central or budgetary central government. The base of measurement of the wage bill might also differ. Wage expenditure can be expressed on an accrual basis, as it is in most advanced economies, or on a cash basis. For Aruba, in this chapter, we have looked at the budgetary central government for the wage bill and employment data.

Figure 4.3 Wage bill and real GDP of Aruba



Source: CBA.

Figure 4.4 Government employment as percent of working age population

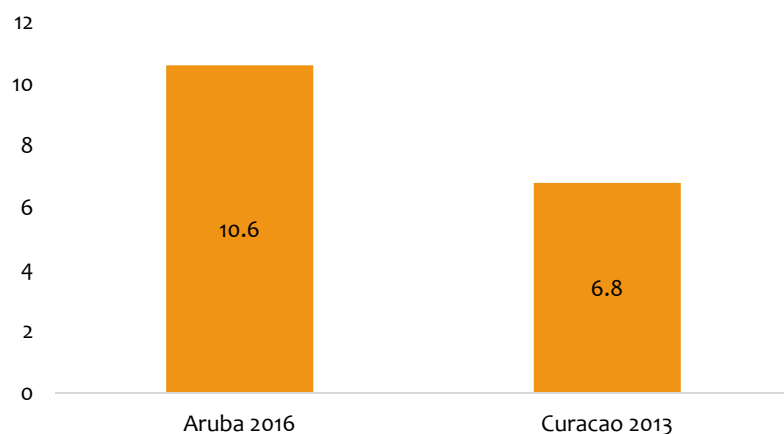


Source: IMF (2016b); CBA.

1/ IMF data is for 2014 or latest available.

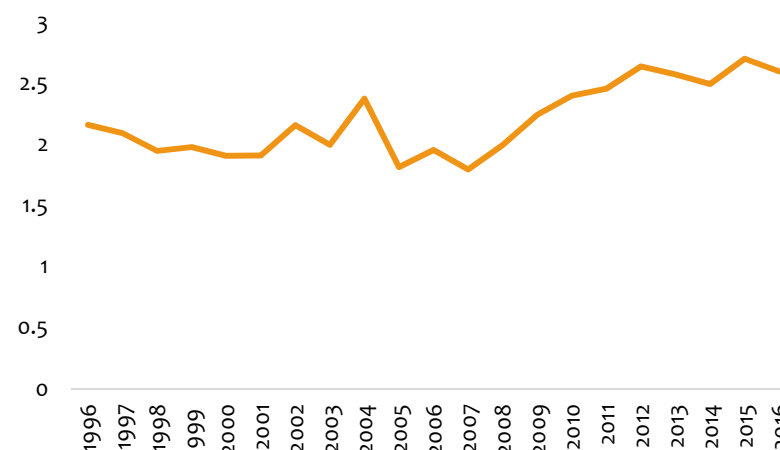
percent of the working age population, in emerging markets this was 8.3 percent, and in LIDCs this was 3.7 percent (see Figure 4.4). Closer to home, the government of Curaçao employed 4,294 persons (including educators) or 6.8 percent of the employed population in 2013. When educators are included, the Aruban government was the employer of 5,704 persons or 10.6 percent of the employed population in 2016 (see Figure 4.5). Another trend worth noting is the rise in the average wage per government employee over the years. This went from Afl. 64,212 in 1996 to Afl. 111,150 at the end of 2016. An increase of 73.1 percent over a period of 20 years. During this same period nominal GDP per capita went up by only 43.9 percent. Conversely, the ratio of the average wage per government employee to nominal GDP per capita went from 2.16 in 1996 to 2.60 in 2016 (see Figure 4.6). This seems to indicate that while government wages were already high relative to average national living standards, they have only gotten higher over time. However, information on the level of human capital in both the public and private sector is required (e.g. educational attainment levels) to really be able to make an accurate comparison.

Figure 4.5 Government employments as percent of employed population



Source: Modus Statistisch Magazine of the Central Bureau of Statistics of Curaçao; CBA.

Figure 4.6 Ratio average wage government per employee/GDP per capita



Source: CBA.

Through conversations with stakeholders, the CBA has identified a number of trends which influences GOA's wage bill. A summary of the most important ones are discussed here. To start with, there is an increase in requests for personnel placement during election years. This is consistent with IMF (2016b) which argues that spending on the wage bill is impacted by the political cycle with wages or employment in the government sector rising ahead of elections. This election year effect appears to be much larger in emerging markets and LIDCs compared to advanced economies, consistent with stronger fiscal institutions in the latter. Related to this trend, It should be noted that the Departamento di Recurso Humano (DRH) is responsible for creating the FTE's for the government departments, although sometimes this happens retrospectively, though the creation of these FTE's is currently not linked to the budget, implying that this process cannot be used for budgetary control purposes.²⁰

Also, the phenomenon of seconding the often higher educated employees from the different government departments to the offices of the Ministries results in an increase in the number of government employees and the wage bill, because their positions at the government

²⁰ FTE refers to full-time equivalent.

departments have to be filled by temporary contract workers. After one year these temporary workers can be taken into permanent service. However, after the government term ends, the employees that were initially seconded, have to be placed back at the departments, creating difficulties for the government departments. Moreover, there is also the possibility that those employees that cannot be placed at a department end up in the so-called redundancy pool (“overtolligheidspoel”). This is a group of government employees that are on the payroll, but for a number of reasons are not working. The government has to find fitting work for them and if it can’t provide this, these workers remain idle but keep receiving their salaries. The size of this group has gone down in recent years, but the numbers have recently begun to increase again and currently stands at about 100. If an average wage cost per government employee of Afl. 111,150 is assumed, the cost to the government on an annual basis is Afl. 11.1 million. The DRH has in the past proposed policy to reduce this group. This proposal included recommendations for placement procedures and maximum duration of the non-active status, including a so-called waiting fee arrangement, however these have not obtained political support as yet.

Moreover, though a hiring freeze is in place, exceptions are made for vital vacancies requiring a bachelor’s degree or higher. As of the beginning of 2016, a policy was set in place to ensure personnel who hold temporary contracts and have been performing satisfactory within a vital function for a period of one year and hold a bachelor’s degree or higher will be afforded a permanent position within government. However, this policy is not functioning properly, as at the moment a large number of the contract workers have been placed into government departments, without meeting the proper requirements. In addition, a large number of the contract based workers at the government departments do not occupy a vital function. In addition to the hiring freeze, the government has tried to bring down the number of employees through natural attrition and by the introduction of an early retirement scheme.²¹

Some government departments have a performance evaluation system in place, but this is not linked to any kind of reward system in salaries or to a function house. Currently, there is a system of periodic wage increases and promotions. The periodic wage increases happen automatically, whenever a civil servant has been in service for a specific number of years. The system of promotions is tied to some requirements, one of which is that the department head of the employee has to submit a positive assessment based on performance. It seems, however, that there are several occasions where employees with records of poor performance are nominated for promotion simply because the department head wants to avoid conflict with the employee.

In several government departments there is a problem with sick leave and consequently a lot of overtime is required. This overtime runs up the wage bill for the government and in turn can lead to more sick leave as employees are forced to make extremely long hours. A number of departments are currently working on strategies to reduce sick leave and, hence, the overtime problem.

²¹ About 200 persons entered into the early retirement arrangement since 2014.

4.2 Recommendations

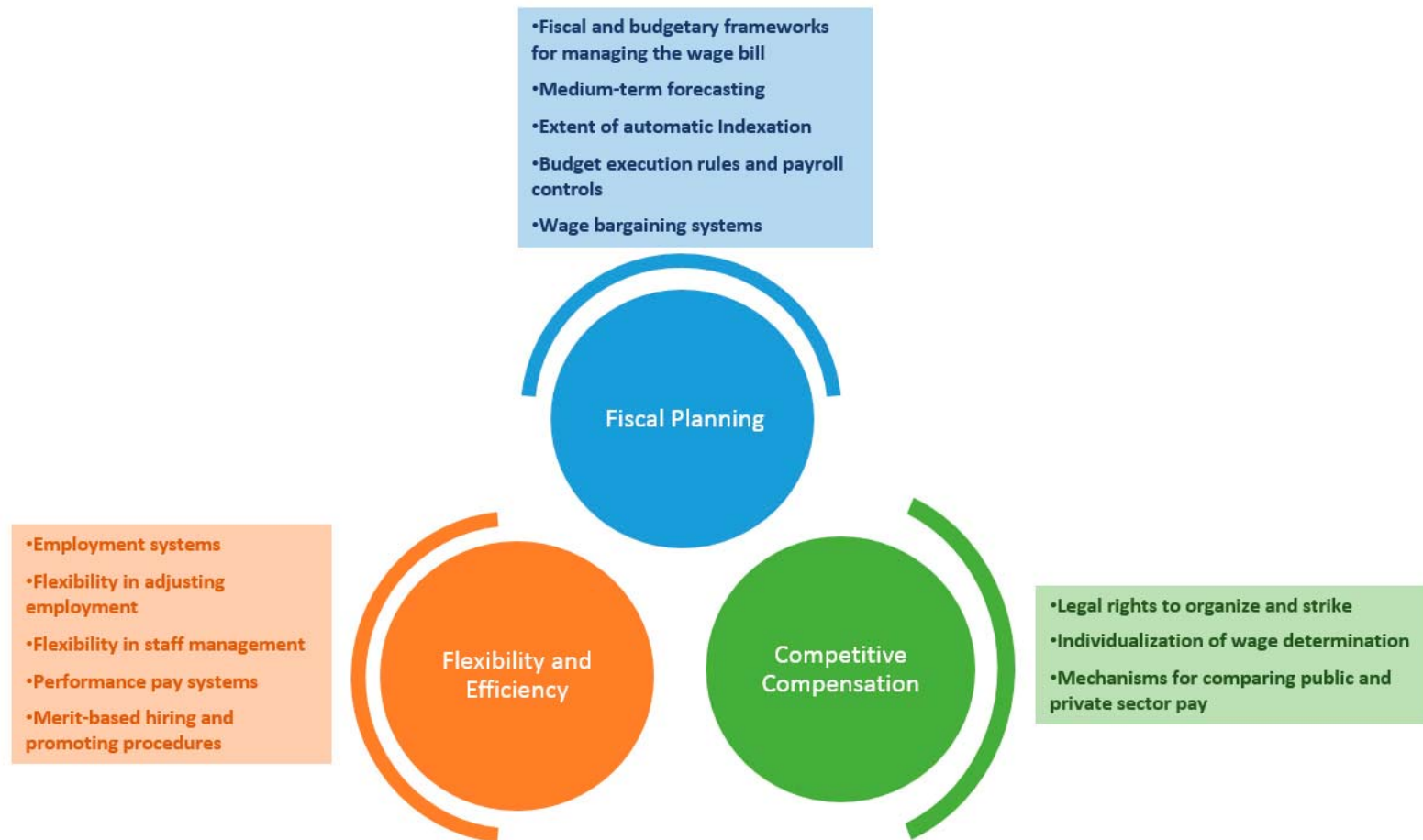
Given that the wage bill in Aruba is so high in terms of GDP and especially in terms of total government expenditures by international standards, it is advisable that the government work on reducing the wage bill and putting mechanisms in place to control the growth of the wage bill. In general, there are three main objectives for wage bill management: (i) adequate fiscal planning to ensure appropriate financing of the wage bill, (ii) competitive compensation to attract and retain skilled staff and incentivize performance, and (iii) the flexibility to adjust the level and composition of employment to respond efficiently to demographic and technological developments (IMF, 2016b). The developments in wages and employment are influenced by governments' institutional arrangements for managing the wage bill related to these three objectives (IMF, 2016b). Based on IMF's framework (see Figure 4.7), the CBA's recommendations for the Aruban government are discussed after this.

Wage bill management and fiscal planning

On average, wage bill increases are associated with a worsening fiscal balance (IMF, 2016b). While it is often thought that higher wage bill spending leads to a crowding out of other items in the budget, an IMF analysis of cross country panel data shows rather that intensifications in the wage bill are associated with expansions in other government spending and with a deterioration of the overall balance. The latter is the result of these additional outlays being only partially compensated with additional revenue. This development has not really been seen in Aruba. There has been some correlation (0.71) between the wage costs and the other items over the period 1996-2016, but this correlation has diminished significantly (0.33) in the period 2008-2016, which was the period that saw the largest deterioration in the fiscal balance.

To manage the wage bill taking into account the objective with regard to fiscal planning, the CBA suggests to establish a link between the creation of FTEs and the budget approved for personnel during a year or preferably for multiple years. The IMF recommends implementing budgetary and fiscal frameworks which integrate decision making on wages and employment into budget planning as this can help ensure consistency with overall fiscal objectives. Currently, in Aruba this is not the case. To enhance control and compliance with the budget, the DRH should have insight into the amount still available for personnel so they can match the FTE and its cost with the budget. It is also important to link payrolls and personnel management and conduct audits, given the challenges with gathering data on staff numbers. The recently introduced automated human resource management system by the DRH can be a useful tool for this.

Figure 4.7 Key institutions influencing wage bill management



Source: IMF (2016b).

Moreover, the CBA proposes to implement a ceiling on wages and/or employment. According to IMF (2016b), consistency with fiscal objectives can be further promoted by utilizing ceilings. This is especially effective in emerging markets, where there is a positive association between the use of ceilings and fiscal planning. Many emerging market countries use ceilings in combination with separate fiscal rules on the wage bill or with fiscal frameworks. In principle, for Aruba the budgeted amount for compensation of employees should already serve as a ceiling. In addition, a staffing plan could be made for each government department to determine the needed FTE's for so far that this is not yet the case. The government can strengthen this ceiling by explicitly stating this. This would mean that overruns in the wage bill are not tolerated, not even if they are compensated for by reducing other expenses. Employment has in theory been capped in recent years, however this should be more strictly enforced. The aforementioned link between the budget and the FTE's could also be useful for this. Having said this, the IMF notes that measures based on attrition can threaten service delivery and have an adverse impact on future capacity. These undesirable side effects can be mitigated by focusing on overstaffed areas and allowing flexible reallocation of employees across sectors by removing legal impediments for mobility and enhancing training.

Wage bill management and the competitiveness of government compensation

Government wages do have an impact on private sector wages and hence the latter's competitiveness, due to the financing of the wage bill through higher taxation or crowding out of other public spending as well as through private sector's wage setting process. On average, public sector wages do appear to be higher than private wages for comparably skilled workers, noting that the public sector wage premium is higher for low income economies than for high income economies, but premiums are also higher for low-skilled compared to high-skilled employees (IMF, 2016b). Most countries in Latin America and the Caribbean have large premiums (IMF, 2016b). Indications are that there is also a wage premium in Aruba which is larger for lower skilled than for higher skilled labor.

The CBA is of the opinion that individualization of wage determination in the government sector could be useful, given that there is a shortage of skilled labor in certain areas. The individualization of wage determination is put forward by the IMF as it allows governments to have flexibility in pay, to differentiate scales, and to provide additional allowances to attract and retain staff especially in areas with skill shortages. When implementing such a scheme, allowances need to be linked to a coherent strategy to attract the needed skills and they need to be used appropriately to prevent excess growth. The flexibility to be able to deviate from the current payment scales in the Aruban civil servants wage structure could be beneficial for attracting high skilled labor that the government has had difficulty attracting so far. The type of skills and the type of positions for which this would be applicable, will have to be determined beforehand in consultation between the different Ministries and the DRH to avoid inappropriate use of this system.

In addition, the CBA suggests to conduct on a regular basis comparisons between public and private sector wages to provide the government with more information on market conditions and to allow for more evidence-based decisions on wages. This should improve the chances of the government to attract high skilled labor towards the end of improving service delivery and to minimize the wage premium where possible. These comparisons are useful to provide governments with information to compete with the private sector in attracting the skilled labor the government needs and help inform wage negotiations. These comparisons have been conducted in the past for the Aruban workforce and have shown that there is a wage premium among government employees, i.e., government employees are paid more than employees in similar positions with similar education in the private sector. This wage premium is larger among low skilled labor than among high skilled labor. This is something that is also seen in other countries, especially developing economies and LIDCs according to IMF research.

Wage bill and flexibility and efficiency

An important factor for achieving spending efficiency is the ability of governments to adjust employment. This flexibility is impacted by rules and procedures for hiring, reallocating, making staff redundant, and the degree of employment protection. This ability in adjusting employment not only refer to governments' capability to adjust salaries, but also the size and composition of its human resources. Being able to meet the demands in key services such as education and health requires careful workforce planning to ensure the availability of adequately skilled staff. Also, the expansion of key public services in a fiscally sustainable manner can be facilitated by addressing large public sector wage premiums where they exist. In Aruba this ability to adjust employment appears to be limited, given that the law offers civil servants a large degree of employment protection. The existence of a redundancy pool is illustrative of this.

In this context, the CBA proposes to introduce measures to limit the time a person can be in the so-called “*overtolligheidspoel*” to help increase GOA's flexibility in adjusting employment. The DRH has put forward recommendations in the past to do this and the CBA is of the opinion that these recommendations, which contain a maximum duration and a waiting fee arrangement, is a good departure point for a policy geared towards the reduction of this phenomenon. A reduction or elimination of this group would, thus represent a substantial saving to the government in the long run, even if some additional costs would have to be incurred upfront. Off course there needs to be a trade-off here between the level of job security for employees and ability of the government to make staff redundant. The existence of this so-called “*overtolligheidspoel*” seems to indicate that in Aruba this trade-off is skewed too much in favor of the civil servant.

The CBA considers that for Aruba it would be beneficial to depoliticize the hiring of government employees. This should be delegated to the respective ministries and departments with an oversight committee consisting of the DRH and the Department of Finance to ensure that departments stay within the budgetary framework and that hiring and placement is based on merits and actual needs of the departments. This will improve the service delivery of departments, because they can now become more agile and act faster to bring their staffing needs

up to par. Additionally, this system will reduce the chance for political placements and departments ending up with staff that don't have the required skills. In the past, the report “Calidad” (Committee “*Deugdelijkheid van Bestuur*”, 2001) also made some recommendations on this issue. According to the committee, the primary criteria when appointing civil servants should be whether the appointment is necessary and if the person to be appointed is qualified for the job. Moreover, the committee recommended legal guarantees be put in place that appointment of government personnel can only occur for vacancies that are part of the determined formation of FTE's and that the financial means are available within the approved budget. In case the recommended legal regulations are not met, the appointment cannot take place, i.e., the appointment cannot be signed into law by the Governor.

Furthermore, the CBA advises putting a limit on the number of employees that can be seconded from the departments to the offices of the Ministries, the so-called “*ter beschikkingstelling*”. The CBA suggests the government to determine the number of Ministry staff that is strictly necessary to carry out the tasks of the Ministry and to avoid deviating from this number. This maximum should include both civil servants that are seconded from the departments as well as employees attracted from the private sector. In addition, when seconding civil servants from their respective departments to the Ministries, consideration should also be given to the continuity of the department. The main problem with the “*ter beschikkingstelling*” arises when these employees have to return to their former jobs mostly after 4 or 8 years and these jobs have since been filled. These employees have to be placed somewhere, where sometimes their particular skills are not needed or where overcapacity is created in departments. In the worst case, these employees end up in the “*overtolligheidspoel*”.

Another important measure is to introduce a performance evaluation system that is linked with a reward system in salaries and/or the function house. Performance-based pay and bonus systems that are well designed and effectively implemented can motivate employees to improve performance and service delivery according to the IMF. It is the CBA's recommendation that such a system replace the current system of “*periodieken*” and indexation, which appears to be based more on longevity than on merit. This performance based system should be tied to a predetermined budget to ensure that wage increases remain consistent with fiscal targets. According to research by the IMF, comprehensive performance pay systems are associated with better fiscal planning in advanced economies as well as in emerging markets and LIDCs, while automatic indexation of wages to inflation or other variables outside the governments control can potentially drive the wage bill in a manner that is inconsistent with fiscal targets. Thus, performance based systems, if well designed, enable better management of the wage bill.

Finally, the government should perform a functional review of the public sector and restructure it based on the findings. Restructuring involves the downsizing or merger of departments, outsourcing, or privatization. This can help reduce government employment permanently while improving service delivery. However, it takes time for the savings to materialize.

4.3 Getting to the management of the wage bill

The data shows that the wage bill in terms of GDP and total expenditures by the government is very high by international standards. The CBA believes that it would be prudent to control and where possible reduce the size of the wage bill. To this end, the CBA has put forward several recommendations. These recommendations focus on a number of areas. The first is to take the appointment of civil servants out of the political realm and to ensure that appointments are really necessary, fit within the budget and that the person to be hired is qualified. Secondly, link promotion and wage increases to a performance based system instead of the current system of “*periodieken*” and indexation. This could help improve the performance of civil servants and help the government to better manage the wage bill. Moreover, the recommendations address the phenomenon of “*ter beschikking stelling*”. This phenomenon should be better controlled and this could be achieved by limiting the number of staff utilized by each Ministry. Solving this issue can also go a long way in solving or at least reducing the problem of the “*overtolligheidspoel*”. Finally, the CBA recommends that the government conducts a critical review of the public sector and consider the downsizing or merger of departments, outsourcing, or privatization. This may not be politically popular and the savings will not be immediately visible, but over time service delivery will be improved and wage bill reduction will be realized.

5 Making health care in Aruba more sustainable

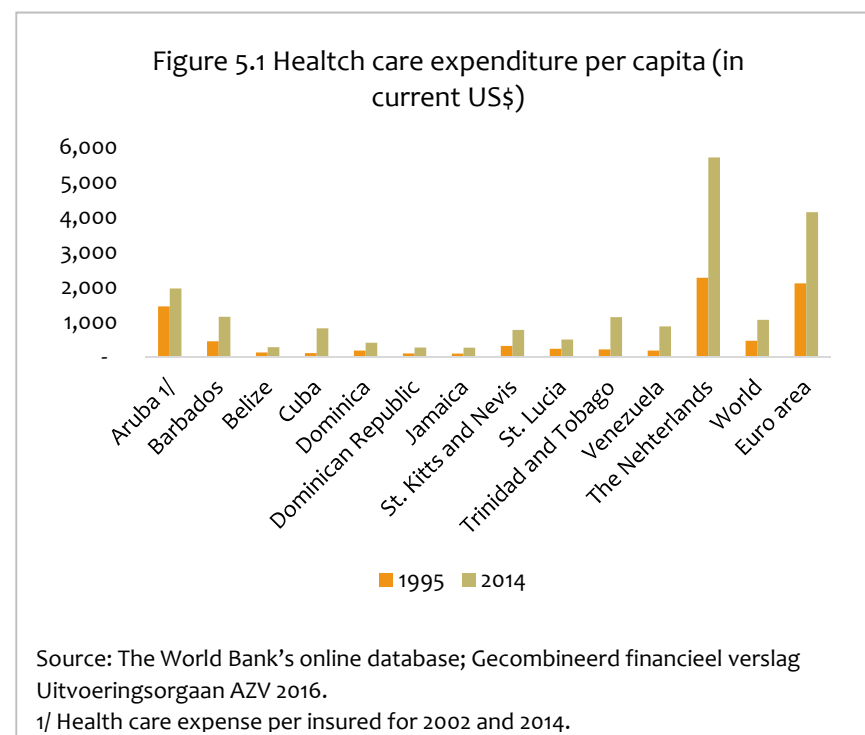
Global health care expenditure has been increasing for many years already. Global health care expenditure per capita (current US\$) has increased from US\$ 461 per capita in 1995 to US\$ 1,059 per capita in 2014 (see Figure 5.1). In past years, Aruba has also registered growth in health care expenditure per insured person. Some drivers of rising health care costs mentioned in the literature are, among others, aging populations and the related rise in chronic disease, costly technological advances, patient demand driven by increased knowledge of options, and by less healthy lifestyles (Economist Intelligence Unit, 2011). To counteract the rising health care costs, health care spending reforms are implemented, such as increasing competition among insurers and service providers, improving the provider payment system to control costs, paying more attention to primary and preventive health care, and making more effective use of health information technology (Clements, Dybczak & Soto, 2016).

This chapter discusses some measures that could contain rising health care costs in Aruba. It is structured as follows. Section 5.1 elaborates on the strategy of the AZV to contain its costs. In section 5.2, various new measures are proposed which can be implemented by the AZV to further contain its deficit. Section 5.3 presents some concluding remarks.

5.1 AZV's cost containment strategy

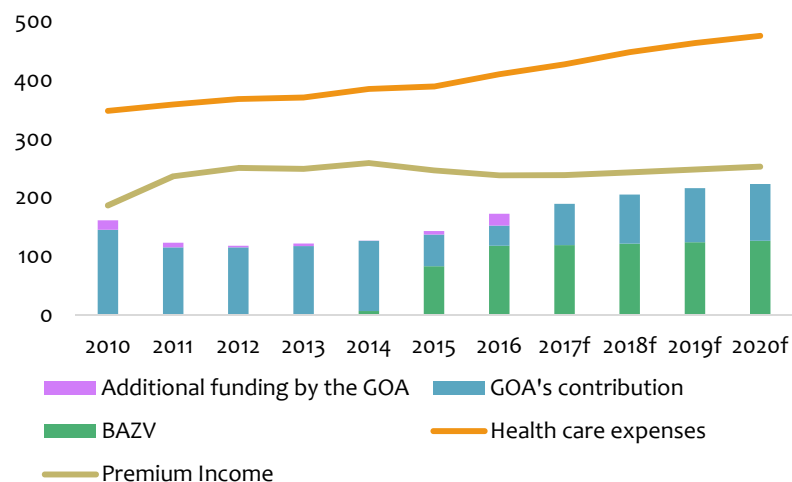
In Aruba, every person recorded in the Population Register, and having Aruba as lawful principal place of residence, is compulsory insured with the AZV. Any person who receives a premium income, is also obliged to pay contributions, which is a percentage of his or her gross income up to a maximum amount. The AZV covers only curative health services and rehabilitative health services.

Before July 2015, the employer paid an 8.9 percent AZV premium, and the employee 2.6 percent. As of July 1, 2015, the AZV premium was lowered by one percentage point to 1.6 percent for the employee part. A levy



(BAZV) of 1 percent was introduced in December 2014, and further increased by 1 percentage point in June 2015, to partially offset the fiscal costs of the health care system.

Figure 5.2 Financial operations of the AZV
(in Afl. million)



Source: Gecombineerd financieel verslag Uitvoeringsorgaan AZV 2016.

The main source of income for the AZV are premium obligations, the BAZV and the GOA's contribution. The GOA is obliged by law to cover the financial deficit of the AZV. Figure 5.2 gives an overview of the financial operations of the AZV as of 2010 up to 2016, and a forecast for 2017 up to 2020 (AZV, 2017). The AZV projects an average of 3 percent increase in the total costs of health care in the long term. For 2017 and 2018, the AZV expects higher costs of health care, due to the higher operational costs for the new building of the Horacio Oduber Hospital and the expansion of IMSAN. The higher costs for IMSAN are related to the radio therapy and operation rooms at the IMSAN. The AZV projects rising health care costs, resulting in expected rising GOA's contribution to the AZV.

The aim of AZV has been to maintain Aruban health care expenditure below global trends and in line with the nominal GDP growth of Aruba, in order to contain costs and to not have it increase excessively. The AZV has taken certain measures to contain health care expenditures, such as: the introduction of a remuneration ceiling for medical specialists, regular controls for the oversubscription of medicine by general practitioners via

the establishment of benchmarks, dealing directly with foreign hospitals rather than via brokers, and a rigorous assessment on the prices of all medicines supplied by importers. Furthermore, the AZV is sending more patients to Colombia instead of to the Netherlands, where it is more expensive. This option will be further explored in order to lower the costs of health care related to treatments abroad. In addition, Aruba together with Curaçao, are sending larger groups of patients to Colombia, and are able to have better negotiating power with respect to the pricing-quality ratio. The contracts are signed separately. It is the intention of the AZV to also broaden this negotiation with other islands of the Dutch Caribbean. Even though preventative care and health promotion are not tasks of the AZV, the AZV has been active in these areas. The AZV has sponsored various television programs, and has issued quarterly bulletins with information on healthy living. Furthermore, the AZV has participated in various programs, such as the population screening of breast cancer via Stichting BOB.

5.2 Possible measures to contain the AZV health care deficit

IMF (2017b) presents a number of suggestions to the GOA to make AZV self-financed, meaning to finance its expenditures with the premiums and now also with the BAZV. The latter author mentions that without such measures, government subsidies to the healthcare system would continue to increase, due to aging. In addition, IMF (2017b) mentions that means-tested user fees (e.g., for emergency room visits for non-urgent care) could help rationalize the demand for certain healthcare services and prevent abuse. Also, IMF (2017b) recommends increasing the BAZV tax rate, or, reducing coverage for certain non-essential treatments.

Taking into account AZV's cost containment strategy as well as the IMF recommendations, the CBA proposes the following measures to contain the costs of health care and/or increase the revenues of the AZV:

1. Expanding the AZV's authority and responsibility for the collection, control and audit of the AZV premium and the BAZV. Currently, these revenues are collected by the Tax Department and the AZV has no control on the compliance of employers. The intention is that the Tax Department should serve only as the front office for the collection of these incomes.
2. Giving AZV the authority to revise the AZV health insurance package if necessary. The AZV can then, for example, make changes in the 'positive list' of drugs. Currently, the Supervisory Board of Directors has the authority to cut into the supply of health care, including adjustments in the 'positive list' or introducing co-payments (the so-called 'eigen bijdrage'), but this adjustment will only have an effect until the end of the current year. This can, however, only happen in the event that the GOA is not able to cover the deficit.
3. Broadening the hospital's authority with respect to the import of pharmaceuticals. It is less expensive for the hospital to import pharmaceuticals, because it does not have to pay import duties, and does not have to include the margins that are charged by third parties that import pharmaceuticals. At the moment, the hospital has the authority to import pharmaceuticals for its patients and the AZV has given the hospital the authority to import certain medicine for, among others, HIV and cancer patients. The current importers of pharmaceuticals are also suppliers of the hospital. Related to this recommendation, it should be mentioned that the hospital does not have the distribution channels in place, so that these must also be developed. The costs for medicine (including bandages) as registered by the AZV, were about Afl. 36 million in 2016, compared to Afl. 33 million in 2015 (AZV, 2017). The hospital registered Afl. 18 million in 2015 for medicine (Stichting Ziekenverpleging Aruba, 2017). The first mentioned amount also includes an Afl. 4 million in medicines imported by the hospital for the AZV.
4. Applying anti-fraud mechanisms at the service/product supplier level. The AZV has already implemented various control mechanisms, but this item can be explored further given the continued advances in technology.

5. Introducing co-payments (so-called “eigen bijdrage”) for doctor visits, as well as, for pharmaceuticals and medical products. This will make patients less eager to go visit their doctor.
6. Further expanding the exploitation of regional medical centers for treatments that cannot be performed on-island. As this is already a measure used by the AZV, this can further be explored to get better options for treatment abroad.
7. Raising the levy (BAZV). Rough estimation indicates that a one percent increase in the levy (BAZV) could generate an additional Afl. 65 million in revenue. Based on CBA’s forecast for the AZV deficit for the years 2018 – 2020 of around Afl. 72 million, the BAZV should be increased by about 1 percentage point.
8. Raising the AZV premium if other measures are not sufficient to contain the cost of health care. Rough estimation indicates that a one percent increase in the AZV premium could generate an additional Afl. 23 million in revenue. Based on the forecast of the CBA for the AZV deficit for the years 2018 – 2020, the AZV premium should be increased by about 3 percentage points.

5.3 Final thoughts

This chapter recommends possible measures that can be implemented to contain the health care costs in Aruba. Raising the AZV premium and/or the levy (BAZV) are measures that the GOA can implement to reduce the health care burden, but it is recommended for the GOA to focus first on the control of the premium contribution and the compliance of employers with respect to the premium contribution. Furthermore, the AZV should continue with its efforts to lower the costs for treatment abroad and further explore the possibilities of introducing other control mechanisms. Another area that can also be explored is that of preventive care. The AZV has already done various activities focused on preventative care, but this can be expanded by the GOA and the AZV in order to contain the rising health care costs on the island.

6 Options for reforming the public pension scheme

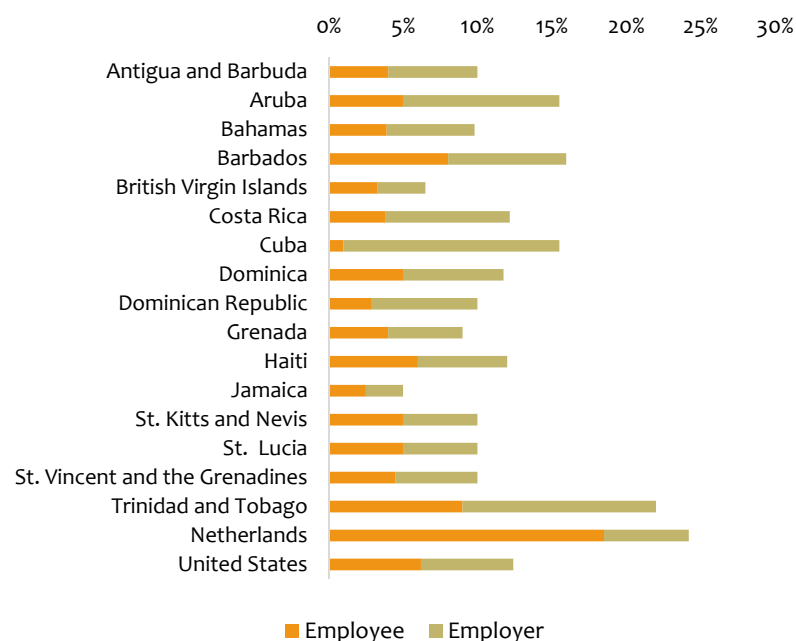
This chapter explores options for further reforming the public pension. In Aruba, public pension is regulated by means of the AOV ('Algemene Ouderdoms Verzekering') law, which was introduced in 1960, with the aim of fighting poverty among the elderly, and is based on a defined-benefit pay-as-you-go (PAYG) system, in which each generation of employees (and their employers) contribute to support the pensioners of the previous generation. This law is administered by the Social Security Bank (SVB). In order to implement the AOV, an AOV fund was set up, as well as a buffer fund, the so-called 'schommelfonds AOV/AWW' ('Algemene Weduwen- en Wezenverzekering'), which can be drawn upon in the case of a deficit in the AOV fund (and the AWW fund). The 'schommelfonds AOV/AWW' is funded by surpluses of either the AOV or the AWW funds. Contribution to the AOV fund consists of a premium levied on both employees and employers. The total premium amounts to 14.5 percent of an employee's wage, where 10.0 percent is borne by the employer, and 4.5 percent by the employee. The maximum annual wage on which the premium can be levied is Afl. 85,000, for a total maximum annual contribution of Afl. 12,325 per employee. Benefits depend on marital status, as well as living arrangements. Unmarried individuals are eligible for a maximum of Afl. 1,107 per month, while married individuals are eligible to receive a total of Afl. 1,864. Married individuals who are permanently separated, as well as an unmarried man and woman living together, (while both are at least 60 years old), are entitled to Afl. 932 each.

This chapter starts with a regional comparison and discusses global developments related to public pension systems in section 6.1. Next, section 6.2 elaborates on measures taken to insure financial sustainability of the AOV fund, followed by suggestions by the CBA for additional reform measures to guarantee sustainability of the AOV fund in section 6.3. Section 6.4 presents some concluding remarks.

6.1 Regional comparison and global developments

In the Caribbean region, Aruba shares third place with Cuba in the top three countries with the highest level of social security premiums, defined here as premiums for old-age, disability, and survivors' insurance²² (see Figure 6.1). The average of these three rates is 43.8 percent

Figure 6.1 Contribution rates for social security, 2015/2016 1/



Source: SVB; Social Security Administration (2015; 2016).

1/ Refer to the rates relating to old-age, disability, and survivors' insurance.

Table 6.1 Mandatory, old-age income security programs by type, 2015/2016

Country	Flat-rate	Earning-related	Mean-tested	Other
Antigua and Barbuda		X		Flat-rate universal
Aruba	X			Occupational retirement scheme
Bahamas		X	X	
Barbados		X	X	
British Virgin Islands		X		
Costa Rica		X	X	Individual retirement scheme
Cuba		X	X	
Dominica		X		
Dominican Republic		X	X	Individual retirement scheme
Grenada		X		
Haiti		X		
Jamaica	X	X	X	
St. Kitts and Nevis		X	X	
St. Lucia		X		
St. Vincent and the Grenadines		X	X	
Trinidad and Tobago		X	X	Occupational retirement scheme
Netherlands	X		X	
United States		X	X	

Source: SVB; Social Security Administration (2015; 2016).

²² In order to make cross-country comparison possible, in the current setting, social security premiums refer to premiums for old-age, disability, and survivors' insurance. In the case of Aruba, this consists of the AOV and the AWW premiums.

Table 6.2 Demographic and other social security-related statistics, 2015/2016

Country	Population (millions)	Percentage 65+	Dependency ratio	Life expectancy (at birth) Men	Life expectancy (at birth) Women	Statutory pension age	GDP per capita, US\$
Antigua and Barbuda	0.091	7.1	46.3	73.4	78.3	60	22,077
Aruba	0.110	12.4	45.3	73.9	79.8	60.5	24,652
Bahamas	0.383	8.0	41.0	72.1	78.2	65 1/	23,491
Barbados	0.283	13.8	49.7	73.0	77.8	66.5 1/	16,058
British Virgin Islands	0.033	8.2	33.8	77.1	79.9	65	42,300
Costa Rica	4.758	8.6	45.6	76.8	81.8	65	14,918
Cuba	11.380	13.6	43.2	77.2	81.4	65 2/	20,611
Dominica	0.072	10.7	48.5	73.8	79.9	62 1/	10,877
Dominican Republic	10.410	6.5	58.1	70.3	76.5	60 1/	13,262
Grenada	0.106	7.1	50.9	70.8	75.7	60	12,425
Haiti	10.570	4.6	63.2	60.3	64.6	55	1,732
Jamaica	2.721	9.0	49.5	71.0	76.1	65 2/	8,875
St. Kitts and Nevis	0.055	8.1	41.0	73.1	78.0	62	23,239
St. Lucia	0.184	8.9	48.0	72.3	77.7	65 1/	10,733
St. Vincent and the Grenadines	0.109	7.2	47.1	70.8	75.0	60	10,727
Trinidad and Tobago	1.354	9.2	42.7	66.9	73.9	60	31,967
Netherlands	16.940	18.2	53.3	79.5	83.2	65.5	48,459
United States	318.900	14.4	50.3	76.5	81.3	66 1/	54,629

Source: CBS; SVB; Social Security Administration (2015; 2016).

1/ Early pension age of 60 years in Bahamas, Barbados, Dominica, and St. Lucia. Early pension age of 55 years in Dominican Republic and 62 years in the United States.

2/ The statutory pension age for women is 60 years in Cuba and 64.75 years in Jamaica.

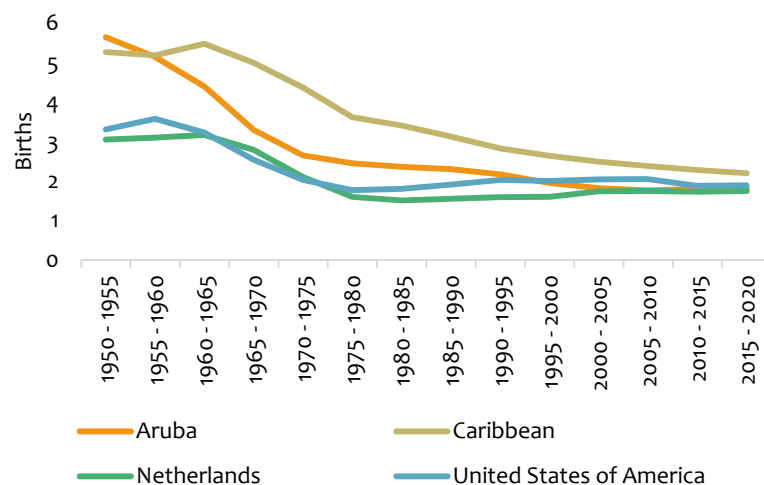
higher than the rate in the United States of America (USA), while falling 26.4 percent short of that in the Netherlands. The majority of mentioned social security systems in the Caribbean region are characterized by employer contribution shares that are larger than employee contribution shares. It is noticeable, however, that Aruba (together with Costa Rica, Cuba, and the Dominican Republic) is one of the few countries in which the employer's share of the social security premium is more than 100.0 percent of that of the employee. Unlike Aruba, the majority of the Caribbean countries in this comparison have earnings-related, means-tested programs (see Table 6.1). In addition, Aruba and Trinidad and Tobago are the only two countries where the private sector is required by law to provide occupational pension schemes, (which are financed by both employee and employer contributions).

The percentage of the population in Aruba who is 65 years of age or older is 12.4 percent (see Table 6.2). This percentage is relatively higher than the regional average of 8.7 percent, and approaches the range observed in developed nations, like the USA (14.4 percent). With regard to the life expectancy at birth for both men and women, Aruba, at 73.9 years for men and 79.8 years for women, fares better than the regional averages of 71.9 years and 77.0 years, respectively. In about half of the countries in the region mentioned in Table 6.2, the retirement age is 65 years and older, with Cuba and Jamaica allowing women to retire earlier than men. Aruba's retirement age (at 60.5 per January 1, 2015) has already been set to increase to 65 years per January 1, 2024. Most

of the remaining countries in the region have a retirement age of 60 years, followed by 62 years and 55 years.

Despite the vast diversity in pension systems in the region, they all face similar challenges, which are known to social security systems worldwide. The first challenge relates to population aging. Population aging is the process by which older individuals become a proportionally larger share of the population (United Nations, 2002). This process is the result of an interplay between different demographic factors, namely, decreasing fertility rates (see Figure 6.2) and increasing life expectancy. According to Paddison (2006), who studied the challenges to social security in the Caribbean, life expectancy (at birth) increased on average by more than 15 years during the last two decades of the 20th century alone, and is forecasted to increase further to approximately 79 years by the middle of the current century. Furthermore, he expects that the population growth rate in the region will decrease to 0.1 percent at that time. Aruba follows

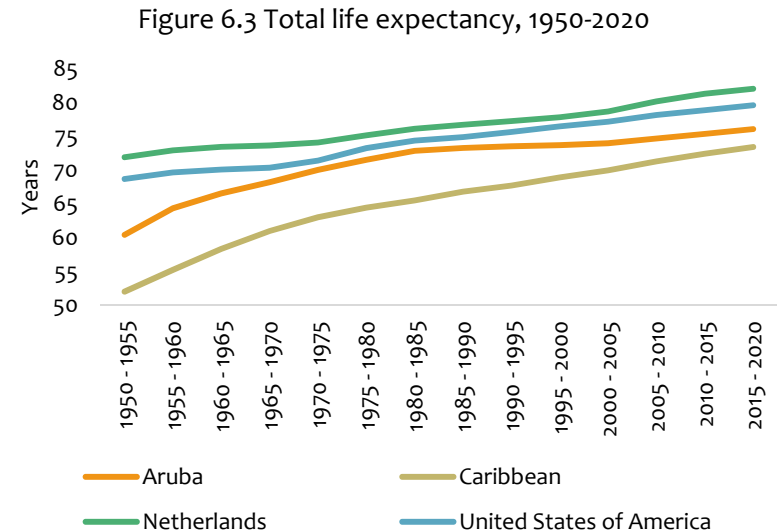
Figure 6.2 Total fertility rates, 1950-2020



Source: United Nations Populations Division (World Population Prospects).

the same trend as regional and developed countries with regard to total fertility rates and life expectancy (See Figure 6.3), and is thus not immune to the population aging problem, where the contribution base is severely reduced in comparison to the benefit obligations.

A second challenge relates to the slow economic growth. Macroeconomic developments at the beginning of the 21st century, have hampered economic growth globally. In addition to the 2000/2001 economic downturn, there was the 2008 global financial crisis, which started as a liquidity crisis in the United States, due to a loss of investor confidence in the value of sub-prime mortgages. Caribbean countries were hit hard by the 2008 crisis (Figure 6.4). The countries experienced declines in remittances, tourism arrivals and offshore finances, with the average



Source: United Nations Populations Division (World Population Prospects).

decline of output loss in tourism-dependent countries being much higher than that in resource-based ones (Nassar et al., 2016). Amid these woes, Aruba's economy was also dealing with the temporary shutdown of its oil refinery, operated by Valero Energy Corp, in Mid-July 2009, followed by its permanent closure at the end of March 2012. These local developments further amplified the negative impact on the economy's output capacity.

A final challenge relates to the high unemployment rates. The International Labour Organization defines the unemployment rate as "the number of persons who are unemployed as a percent of the total number of employed and unemployed persons (i.e. the labour force)". Since the beginning of the 21st century, the global average

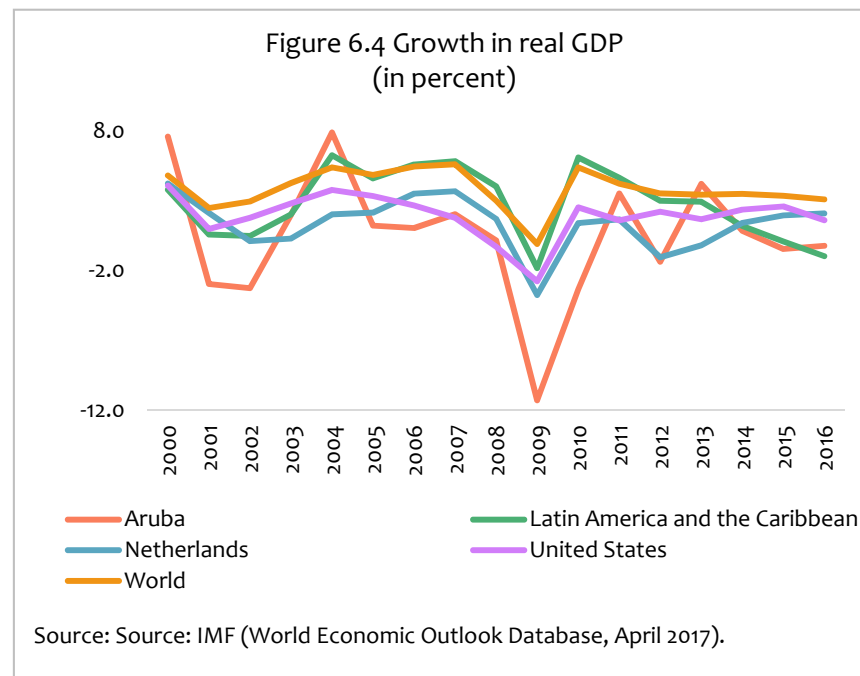
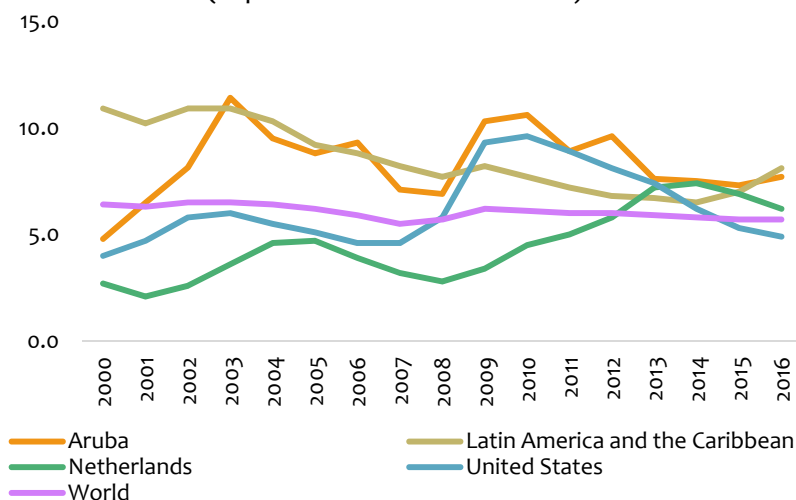


Figure 6.5 Unemployment rates
(in percent of the labour force)



Source: International Labour Organization, (ILOSTAT, 2017); CBS.

unemployment rate floats around 6.0 percent. The unemployment rate in Aruba, and the Latin America and the Caribbean region have been substantially higher than this average, while developed countries (such as the Netherlands and the United States) have been faring under this average up until the global financial crisis of 2008 (see Chart 6.5). The crisis resulted in a substantial increase in unemployment rates across the board, and even though the statistics are showing recuperation signs, the global number of unemployed persons is forecasted to rise in 2017, with emerging and developing economies contributing to the increase in this level, while improvements in developed countries tend to offset this increase by falling unemployment levels (ILO, 2016). High unemployment levels adversely impact pension schemes in the form of lower pension contributions, as they lead to a smaller base to levy premiums on.

6.2 Measures taken to insure financial sustainability of the AOV fund

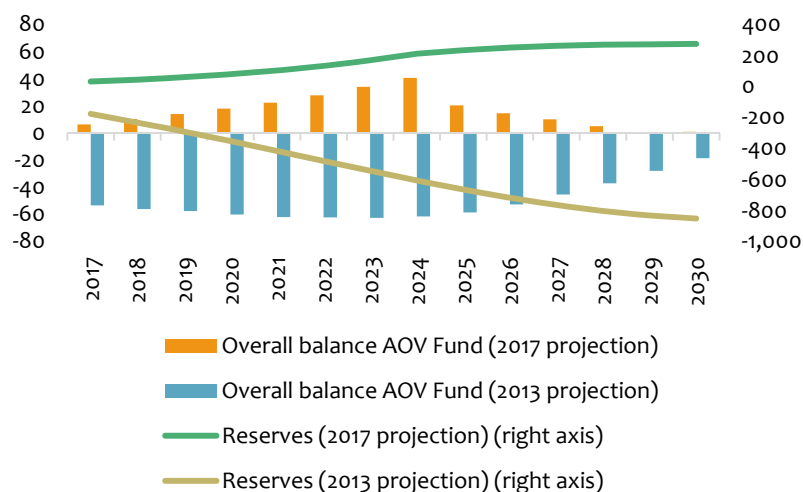
From 2004 to 2014, the AOV fund ran financial deficits, due to the fact that benefits were exceeding AOV premium contributions (see Figure 6.6). This development did not only put pressure on the AOV fund, and the 'schommelfonds AOV/AWW', but also on the SVB's general reserves. In light of this, and given the fact that by law, the liabilities of the SVB are unconditionally guaranteed by the GOA, different measures have been taken over the years, to insure the continuity of the AOV fund.

In January 2012, the government introduced a mandatory pension scheme for the private sector, individualized AOV premium contributions, increased the wage cap from Afl. 54,600 to Afl. 65,052, and introduced incentives for those willing to postpone retirement beyond the mandatory age of 60. By January 2014, further changes were made to the AOV law. The total premium was raised to 13.5 percent, by increasing both the employee and employer percentages by 0.5 percentage point. The employer's share became 9.5 percent, while the employee share amounted to 4.0 percent. In addition, the wage cap was raised from Afl. 65,052 to Afl. 85,000. As of January 2015, another

round of premium increases was implemented, with the total premium amounting to 14.5 percent (employer: 10.0 percent; employee: 4.5 percent). As of January 2015, the pension age would be raised as well, by 6 months each year, till the age of 65 is reached.

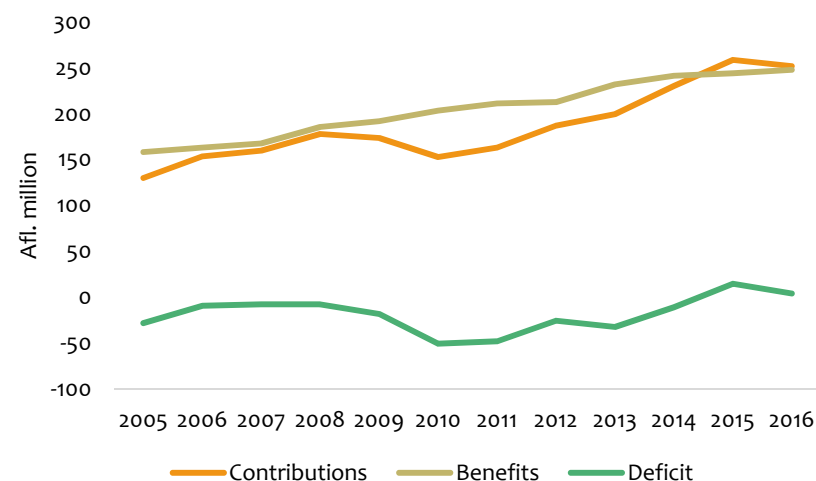
With regard to the 'schommelfonds AOV/AWW', it was decided in June 2016 that certain debt forgiveness would retroactively take place, as of January 1, 2015. Specifically, an Afl. 60.5 million debt of the GOA to this fund, related to the division of the wealth of the 'joint Social Security Bank' of the former Netherlands Antilles, when Aruba became an autonomous country within The Kingdom of the Netherlands. In addition, claims between different funds of the SVB, would be settled internally.

Figure 6.7 The AOV fund and the SVB's general reserves (in Afl. million)



Source: SVB; CBA (2013).

Figure 6.6 Financial operations of the AOV fund



Source: SVB.

The results of the measures taken by the GOA can be seen by looking at Figure 6.7 which compares the SVB's calculations presented in a report published by the CBA in 2013 (CBA, 2013) and a 2017 scenario estimated by the SVB. In the 2013 projection, under unchanged policies, a drastic deterioration of the AOV fund was expected. In the 2017 scenario, particularly taking into account the implemented measures such as increases in the wage cap, the premium, and the pension age, a completely different picture is drawn.

The combined efforts have led to a complete turnaround in the position of the AOV fund. In comparison to the 2013 projections, the expected number of pensioners each year in the 2017 projections is substantially lower, (ranging from -9.45 percent in 2017 to -28.97

percent in 2024). As a consequence, the total expected yearly benefit payments are reduced. Whereas a deficit was calculated in the 2013 projections, the AOV fund is now expected to have a surplus by the year 2017, which is expected to grow until 2024. This development reduces the pressures on the ‘schommelfonds AOV/AWW’ as well as the reserves, as these would not have to be drawn upon for the coming years. Instead of a depletion of the SVB’s reserves, one can now observe a continuously increasing reserve from 2017 to 2030.

6.3 Additional reform measures to guarantee sustainability of the AOV fund

According to the latest projections of the SVB, the AOV fund will be running increasing surpluses for the coming seven years. After the year 2024, there will still be surpluses, albeit at a decreasing rate. During these years, it is possible for the SVB to strengthen the financial position of the ‘schommelfonds AOV/AWW’ and its reserves, without having to implement measures that have a direct impact on the pockets of the public, and tend to be perceived as unpleasant by citizens. These funds can be drawn upon in the future in the case of unforeseen shortfalls in premium contributions, or, increases in benefit payouts. Nevertheless, the following five measures can be taken to further fortify the AOV fund position.

1. Placing the SVB in charge of the collection, control and audit of the AOV/AWW premium income, in order to increase the effectiveness of the collection of and compliance with these premiums: The Tax Department should serve only as the front office for the collection of these incomes. At the moment, the Tax Department is the responsible agency for the collection and audit of the AOV/AWW premium revenues, as well as for most other taxes on the island. With its given budget and resources, in addition to its broad responsibility/mandate, it is not always possible to tackle all the risks in the system at any given time. As the SVB has the main interest in the AOV/AWW premiums, it is likely to place a higher priority on ensuring compliance and correctness of AOV/AWW premiums paid by employers. By placing the above-mentioned responsibility with the SVB, it is thus possible to increase the effectiveness of the collection of these premiums, and the compliance of employers. Revenues would increase, which in turn will help with the resilience of the AOV fund as well as that of the ‘schommelfonds AOV/AWW’. As such, the likelihood is decreased that the GOA (as explicit guarantor of the pension benefits and of the SVB’s liabilities) would have to make transfers into the funds.
2. Expanding the premium base of the AOV/AWW: The concerns regarding the pension system arise not only from the growing proportion of elderly in the population, but especially from the changing ratio of the working-age population to the retired population. In particular, a sharp decline of this ratio has the capacity to directly affect the viability of social security systems (United Nations, 2001). Given the

PAYG system in Aruba, contributions from the current working population have to at least keep up with the benefits to be paid out to current retirees. Increasing premium income without directly impacting the pockets of the working population can be done by either increasing the size of the working population, and/or, increasing the income level of the working population. One can think of different types of policies in this context: migration policies, aimed at attracting relatively younger and higher educated individuals, education policies, promoting citizens to pursue a higher level of education, and labor market policies, such as, incentives directed at increasing female participation in the labor force.

It should be noted, however, that each policy comes with its own limitations. With regard to migration policies, for instance, available research studies show an array of challenges facing the regulation of the level and composition of replacement migration streams, to reach a desired population size or age structure. Firstly, unless migration streams reach comparatively high levels, inflows of migrants will not be able to prevent population declines in the future. Secondly, international migration can only act as a partial means to offset the effects of population aging arising from below-replacement fertility. Last but not least, in addition to questions regarding the feasibility of formulating and adopting suitable, and realistic migration policies, large volumes of immigrants are likely to be socially and politically unjustifiable (United Nations, 2001).

As higher education leads to higher earnings, Aruba has the potential to expand its premium base by means of improved education policies. The supply of higher education on Aruba, however, is limited. Therefore, on average, more than 400 students go abroad each year, to further their education (Departamento di Enseñansa Aruba, 2015). Nonetheless, a great share of these students, do not return to the island after having concluded their studies abroad, leading to an apparent “brain drain” in Aruba. In addition, it is not always easy for the ones who do return to the island to find work matching their educational attainment. This can partly be explained by looking at Aruba’s economy, which consists of pillars containing mostly unskilled or less skilled labor sectors, such as tourism, and construction. In the year 2011, the government of Aruba introduced a 30.0 percent discount on student debt, for Aruban graduates who returned to the island within 3 years of completing their studies. In his study on the return migration of Aruban students, however, Upegui (2011) presents evidence that such a policy would not have an effect on students’ decision to return to Aruba. He does present several determinants which affect a student’s decision to return to Aruba. A couple of these determinants are in the area of influence of the government, such as: future labor market prospects, and the safety and comfortableness in Aruba. By focusing on bringing improvements in these conditions, the government might increase the stream of students returning and contributing to the labor force on the island. With regard to future labor market prospects, the CBA is developing a strategic framework to strengthen Aruba’s innovation capacity and increase its economic resiliency, the so-called “Isla Innovativo”. Such an initiative has the ability to create/increase the demand for well-educated and

high skilled labor. This can increase the attractiveness of migrating to Aruba, not only for Aruban graduates who have completed their studies abroad, but also for high skilled labor from other countries.

Reforming labor market policies, can help to increase the number of the working-age population active in the formal labor force. One can focus on, for instance, attracting a greater number of females to participate. In Aruba, as in many countries, the female labor force participation rate is relatively lower than the male participation rate (59.5 percent compared to 68.9 percent, respectively, in 2010). Even though this percentage has been growing over the years, there is still room for improvement. Jaumotte (2003) presents different market failures and policy distortions that, in addition to factors such as culture and social norms, affect the participation of women in the labor force. She also brings forward economic incentives that governments can provide, to boost female labor force participation, such as: childcare subsidies, paid parental leave (up to an extent), expanding part-time work opportunities, and having a more neutral tax treatment of second earners in a household, compared with single earners. Her findings indicate that a review of other existing policies might also be in place, as, for example, child benefits reduce female labor force participation. One should bear in mind, however, that most of these policy reforms imply budgetary costs and may lead to unwanted or unintended negative externalities. Nonetheless, these can be kept low based on the design features of the policies.

In addition to the two above mentioned recommendations, the CBA suggests the GOA to consider the following additional tools at its disposal to guarantee sustainability of the fund, taking into account that the surpluses are expected to follow a decreasing trend as of the year 2024.

3. Raising the pension age by linking it to the average life expectancy: In the Caribbean region, the gap between the retirement age and life expectancy is on average 10 and 15 years for men and women, respectively. This is comparable to the average time spent in retirement in the United States, whereas in the Netherlands, people tend to retire for even longer periods. In Aruba, men and women currently spend an average of 13 and 19 years in retirement, even though, as mentioned earlier, a path has already been set to increase the retirement age by 6 months each year, until 65 years is reached in 2024. Life expectancy is expected to continue on the increasing trend in the future (United Nations, 2002). A static retirement age (even at 65 years) does not reflect the expected longer life spans of people, and is not a financially prudent approach to guarantee the sustainability of the pension system. This also implicitly counts for a reduction in the retirement age. As a matter of fact, calculations done by the SVB indicate that a reduction in the retirement age in Aruba from 65 to 62 years, would lead to a depletion of its reserves by the year 2018. With increasing life expectancies, there is thus room to further increase the pension age. Given the difference in life expectancy between men and women, there is even room to implement a higher retirement age for women than for men. The current AOV law can be seen as unfavorable to men, given that with an equal accumulation period and

gender neutral benefits, women are expected to draw greater benefits from the system than men, given their expected longer years spend in retirement. Increasing the retirement age can be done by means of linking it to the average life expectancy. In this way, the disparities in time spend in retirement, between different generations (and their related life expectancies) can be mitigated. By collecting data, and monitoring developments in longevity, the government can revise the retirement age every time that the average life expectancy increases above a given pre-specified level. This method has the advantage that if for some reason, in the future, the average life expectancy decreases, the retirement age is automatically revised downwards. One should note however, that as there is a positive relationship between income and health (Cutler et al., 2006), raising the retirement age can be considered unjust to low-earning individuals, as they are more likely to experience smaller improvements in longevity than high-earning individuals.

Whatever choice is made with regard to adapting the retirement age, it is important to announce this in time, in order to give citizens an ample chance to make necessary adjustments, and prepare for old-age. In addition to raising the pension age, however, labor laws and labor conditions should be altered in order to accommodate a longer working, older labor force. Furthermore, it should not be ruled out that even when people leave the labor force, they may continue to contribute to society in different ways, such as in the informal labor force, and by volunteering.

4. Increasing premium contributions and/or the wage cap: According to the latest projection of the SVB, as of the year 2017, the required AOV premium is lower than what is actually being charged. By keeping contributions at the current levels, the surplus can be used to strengthen the 'schommelfonds AOV/AWW' and the reserves. In the future, if the charged premium level threatens to fall below the required level, the government can consider to further increase premium contributions and/or the wage cap. One should bear in mind, however, that increasing the payroll tax rate would result in lower spending power for the people, and might discourage some people from working in the formal labor force or from working additional hours, having an additional negative impact on the economy. It also results in higher labor costs for employers, which could discourage hiring. Increasing the wage cap, or, eliminating it altogether, would result in similar consequences for people earning more than the current wage cap, as a larger part of their income is now taxed, (while benefits remain equal).
5. Reducing nominal pensions: An additional cost management tool at the disposal of the government, is the reduction in nominal pension benefits to be paid out, which should be used only in the most extreme of cases. One has to take into account that employees approaching retirement age, have little else to rely upon in order to finance their retirement. Furthermore, they are too late to accumulate sufficient funds elsewhere, to compensate for the cuts in the generosity of the basic pension (Bonoli & Shinkawa, 2006). There are challenges, even

if the reduction in pension benefits concerns younger employees, who have the possibility to build up sufficient funds elsewhere, to finance their retirement. They are confronted with the problem of double taxation, as they are contributing to the system for current retirees, and will have to save for their own retirement, in order to compensate for the cut in generosity of the basic pension (Pierson, 1997). A reduction in pension benefits can also lead to anti-governmental feelings that can turn into protest or electoral punishment. Pension systems are widely regarded as a social contract between the state and its citizen, and pension retrenchment tends to be seen as the government unilaterally reneging on that contract (Myles & Pierson, 2001).

So far, the recommended reform measures involved changing some parameters of the existing PAYG scheme. While parametric reforms may be easier to implement, structural changes to systems have often been considered to be more relevant to the long-term viability of the schemes (Paddison, 2006).

Aruba has already made a structural reform to its pension system, by moving from a one-pillar PAYG, to a multi-pillar system, when it required the private sector by law to provide occupational pension schemes. There is room to broaden the system further, by developing the so-called voluntary “third pillar”. This can take up many forms, but essentially boils down to individual savings for retirement (Holzmann et al., 2008). The government could exert efforts into educating its citizens about the importance of saving for old-age, and play a more active role in encouraging them to do so.

In general, the concept of pension system reform is associated with the move to a fully funded defined contribution system, requiring employees to save a proportion of their income in individualized accounts, which can only be accessed once they have retired (Paddison, 2006). Funded systems are supposed to have three main advantages compared to PAYG systems, which show up in higher economic growth: more saving, higher formal-sector employment, and the development of capital markets (Thiele, 1997). Fully funded defined contribution schemes, however, can cause substantial inequality in pension income, as they lack the PAYG’s redistributive element, due to each employee’s private account. The schemes are also riskier on an individual level. Firstly, in order to benefit from compound interest effects, and build up a significant amount of funds, employees need to start contributing early on in their careers, and on a consistent basis. Unemployment may thus lead to significant shortfalls in the accumulation of capital. Secondly, there is limited scope for spreading longevity and return risk. Individuals who live longer than expected, as well as individuals who sustain large losses in their portfolio, especially toward the end of their careers, can unexpectedly be worse off (Paddison, 2006). The bottom-line is, that one cannot simply compare the two different schemes. Any comparison needs to take into account the costs of the move, the different risks and administrative costs related to each system, as well as the distributional effects within and across generations. Pensions serve multiple purposes, which may be given different weights, and need

to be taken into account in determining whether for a specific country, the move towards fully funded pensions improves the welfare of the people (Barr & Diamond, 2006).

6.4 Concluding remarks

The GOA has taken different measures to improve the financial sustainability of the AOV fund: the introduction of a mandatory pension scheme for the private sector, the individualization of AOV premium contributions, increasing the wage cap, premiums, and retirement age, as well as introducing incentives for those willing to postpone retirement. The result of these combined measures led to a change in the position of the fund, from running a financial deficit, to a surplus, which is expected to increase in the coming years. As pension systems are susceptible to pressures that might not be directly controlled by the government, such as, population aging, slow economic growth, and high unemployment rates, it is prudent to consider additional reforms in order to insure the financial sustainability of the fund. Given the positive position that the fund is in currently, one can consider measures that do not directly impact the pockets of the public, such as placing the SVB in charge of the collection and audit of the AOV/AWW premiums, and expanding the premium base. Further reform can include raising the pension age (e.g. by linking it to average life expectancy), increasing premium contributions, and/or the wage cap, and reducing nominal pensions. It should be emphasized, that even though the fund is currently in a positive position, turning back the retirement age is not an option. This would negatively impact the position of the fund, and lead to a depletion of the SVB's reserves. In closing, the current chapter explores literature on a move from a PAYG to a fully funded pension system, but the analysis of such a move for Aruba is left out of the scope of the chapter.

7 Promoting capital expenditures and other growth enhancing expenditures

One of the main reasons for government investments in any country is the promotion of economic growth; this is achieved, among other ways, through the financing of public infrastructure projects (roads, housing, schools, hospitals and communication networks). Moreover, some projects with desired social returns (public goods) are not profitable for the private sector and thus are developed by the public sector. Indeed, large infrastructure investment can be transformative for growth, and be self-financing in the long run. However, public sector borrowing to finance these investments can also pose significant risks to fiscal and debt sustainability if the bill is a significant share of GDP.

A key question that arises therefore relates to the balancing of the role of growth enhancing expenditures (which may additionally be desirable as countercyclical fiscal policy) given fiscal constraints. Particularly in the short run, high public debt and limited fiscal space can raise questions about whether these investments risk jeopardizing debt sustainability. This chapter provides a discussion on these considerations as they apply for the case of Aruba and provides policy recommendations for the GOA to adapt going forward to ensure economic growth objectives are pursued despite fiscal space constraints.

The remainder of this paper proceeds as follows. Section 7.1 outlines relevant theoretical consideration, while section 7.2 introduces the current state of investments in Aruba. Section 7.3 then discusses potential steps moving forward including various measures and presents some concluding remarks.

7.1 Theoretical considerations

The literature indicates that it would be misleading to equate capital expenditure with growth-enhancing expenditure. The reason is that public spending classified as capital expenditure according to government accounting rules is neither a necessary nor a sufficient condition for its growth impact. For instance, spending on research and development or human capital cannot be classified as capital expenditure but exhibits a significant impact on growth. And, vice versa, not all types of capital expenditure qualify as unambiguously growth-enhancing (e.g. leisure facilities). To a large part this can be attributed to low efficiency arising from poor selection and implementation of projects due to limited information, waste and leakage of resources, and weak technical expertise.

Indeed, not all investments are created equal. Evidence from recent academic research suggests that the level and the composition of public spending indeed affects long-run growth, but also shows that the growth effects of different public spending categories differ significantly (Heinemann et al., 2012). According to this research, when evaluating the growth effects of projects per sector, investment projects classified as “Education” come out on top in terms of long run growth effects.

Country efforts to “invest in the investment process” can play a key role in raising the returns on public investment, and in ensuring that the scaled-up investment reaps the required growth dividends, while maintaining fiscal and debt sustainability (Collier & Venables, 2008). This encompasses several aspects—country capacity to carry out technically sound and non-politicized project appraisal and selection, appropriate mechanisms for implementation, oversight, and monitoring of investment projects, and ex post evaluation. The transparency and accountability of these functions and processes contributes to ensuring that productive public investment is supported. Economic and institutional indicators that measure and capture these aspects can thus play a key role in guiding the assessment of the scope to increase productive public investment and its growth benefits (Dabla-Norris et al., 2011).

These considerations become even more important in the context of countries that receive significant resource/windfall revenue. Although to date Aruba has not been the recipient of significant natural resource revenue, it has in the past received sizable revenue windfalls (e.g. Plant N.V.) and going forward it will need to consider the potential of receiving concession revenues from natural gas explorations currently underway.

A key issue facing policymakers in developing countries is the prudent management of natural resource wealth. Resource revenue is difficult to manage due to highly volatile commodity prices and production discoveries. This volatility leads to increased revenue fluctuations and overall macroeconomic instability as it creates boom-bust cycles in natural resource-rich countries (Primus, 2016). The exhaustibility and volatility of natural resource revenue therefore pose great challenge to policymakers and raise concern about how much of the resource wealth to invest, save or to utilize as debt repayment. Discussions on capital expenditures going forward therefore must consider the allocation of potential windfall revenue.

7.2 The state of capital expenditures in Aruba

The Report of the National Commission on Public Finance on Sound Public Finance and Public Accountability in Aruba issued in 2007 assessed government spending with the objective to determine an adequate level of current and capital expenditures. At the time, the report noted that government investments, which pertain to the government capital expenditures, were relatively low showing a ratio of 1.6 percent to GDP in 2005 compared to the peer group which varied between 1.5 percent and 7.1 percent with an average of 4.4 percent.

Similarly, the Article IV consultation mission by the IMF in 2017 concluded that potential growth could be enhanced by prioritizing capital expenditure. The report further advises that policies should strike a balance between lowering debt and building policy space with boosting potential and actual growth. The justification for this stance lie in the results of its model-based estimations that show that fiscal multipliers

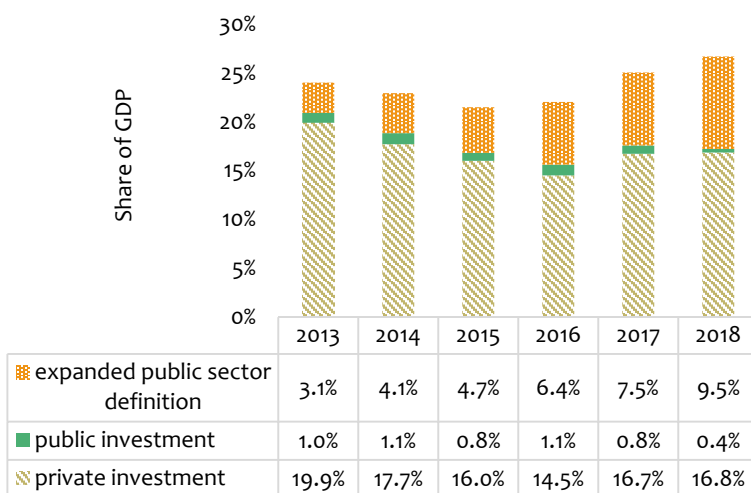
are very large for capital spending, but small for other fiscal measures. The IMF staff further recommends boosting Aruba's potential growth by enacting a general composition shift of public expenditures from current to capital.

According to GDP estimates produced by the CBA, investments in Aruba are predominantly executed by the private sector. Particularly, public investments (according to a strict definition) has been a mere fraction of total investments, hovering on average close to 1 percent of GDP in the period 2013-2017. This relates to investments that appear on the budget of the GOA. However taking a broader definition of the public sector to include investments carried out by entities that are more loosely affiliated to the GOA (including the TPEF, SOGA, RDA, WEB, ELMAR, SETAR, FCCA and PPP projects), the share of public sector gains in significance. The broader definition takes into consideration that the GOA plays an active role in creating investments through entities that fall outside the scope of its budget. As a caveat, it should be noted that the distinction between capital expenditure (and thus investments) and current expenditure are not necessarily a reliable classification of the productiveness or the growth enhancing potential of said expenditure. Current expenditure may include for instance road

maintenance, or wages for public teachers which are generally believed to fund productive public services.

From Figure 7.1 it can be concluded that the pace of public sector led investment projects has intensified since 2013. This is consistent with the policy rationale of the GOA to boost investments in infrastructure, spatial quality and energy. In the memorandum of explanation accompanying the budget of 2017, the government of Aruba explains: "These tree pillars would guarantee a sustainable economic growth. The purpose of the *Bo-Aruba* program aimed at urban renewal and district improvement is carried out on the one hand to return Aruba to the desired level, and on the other hand to provide a strong impulse to the local economy". At the same time, the cessation of the *Fond Desaroyo Aruba* (FDA) which was a vehicle for long run capital expenditure projects financed through a collaboration between the GOA and the Dutch government, meant that budgetary constraints similarly crowded out the investment component

Figure 7.1 Investments in Aruba 1/



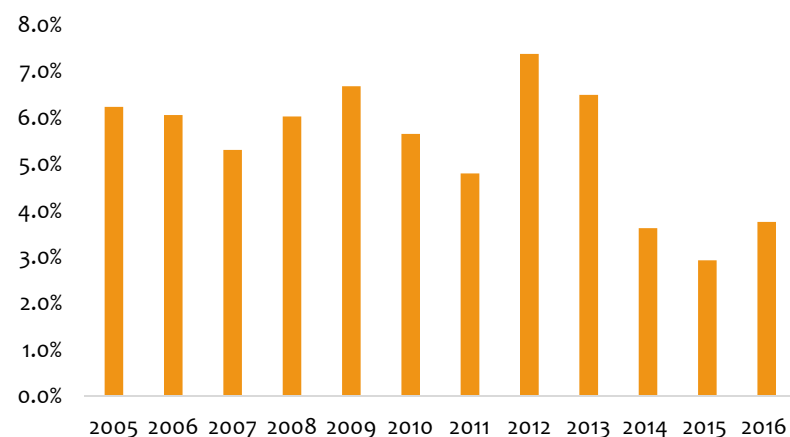
Source: CBA

1/ Expanded public sector definition includes investments by TPEF, SOGA, RDA, WEB, ELMAR, SETAR, FCCA and PPP projects, but excludes public sector investments according to the GOA budget.

on GOA's budget to as little as 3.8 percent of government expenditures in 2016 (see Figure 7.2)

Given the limited fiscal space, the introduced stimulus plans aimed at increasing investments in infrastructures were predominantly financed through PPP-style constructions. Examples of large investment projects that were carried out in this period include the container port in Barcadera, the renewal of the hospital, the Green Corridor, multifunctional accommodations and the Watty Vos Boulevard (Ringroad).

Figure 7.2 Investments as percent of total government expenditures 1/



Source: CBA

1/ Investments include development fund spending.

7.3 Moving forward

Considering the budgetary constraints, moving forward the CBA proposes the following guidelines to ensure an adequate balance between growth enhancement and fiscal sustainability is achieved.

Since financing public investments through PPPs offer ambiguous long run growth prospects, but have a certain long run fiscal impact, the CBA suggests the GOA to limit its exposure to the PPPs that have already been committed to. Though these projects certainly provide significant short run impact in terms of job creation and growth, the long run growth effects are not as straightforward. To date no PPP projects generates revenue, thus the returns following completion of the construction phase remains unclear. This raises the question whether the long run benefits of completing these projects outweigh the costs associated with the short-term investment boost and the accompanied long-term financial implications.

In addition, to ensure that going forward incidental revenue sources which may offer significant growth potential are reserved for growth enhancing purposes, it is advisable to assign future incidental/windfall revenue exclusively for the purpose of capital expenditure with large estimated growth effects, particularly in education. Note that incidental receipts have been partially the reason the GOA has been able to

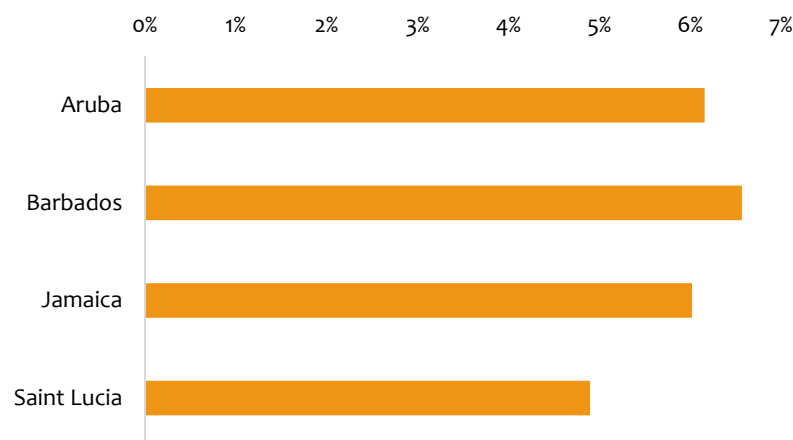
meet its fiscal targets in recent years. With significant budgetary pressure, it is not unimaginable that the achievement of fiscal targets come to depend on incidentals. However, achieving fiscal targets through incidentals does not address the structural causes on the expenditure side neither is it consistent with enacting countercyclical policy to help stabilize output over the business cycle. It also results in a large opportunity cost of assigning incidental/ windfall revenue to current expenditure over capital expenditure.

In the event that the incidental revenues become sizable, for example should the GOA receive revenue from commodities such as gas, the construction of a sovereign wealth fund could provide an avenue worth considering to accumulate and transfer wealth for capital expenditure purposes. The concept of a sovereign wealth fund in this context refers to special purpose vehicle set up to insulate the economy from commodity price volatility and to allocate resources to priority socio-economic projects, e.g. education. Funds with such a “stabilization/savings” purpose are already active in countries such as: Azerbaijan, Botswana, Trinidad & Tobago, and Norway. The Natural Resource Governance Institute, an independent non-profit organization, as well as the investment Committee of the OECD provide guidelines and tools to aid in the governance and set up of such funds.

Therefore, the CBA advises the GOA to create a sovereign wealth fund with money from the incidental and/or windfall revenues, including possible revenues generated from the exports of natural resources, noting that the monies in the sovereign wealth fund should be used exclusively for debt reduction or otherwise growth enhancing expenditure outside the general budget. Such a fund should be chartered with the assistance of independent international partners like the OECD and the Natural Resource Governance Institute.

Furthermore, given the long run growth prospects of spending in education, particular care should be taken to ensure that spending in this item is maintained despite budgetary pressures. In comparison to Caribbean peers which report expenditure on education as a percentage of GDP, Aruba falls within the same range as comparable islands (see Figure 7.3). However, recent research by the International Commission on Financing Global Education Opportunity (2016) estimate that the total education spending as a share of GDP should reach 11.8 percent. Though the applicability of this specific target for education

Figure 7.3 Expenditure on education in percent of GDP in 2014



Source: UNESCO (UIS.Stat)

spending needs to be investigated to assess the appropriateness of adopting in the case of Aruba, it is strongly advisable for the government to determine and implement a minimum target of expenditure on education as a percentage of GDP.

All in all, capital expenditures and other growth enhancing expenditures (e.g., in education) have the potential to promote economic growth. However, the link with growth outcomes depends critically on the quality and efficiency of public investment. This highlights the importance of going beyond discussions of investment levels and addressing issues of the broad institutional framework underpinning the provision of investment. This may include assigning non-budgeted revenues to a sovereign wealth fund. Furthermore, to maximize the long run growth enhancing potential of government investments, measures in the domain of education are particularly emphasized.

8 Debt management

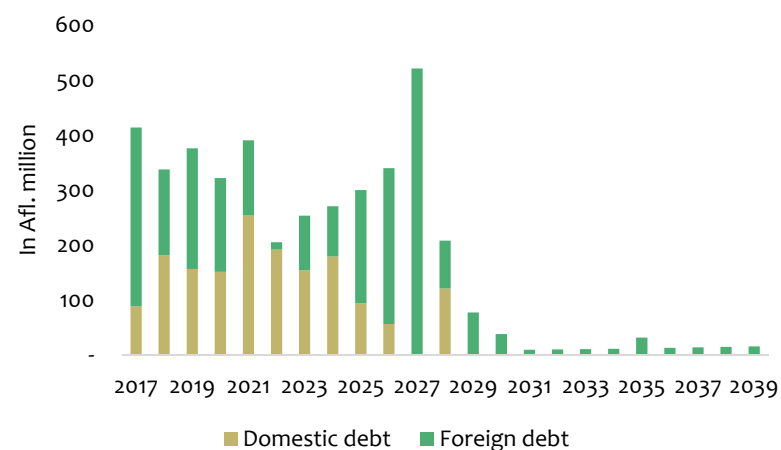
The objective of this chapter is to discuss briefly the profile of the current government debt and the institutional framework of public debt management in Aruba. Public debt management is the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding, achieve its risk and cost objectives, and meet any other sovereign debt management goals the government may have set, such as developing and maintaining an efficient market for government securities (IMF, 2001). Public debt management has a variety of goals according to theory on optimal debt management, including macroeconomic stabilization, supporting monetary policy, minimizing costs, and minimizing risks (Wolswijk & de Haan, 2005). However, in practice the primary objective of debt-management agencies is to ensure financing of the annual borrowing at minimal (medium-term) costs at acceptable risks.

The remainder of this chapter is organized as follows. Section 8.1 elaborates on the profile of the current government debt, including assessing the risks associated with this profile. Next, section 8.2 assesses the performance of debt management. Finally, section 8.3 presents some concluding remarks and recommendations.

8.1 Profile of current government debt

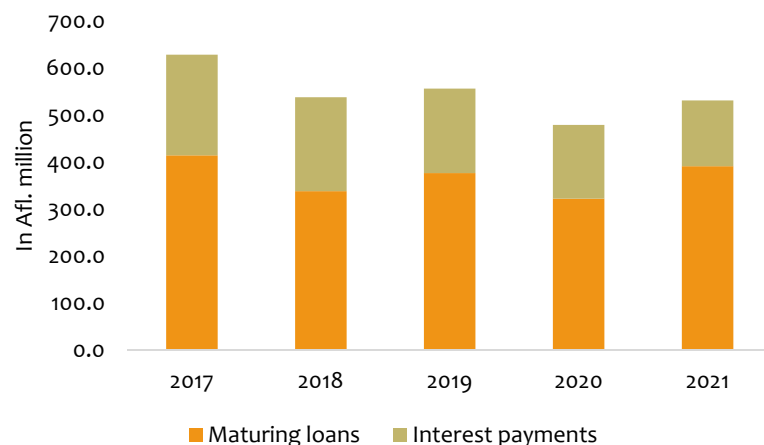
In the case of Aruba, public debt management is critical considering GOA's debt maturity profile (see Figure 8.1). In the past 31 years, GOA's debt has expanded to Afl. 4.1 billion or 84.3 percent of GDP in the first quarter of 2017. Figure 9.1 shows clearly the significant sums in maturing debt in the coming years. In the period 2018-2021, a total of about Afl. 1.4 billion in debt will be maturing (2018: Afl. 337.9 million, 2019: Afl. 376.4 million, 2020: Afl. 322.2 million, and 2021: Afl. 391.1 million), of which Afl. 683.9 million is foreign debt. The debt service payments are even higher (see Figure 8.2), amounting to Afl. 2.1 billion in the same period (2018: Afl. 537.7 million, 2019: Afl. 556.0 million, 2020: Afl. 478.8 million, and 2021: Afl. 530.8 million). In addition, when considering the debt ratios for the interest payments on the existing stock of debt, a rate of above 16 percent to total revenues is projected as early as 2018.

Figure 8.1 Maturity schedule of outstanding debt in August 2017



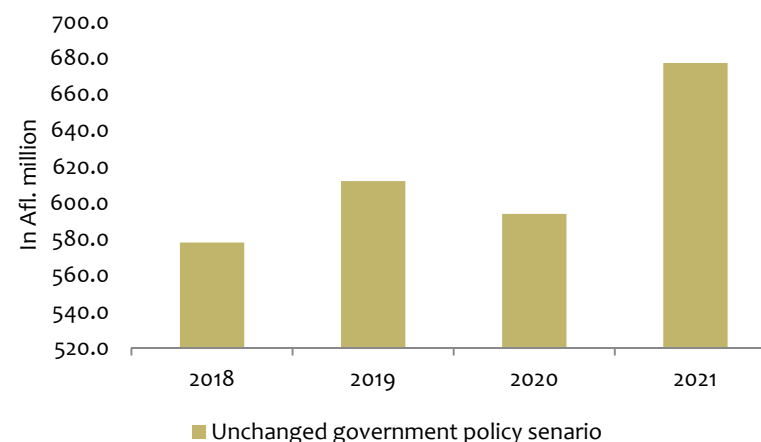
Source: DF.

Figure 8.2 Debt service payments 2017-2021, based on outstanding debt in September 2017



Source: DF.

Figure 8.3 Financing needs ¹⁾



Source: DF; CBA staff estimates.

1) The financing needs take into account the financial deficits of the unchanged government policy scenario presented in Chapter 2.

The mentioned totals in maturing debt and debt service payments do not take into consideration the expected financial deficits in the relevant period. When considering the financial deficits calculated in the unchanged government policy scenario, total financing needs equal Afl. 2.5 billion in the period 2018-2021 (see Figure 8.3). Clearly, the GOA will be challenged to find the necessary funding to cover its financing needs.

In view of the high government debt level, the maturity profile, and the expected government financial deficits, the GOA should consider a debt management strategy to address the structure and composition of debt that is within Aruba's debt-servicing capacity. At present, Aruba's government debt is composed of 47 percent domestic denominated debt and 53 percent external denominated debt, as depicted in Figure 8.4. Being almost equally distributed, attention should be placed on the risks associated with the present mix. While domestic debt

may help shield the economy from external debt market impulses, there are linkages with other macroeconomic factors, such as ongoing imbalance within the balance of payments, to consider while devising debt management policies.

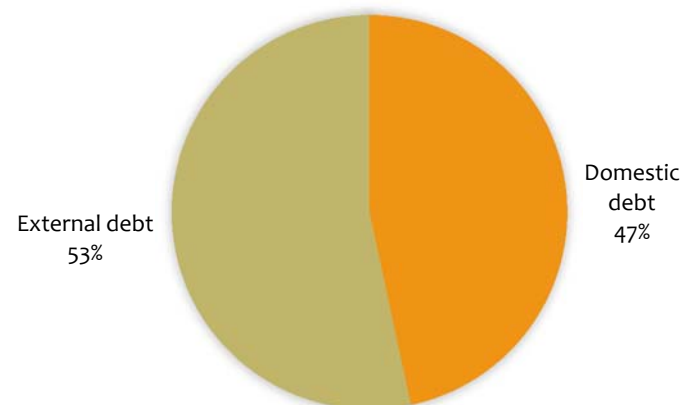
A debt management strategy is particularly important in the context of the outlook of the continued decline in international reserves. For the near-term, the GOA should contemplate covering its financing needs by foreign financing to mitigate the expected fall in Aruba's international reserves. This action would extend the period needed to tackle the structural causes of the balance of payments imbalances. These new foreign loans should preferably have a longer maturity than the current loans to spread the repayments over a longer period. In addition, the GOA should consider restructuring its outstanding debt by negotiating with its creditors with the aim of promoting a more balanced debt maturity profile, as the weight of debt maturities are mainly short to medium term rather than medium to long term.

Reviewing the maturity structure is an integral part of public debt management to avoid a situation of clustering of repayments. Moreover, the debt management strategy for Aruba should include an indicative multi-year borrowing plan that attracts financing at more competitive while enhancing cash flow expectations. Excessive borrowing in the domestic market by the government and the PPP investors could 'crowd out' the borrowing needs of the private sector, however at the same time, excessive reliance on foreign currency debt poses particular risks as it can lead to exchange rate and/or monetary pressures if investors become reluctant to refinance the government's debt (IMF, 2014b).

8.2 Measuring the Performance of Debt Management: A Preliminary Assessment

The CBA has conducted a brief review of Aruba's current debt management practices to determine its strengths and weaknesses, based on the World Bank's Debt Management Performance Assessment (DeMPA) framework (see Appendix). The World Bank together with several other stakeholders developed this tool for assessing different indicators that relay information concerning the performance of debt

Figure 8.4 Composition of government debt



Source: CBA.

management. The DeMPA comprises five core areas, i.e., governance and strategy development, coordination with macroeconomic policies, borrowing and related financing activities, operational risk management, and debt records and reporting. In this framework, each area is assessed by grading debt performance indicators, by giving (a total of 14) debt performance indicators (DPIs) a score between “A” to “D” and in some cases remain unrated (“N/R”) when a rate or an assessment is not possible, all based on specific criteria (World Bank, 2015).²³

In this brief review, the CBA has examined in general Aruba’s debt management practices compared to the DeMPA framework without giving a score for the debt performance indicators, because the latter would require a more in-depth assessment. In what follows, the main items for improvement are discussed for each of mentioned five core areas.

With regard to the core area *governance and strategy development*, the results of the quick review show that the GOA could improve the legal framework further by including a requirement for the development of a medium-term debt management strategy in its legislation and also evaluate the performance of debt management against established debt management objectives. Moreover, the managerial structure should ensure that borrowing and debt related transaction can be conducted effectively without political interference on those executing government policies. To improve this further, debt management must be steered by a formalized strategy and undertaken by the Treasury department within the Department of Finance. The latter functions as the debt management agency (DMA) that prepares recommendations for borrowing and debt related transactions. In addition, this quick review indicates that the GOA could improve its debt management practices by publishing its strategic objectives for debt management, conduct thorough assessments on costs and risks, and identify vulnerabilities in the debt portfolio. Furthermore, the debt reporting and evaluation could be enhanced by including a prerequisite for the GOA to provide the Parliament with a detailed report of the debt management activities on an annual basis. Also, both internal as well as external audits are necessary to strengthen accountability, including the political will to address the outcomes of these audits (World Bank, 2015). In recent years, the government has been able to prepare and present annual financial statements to Parliament, and debt management has been discussed in the quarterly reports to the CAFT. This could be strengthened further by aiming in the (near) future for an unmodified audit opinion of the financial statements as well as taking actions to address the outcomes of these audits.

²³ Each performance indicator has one or more dimensions. A score of C indicates that a minimum requirement for the dimension has been met. A minimum requirement is considered the necessary condition for effective performance under the particular dimension being measured. If the minimum requirements set out in C are not met, then a score of D should be assigned. A score of D, which indicates that the minimum requirement has not been achieved, signals a deficiency in performance, normally requiring priority corrective action. The A score reflects sound practice for that particular dimension of the indicator. The B score lies between the minimum requirements and sound practice for that aspect.

In terms of the core area *coordination with macroeconomic policies* (i.e., fiscal and monetary policy), the GOA could enhance the current debt management practices further by conducting forecasts that include interest and exchange rate sensitivity analysis and incorporating debt sustainability analysis. Moreover, ongoing information sharing between the Department of Finance and the CBA remains essential to support their respective objectives. Whether the government should obtain financing domestically or externally to support the monetary policy objectives or to meet government's long-term cost minimization debt goals, relevant information must be shared between parties. Related to the core area *borrowing and related financing activities*, the legislation that governs the budgetary process, stipulates that a list of government issued guarantees must be included in the explanatory memorandum of the government's budget. However, as the current legislation lacks the policies and procedures for approving loan guarantees, the GOA should contemplate amending the legislation to address this deficiency. Concerning the core area *operational risk management*, the GOA should properly document its procedures for administering debt in a manual. Also, the GOA should have business-continuity and disaster-recovery plans in place to mitigate the risks emanating from unfavorable external events. Finally, with regard to the core area *debt records and reporting*, the quick review finds no major issues.

All in all, Aruba has a number areas that need to be improved. It should be noted that these results are not exclusive to Aruba. Debt management practices in Caribbean economies are presently weak, and most countries do not have an explicit debt management strategy. Some of the key weaknesses most Caribbean countries face in debt management practices include, (i) poor legal frameworks, (ii) lack of coordination with monetary and/or fiscal policy, (iii) absence of debt management strategies, (iv) mediocre borrowing activities, (v) no management of operational risks, and (vi) deficiency of debt recording and reporting (IMF, 2014a).

The main conclusion on the brief review based on the DeMPA framework is that Aruba has room for improving its debt management practices in a number areas, like many other countries around the world. However, political will is expedient for the supporting debt management and for addressing issues when they arise. In order to meet debt management objectives, policies and strategies must be implemented within an environment of transparency, sound practices, and secured systems.

8.3 Conclusion

Throughout the past years, the debt management preferences of the government have focused on gradually converting foreign denominated debt into domestic debt through refinancing activities, while considering the limitations of the liquidity within the local market. While domestic debt is less costly to secure and easier to structure, attention must be placed on the adequacy of the foreign reserves and the risks inherent to domestic debt. All in all, for Aruba, the main objectives of public debt management, should be minimizing the costs of borrowing and preventing high maturing loans in specific years in order to reduce rollover/financing risks.

In the coming years, accountability in debt management must be fortified by raising its transparency. Not only must the outstanding debt figures be published on a regular basis to ensure that informed decisions can be made, but also clear objectives and instruments must be established for its management, such as the DeMPA methodology. Related to this, the CBA advises the GOA to conduct a full-fledged DeMPA assessment in the (near) future.

Apart from conventional debt, contingent liabilities from PPPs should also be included in the overall assessment of risks within Aruba's debt profile. Furthermore, the introduction of a DMA, either within the Department of Finance or as a separate entity, is recommended to elicit the commitment needed to strategically maintain the lowest possible costs in the medium to long term. There needs to be a balanced approach to structuring the debt portfolio, while considering factors that not only affect fiscal concerns, but also macro-economic concerns.

Appendix: Brief explanation of the DeMPA methodology

The World Bank together with several other stakeholders developed a tool for assessing different indicators that relay information concerning the performance of debt management. This tool, or better known as the Debt Management Performance Assessment (DeMPA), has become the standard for comprehensively evaluating debt management in developing countries by grading fourteen debt performance indicators that relate to the following five core areas: (i) governance and strategy development, (ii) coordination with macroeconomic policies, (iii) borrowing and related financing activities, (iv) operational risk management, and (v) debt records and reporting. Each of these five core areas includes a number of debt performance indicators (DPIs; see Table below)

Table: DPIs for each core area of the DeMPA framework

Governance and Strategy Development	
DPI-1	Legal Framework
DPI-2	Managerial Structure
DPI-3	Debt Management Strategy
DPI-4	Evaluation of Debt Management Operations
DPI-5	Audit
Coordination with Macroeconomic Policies	
DPI-6	Coordination with Fiscal Policy
DPI-7	Coordination with Monetary Policy
Borrowing and Related Financing Activities	
DPI-8	Domestic Market Borrowing
DPI-9	External Borrowing
DPI-10	Loan Guarantees, On-Lending, and Derivatives
Cash Flow Forecasting and Cash Balance Management	
DPI-11	Cash Flow Forecasting and Cash Balance Management
Operational Risk Management	
DPI-12	Debt Administration and Data Security
DPI-13	Segregation of Duties, Staff Capacity, and Business Continuity
Debt Records and Reporting	
DPI-14	Debt Records

Source: World Bank (2015).

In this framework, each area is assessed by grading debt performance indicators, by giving (a total of 14) debt performance indicators (DPIs) a score between “A” to “D” and in some cases remain unrated (“N/R”) when a rate or an assessment is not possible, all based on specific criteria. Each performance indicator has one or more dimensions. A score of C indicates that a minimum requirement for the dimension has

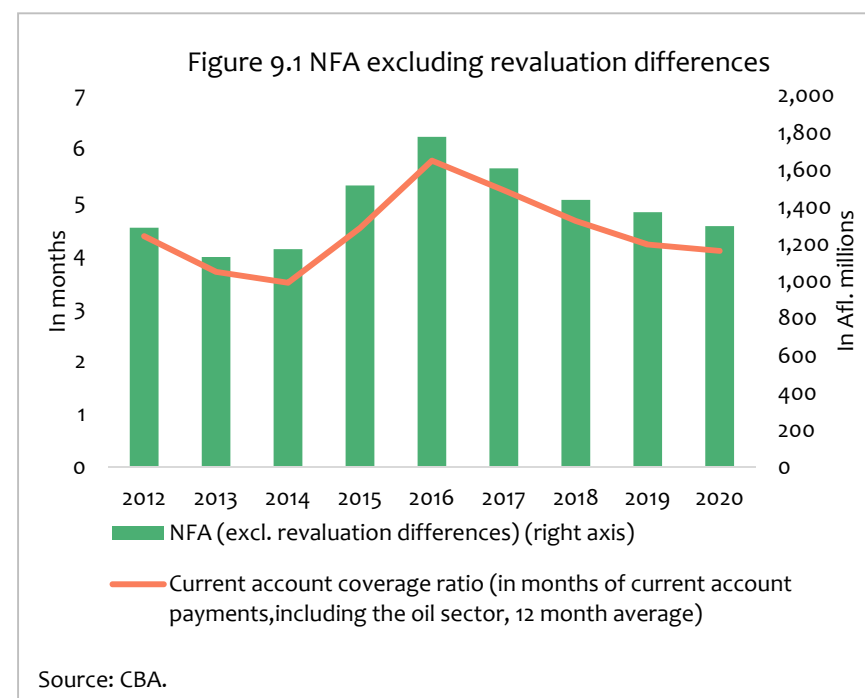
been met. A minimum requirement is considered the necessary condition for effective performance under the particular dimension being measured. If the minimum requirements set out in C are not met, then a score of D should be assigned. A score of D, which indicates that the minimum requirement has not been achieved, signals a deficiency in performance, normally requiring priority corrective action. The A score reflects sound practice for that particular dimension of the indicator. The B score lies between the minimum requirements and sound practice for that aspect. The final outcome of the assessment is then reported in a debt performance management report, which provides a summary of the assessment, outlines ongoing reforms of the government, and country specific information for background.

9 Strengthening the balance of payments position

The chapter proposes measures that the government of Aruba can take which could have a positive effect on the balance of payments and limit potential imbalances. Such imbalances in the balance of payments could upset the adequacy level of Aruba's net foreign assets (NFA).

Currently, the international reserves are projected to follow a downward path in the (near) future, as the anticipated inflow of funds are not sufficient to account for the large estimated outflow of funds (Figure 9.1). Nevertheless, Aruba's net foreign assets are expected to remain at an adequate level through 2020, measured by the current account coverage ratio (a ratio of 3 months is considered adequate). However, this negative path in NFA will not be sustainable in the long run if reforms are not introduced to correct for this undesirable development.

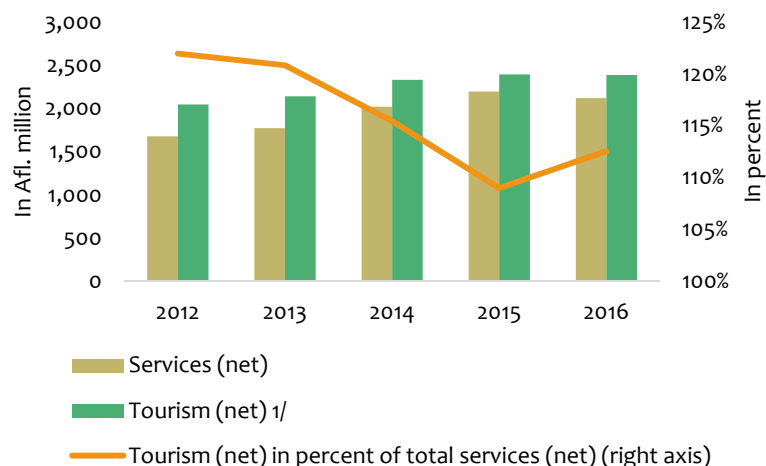
This chapter start with an analysis of the key drivers of the balance of payments in section 9.1 to determine possible avenues for reforms. Next, section 9.2 proposes a number of measures to correct balance of payments imbalances. At the end of this chapter, section 9.3 provides some final thoughts.



9.1 Key drivers of the balance of payments

There are several key drivers of the balance of payments (BOP), with some contributing positively and others negatively. The five main drivers, in no particular order, are (i) tourism which influences the BOP mainly through tourism receipts, (ii) the oil sector which brings pressure to the BOP through the import of oil related products, (iii) the foreign direct investment (FDI) account, (iv) import of goods since Aruba imports virtually all its merchandise, and (v) the government sector in large parts by borrowing foreign funds to pay for foreign debt obligations. In what follows, each of these key drivers is discussed briefly.

Figure 9.2 Service account surplus and tourism



Source: CBA.

1/ Tourism receipts less tourism payments.

Tourism

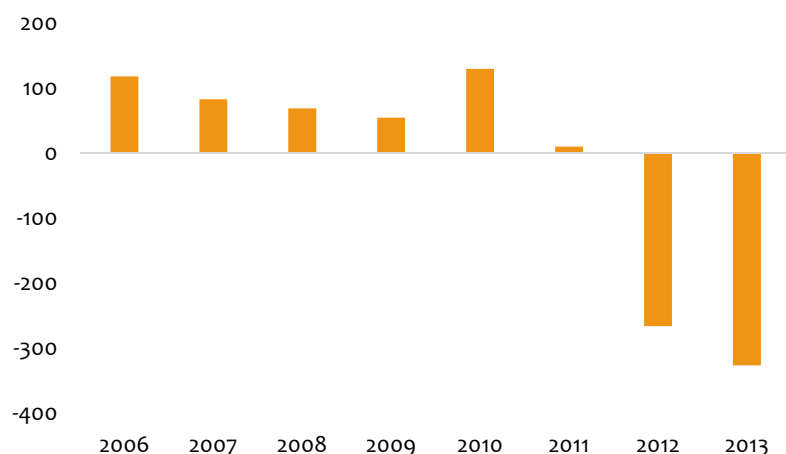
Of the 5 drivers, only tourism, through tourism receipts, contributes positively to the BOP (via the current account) and the NFA. There is some outflows of funds (e.g., imports of goods) related to tourism, but overall there is a positive contribution to the current account. Furthermore, there are other tourism related services such as timeshare maintenance fees that also contribute positively to the NFA, though the size of these contributions is small compared to tourism receipts. Additionally when residents go abroad the funds that flow out related to tourism fall under tourism payments.

In the period 2012-2016, the tourism surplus has been on average 116 percent of the total services surplus (see Figure 9.2). This indicates that the other components of the services accounts register an outflow of funds on a yearly basis. The proceeds from tourism are thus of outmost importance to the BOP and the NFA.

Oil sector

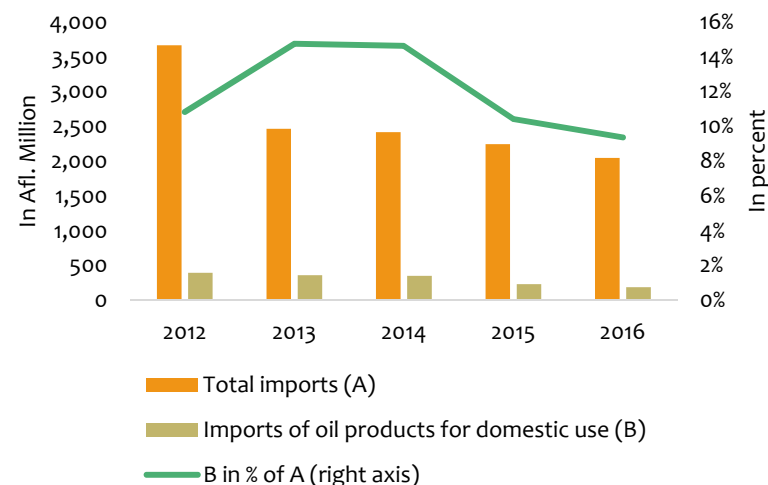
When the oil refinery was in operation (it closed down in 2009, re-opened in 2011, and has been closed since 2012), it generated sufficient foreign exchange to cause a surplus on the overall balance of payments of the oil sector (Figure 9.3), despite an estimated more than Afl. 350 million outflow each year directly related to the imports of oil products by the refinery for domestic use. Note that the latter figure has decreased in 2015 due to the fall in oil prices. This outflow is recorded as imports by the oil sector in the balance of payments (see Figure 9.4). The refinery sells fuel oil to the local water and electricity company for the production of electricity and it also imports gasoline and diesel for private consumption by the Aruban population. In the period 2012-2016, these imports of oil related products totaled between 9-15 percent of all imports. When the refinery was operational, its refining activities were large, generating foreign reserves that more than compensated for this yearly outflow of funds. After ceasing operations, the refinery continued with activities related to transshipment (around 2 percent of the services receipts from 2014-2016) which were not sufficient to counter the outflow of funds related to oil products for domestic use.

Figure 9.3 Overall balance of the oil sector on the BOP (in Afl. million)



Source: CBA.

Figure 9.4 Imports of oil products for domestic use



Source: CBA.

In 2017, the refinery started its refurbishment activities with the intention to restart (two thirds capacity) as an upgrader facility in 2019, reaching its full capacity in 2020. It is expected that service inflows related to the oil sector will increase once the refinery is in operation. Over the period 2000-2008, when the refinery was in operation, the oil sector BOP recorded an average net inflow of Afl. 74 million. It is however not yet known if the new refinery will cause inflows of similar size, but it will mitigate the outflows related to the import of oil products for domestic use.

Foreign direct investment (FDI)

Foreign direct investment contributes positively to the BOP in most years in the period 2012-2016, due largely to the inflow of funds for the purchase of real estate and timeshares (FDI in Aruba). On the other hand, there is some outflow with the purchase of real estate and timeshares in foreign countries (FDI abroad). It should be noted that the inflow from real estate and timeshare will be accompanied by yearly outflows in the income account related to these investments, due to the renting out of these properties by nonresidents. Additionally,

intercompany loans also bring in capital from abroad. However, these funds will also flow out in the long run due to the repayment of the loan along with interest payments. FDI's are currently contributing to funds, but do account for future outflows of funds. Furthermore, inflows from real estate and timeshare have been decreasing in the recent years, indicating that the market for these properties may be limited.

Imports of goods

Imports of goods is the number one driver of outflow of funds from Aruba. This should be expected as Aruba does not produce many goods and imports most, if not all, of its goods. Demand for goods has been weak since 2014 due to a weakened economy. This has caused a decline in the imports of goods. Goods imports, however, are expected to pick up back when the economy recovers.

Government

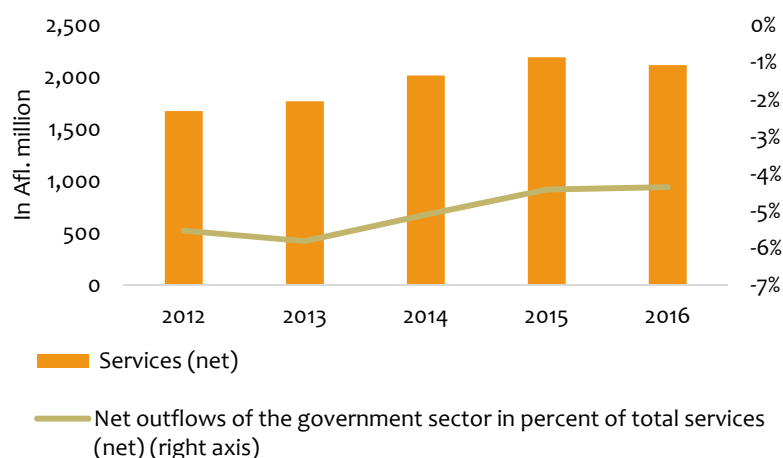
The government influences the BOP in several ways. Firstly, there is a yearly net outflow of funds of around 5 percent of total services (see Figure 9.5). These are mainly attributed to funds sent abroad by the ATA for promotion purposes and funds sent to students (Arubalening).

Additionally, there are also outflows related to technical assistance (for example, the government hires a non-resident consultant).

The income account of the BOP registered, on average, a net outflow of Afl. 230 million in the period 2012-2016. This is mainly due to outflows related to interest on bonds and loans and also income related to real estate and dividend payments. The government sector accounts for a substantial part of the yearly income account deficit through interest payments on its outstanding foreign debt (see Figure 9.6). This was nearly 50 percent of total income deficit in 2016 (+/- Afl. 117 million).

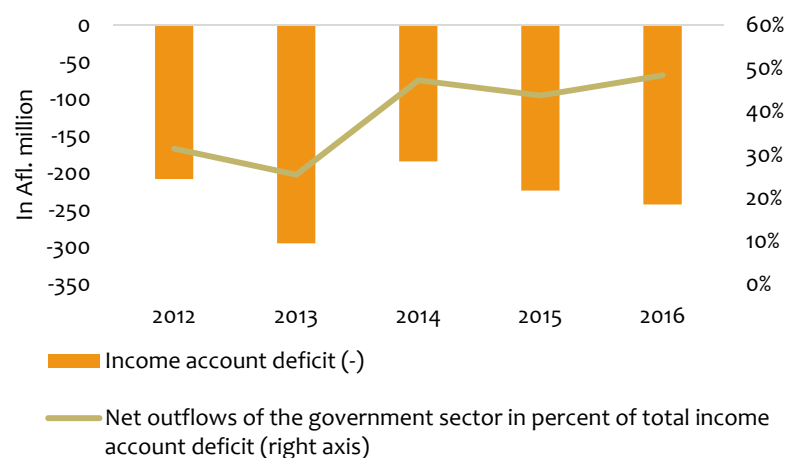
Finally, the government receives funds from abroad due to external borrowing. Figure 9.7 depicts the net inflows related to its external borrowings. The government has been borrowing externally to cover its deficit and repayments for the most part the last few years. The problem for the BOP and its sustainability is that these debt will have to be paid in

Figure 9.5 Service account surplus and the government sector



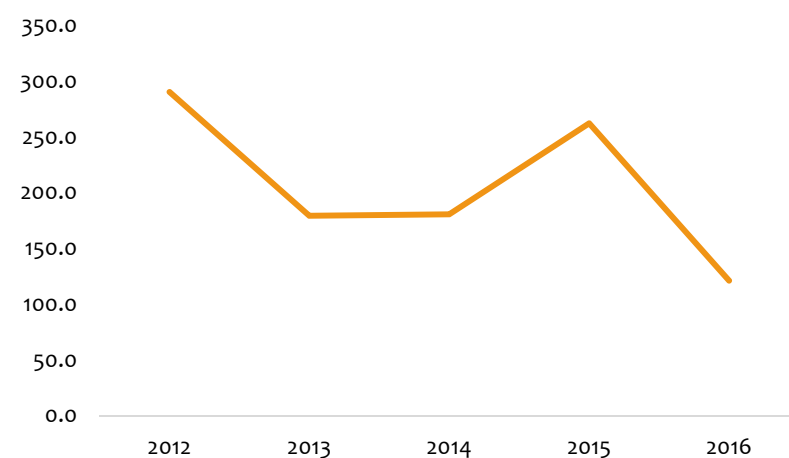
Source: CBA.

Figure 9.6 Net outflows of the government sector on the income account



Source: CBA.

Figure 9.7 Net inflows of the government sector on the financial account (in Afl. million)



Source: CBA.

the future along with interest. This implies that even though the government does contribute to the BOP, by borrowing, in the short term, it will cause much higher outflows in the future.

9.2 Measures to reduce BOP imbalances

The government has tools (e.g., fiscal policy) at its disposal to introduce measures to influence the development in the BOP and potentially reduce the imbalances. These reforms should focus primarily on the current account of the balance of payments. According to Ali Abbas et al. (2011), an analysis based on a large sample of countries shows that fiscal policy does have an effect on the current account of the balance

of payments. Their study suggests that strengthening the fiscal balance by 1 percent of GDP is associated with an improvement of the current account balance by 0.3-0.4 percent of GDP on average²⁴.

To improve the BOP, the GOA could consider the following measures.

Measures related to the oil sector

There are several actions which could lower the current account deficit created by the imports of oil products for domestic use. In the first place, the GOA could raise the excises on oil products to contain domestic spending on these products. It should be noted that the extent of the impact of this measure is unknown, since, for example, commuters will still use their vehicles for their daily commute to work and other necessities. In the second place, the GOA could increase fuel efficiency by promoting the use of electric cars by 2030, resulting in lower imports of gasoline. A secondary positive effect, unrelated to the BOP, is the reduction of pollution on Aruba. However, there are some challenges in implementing this measure. Electric cars are more expensive than the conventional cars, which would raise the value of imports of cars by shifting to these vehicles instead of conventional cars. Furthermore, the government would most likely give some form of tax benefit (lower import duties for electric cars) or subsidies (some environmental subsidy for owning an electric vehicle) which would negatively impact government finances. Finally, the disposal of the batteries of these electric cars once spent will be costly. These would most likely be exported abroad to a plant since Aruba does not have the capabilities to recycle these batteries which may cause pollution if leaked²⁵.

Measures related to FDI

Funds that flow in related to investments will flow back out in the future in the form of interest payments or dividend payments. Nevertheless, the government can promote FDI for projects that could potentially generate foreign funds in the long run (for example tourism related projects).

Measures on goods imports and other measures

Since most goods are imported, the government could impose some measures that would reduce the consumption of goods which in turn will lower the imports of goods. One of these measures could be to raise import duties on luxury type of goods. Another alternative is to

²⁴ Ali Abbas et al. (2011) use, among others, panel regressions and VARs for their analysis. The association between fiscal policy and the current account seems stronger in emerging and low income countries, in countries with flexible exchange rates, and when levels of debt are above 90 percent of GDP.

²⁵ “The rise of electric cars could leave us with a big battery waste problem” <https://www.theguardian.com/sustainable-business/2017/aug/10/electric-cars-big-battery-waste-problem-lithium-recycling>.

increase the sales tax (BBO). An increase in the BBO rate would mean less disposable income to spend in, among others, goods imported. In fact, any tax revenue generating measure will most likely reduce the imports of goods. Finally, the government could promote the local agriculture industry to reduce the imports of food and vegetables products. However, this would probably mean that the government would have to subsidize local products (or some other incentive) which will increase government spending. Additionally, there is only a limited variety of fruits and vegetables which can grow on Aruban soil and in the Aruban heat (weather). Next to reducing the imports of goods, the government could potentially influence the exports of services by lowering wage and income tax. This would make it attractive for high skilled labor which would stimulate local enterprises to export services which they previously could not.

Measure on the government

Most of the aforementioned measures by the government on different drivers of the BOP were revenue generating measure for the government. Yet the most crucial reform which the government can take to reduce the BOP imbalances is to lower its expenses. Furthermore, the government should reduce its debt even further which most likely result in a decrease of interest payments abroad. Finally, the government should restructure its debt to get a lower interest on its outstanding debt. These reforms would have a direct effect on the current BOP imbalances but also on the future BOP.

9.3 Final thoughts

Adequate levels of international reserves, and therefore sustainable balance of payments, are a prerequisite for maintaining the current peg of the Aruban florin with the US\$. The expected current account deficits and overall deficits on the balance of payments are anticipated to result in a downward trend in the international reserves. To reverse this development, it is of utmost importance that the government takes measures swiftly.

As mentioned before, fiscal policy can contribute to solving BOP imbalances. Excessive government expenditures result in steep demand, which may ignite inflationary pressures, thereby weakening the value of the Aruban florin. Furthermore, protracted fiscal deficits and disproportionate government expenditures can cause balance of payments problems because of the related rise in foreign exchange outflows (e.g., import payments), which in turn negatively impacts Aruba's international reserves. Furthermore, to turn around the anticipated current account deficits, the GOA should focus primarily on the current account deficit created by the imports of oil products for domestic use. Finally, the government should assess its policies carefully before implementing one that could potentially distort the largest contributor to the NFA, the tourism market.

10 Aspiring good governance in the public sector

This chapter discusses possible policy options for improving governance in the public sector. Governance is a broad concept covering all aspects of how a country is governed, including its economic policies, regulatory framework, and adherence to rule of law (IMF, 2017a). Good governance is important for better informed and longer-term decision making, more efficient use of resources, and creating safeguards for achieving policy objectives. Good governance refers to the management of government in a manner that is essentially free of abuse and corruption, and with due regard to the rule of law (IMF, 2007). There are many aspects to good governance. However, in this chapter the CBA presents proposals for improving governance, focusing on fiscal governance, the philosophy of Open Government Data, and a possible anti-corruption strategy.

10.1 Fiscal governance

Fiscal governance comprises those rules, regulations and procedures that influence how budgetary policy is planned, approved, carried out, and monitored (Giosi, Testarmata, Brunelli & Stagliano, 2014). Consequently, fiscal governance has many dimensions, such as numerical fiscal rules, the independent fiscal institutions, the medium term budgetary frameworks and the budgeting procedures. Already in its 2013 report “A roadmap to fiscal sustainability in Aruba: Policy recommendations to the Government of Aruba for the period 2013-2017”, the CBA suggested to the GOA to introduce numerical fiscal rules and to establish an independent body to monitor compliance with the numerical fiscal rules. Specifically, the CBA recommended to introduce a balanced budget rule from 2016 onwards, a maximum debt to GDP ratio of 55 percent starting by 2021, a limit on the annual payment commitment related to PPP projects of 3 percent of a 5-year moving average of total government tax revenues (excluding one-off revenues), and the use of windfalls only to reduce government debt.

Though numerical fiscal rules were introduced in 2015 for the period 2015-2018 as a result of the adoption of the *Landsverordening Aruba tijdelijk financieel toezicht* (Laft) by the Parliament of Aruba²⁶, the current state of public finances and the fiscal outlook show that a further strengthening of the fiscal frameworks is a sine qua non for achieving sustainable public finances. As noted by Peterson & Croes (2017), “forward-looking fiscal rules and capable fiscal institutions are quintessential for assuring effective fiscal policy and ensuring sustainable public finance”. The latter authors suggest different pathways for strengthening fiscal rules and fiscal institutions, among others: (i) enacting and/or enforcing a fiscal responsibility law, encompassing fiscal rules and fiscal institutions, (ii) diversifying and designing comprehensive

²⁶ The College Aruba Financieel Toezicht (CAFT), acting as the fiscal council, is responsible for monitoring the compliance with these fiscal rules, while the Council of Ministers of the Kingdom of the Netherlands is the supervisor.

fiscal rules, including (at a minimum) expenditures and debt rules, and a golden rule for capital expenditures, (iii) establishing a national fiscal council, and (iv) expanding the time-horizon of the current medium term budget framework to at least 5 years.

To improve fiscal governance further, the CBA suggests the GOA to introduce fiscal rules beyond 2018. Specifically, the CBA proposes the GOA to consider introducing a balanced budget rule, a rule for a maximum debt to GDP ratio, a golden rule for capital expenditures, and a minimum expenditure rule for education expenses. In addition, to ensure appropriate coverage, going forward, fiscal rules also should address off-budget fiscal activity (e.g., spending on PPP projects), of which the non-debt obligations are in fact akin to debt, by imposing a limit on PPP projects. Great care should also be exercised to ensure that the fiscal rules are comprehensive to prevent shifting the source of fiscal indiscipline to areas not covered. To prevent fiscal indiscipline, the fiscal laws should include procedural protocols to hold delinquent civil servants accountable for noncompliance. On the other hand, the fiscal council may consider limited escape clauses to provide some flexibility in fiscal rules to respond to business cycle developments.

10.2 Open government data

The CBA recommends the GOA to adapt the philosophy of Open Government Data (OGD), i.e. a philosophy – and increasingly a set of policies – that promotes transparency, accountability and value creation by making government data available to all. Open Data is grounded in the recognition that government data is produced with public funds so, with few exceptions, should be treated as public goods (NSO study working group, 2014). A study by the Centre for Strategic Economic Studies at Victoria University shows that the benefits of making public sector information data freely available outweigh the costs by some considerable margins (Houghton, 2011).

By making government data available, public institutions become more transparent and accountable to citizens. According to the World Bank, open data support public oversight of governments and help reduce corruption by enabling greater transparency²⁷. Note that the data must be legally open, which means they must be placed in the public domain or under liberal terms of use with minimal restrictions. In practice, achieving this condition proves particularly challenging given that government data are collected by numerous (public) entities in Aruba with their own mandates and processes to collect and disseminate information. Furthermore, depending on the institution, the dissemination of data can be subject to approval by a ministry in charge of the domain in which the entity operates. Such an environment could give rise to principal-agent problems when data releases don't align with the incentives of their respective ministries. This can be the case both for realized data as well as for forecasts. Legal constraints currently also restrict data sharing across institutions and government departments in Aruba. The statistics ordinance does not explicitly authorize the Central Bureau of Statistics (CBS) to demand data from other government

²⁷ Source: <http://opendatatoolkit.worldbank.org/en/starting.html>.

entities or institutions. These partners are therefore less compelled to share their data, often citing the need to uphold the privacy of their clients. Introducing a standard protocol enabling a data sharing could potentially lead to significant improvements including: improvements in tax collection, more accurate projections and the linkage of complimenting administrative data sets to support evidence based policy making.

To really foster accountability, governments and civil society must take action to increase awareness and the use of data, and to interpret and deploy data to build pressure for change. Studies have shown that unless civil society organizations are involved in dissemination, the online release of government data often has little impact. The role of intermediaries – such as community and religious centers and community radio stations – is key to ensuring data lead to more informed and empowered citizens, and drive change.

Moreover, the data must be technically open, which means they must be published in electronic formats that are machine readable and preferably non-proprietary. Data must also be publicly available and accessible on a public server, without password or firewall restrictions. In laying a foundation for technically open data, various local institutions have already started the process of upgrading their data systems. Most notably, the CBA has created web portals to electronically communicate with its reporting institutions. From an efficiency standpoint such initiatives can be replicated and expanded to government institutions to facilitate more efficient communication of data across institutions, preventing the duplication of efforts by different organizations to secure publicly available data for their organizational needs.

Some of the above mentioned benefits have already been implicitly recognized by the GOA in a ministerial decree enacting a so-called ‘SDG Indicator Workgroup’ to implement the sustainable development goals (SDGs) framework of the United Nations. The SDGs created a surge of interest in the data that would be used for monitoring, and the data that governments and others would need to achieve them. So far, companies have been involved in this conversation mostly as producers of data, and as developers of tools for analyzing the data. But this should change. How companies and civil society partners use data, and what data they use, is as much a part of effective strategies for social good in the private sector as it is for governments and NGOs. While using GDP as a measure of development has become increasingly contested, the SDG framework also provides the opportunity to more broadly measure sustainable development by creating a composite indicator across the three dimensions of sustainable development, namely: economic development, social inclusion and environmental sustainability. SDG indexes and dashboards have been constructed to the effect and in the spirit of ‘moving beyond GDP’; an open data initiative could spearhead the development of these new practical tools. Sound metrics and data are critical for turning the SDGs into practical tools for problem-solving by (i) mobilizing governments, academia, civil society, and business, (ii) providing a report card to track progress and ensure accountability, and (iii) serving as a management tool for the transformations needed to achieve the SDGs by 2030.

While preparatory work for monitoring and evaluation of the SDG's are being pursued, the CBA argues that these efforts to aid sustainable development can be bolstered by the explicit enactment of an OGD initiative. In this context, the SDGs and their attainment need to remain centrally coordinated. In addition, the GOA needs to embrace civil society and businesses as partners to achieve SDGs. Moreover, data should be made accessible in the public domain via an Open Data platform. Also, standard protocol for data sharing among government departments should be introduced.

10.3 Anti-corruption strategy

To promote good governance in the public sector, the CBA advises the GOA to adopt an anti-corruption strategy. After all, corruption is the antithesis of good governance (Fourie, 2016). According to Rose-Ackerman (1999), high levels of corruption limit investment and growth and lead to ineffective government. Furthermore, corruption can weaken the state's ability to provide inclusive economic growth in a number of different areas (IMF, 2016a). Therefore, the CBA recommends the GOA to adopt, in close collaboration with relevant stakeholders, a holistic (island-wide) anti-corruption strategy, focusing, among others, on creating the right incentives, tackling the vulnerable sectors, promoting transparency, building shared values and strengthening the controlling institutions. The anti-corruption roadmap includes drafting specific laws and code of conduct for all public officials, the public disclosure of campaign finance, whistleblowing processes, digital transformation, policy for dealing with conflict of interest, and campaigns to educate the public to require public benefits from the political system and not personal favors. Note that policy on openness of information, such as Open Government Data, could be one element of a possible anti-corruption strategy. The CBA will present proposals with regard to an anti-corruption strategy in the short term.

10.4 Final thoughts

In addition to mentioned reforms, the GOA should consider strengthening public institutions that control or advise the government such as the *Centrale Accountantsdienst*, *Algemene Rekenkamer* and *Raad van Advies*. In addition, a dedicated department within the government, preferably under the responsibility of the prime minister, should be in charge with good governance. Moreover, the GOA should ensure a data driven digital transformation, thereby contributing to better-informed decision making as well as the efficient use of resources. Digitization offers opportunities for improving fiscal policy and public finances, because governments have access to more timely, easily accessible, and transparent information on economic activity, better digital systems for enhanced implementation of tax and spending policies, and new policy options (Gupta, Keen, Shah, & Verdier, 2017, p. 2-6).

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