CONTEXT

1. **Aruba is one of the most tourism-dependent countries in the world.** About 87 percent of the economy depends directly or indirectly on tourism, making Aruba's growth volatile and markedly dependent on external conditions. With U.S. tourists currently accounting for almost 70 percent of stay-over tourism, the economy is particularly sensitive to the U.S. business cycle.

2. **Several recessions over the past decade have weighed on the fiscal position.** The global financial crisis and its aftermath and the end to oil refining in 2012 have weakened activity and increased fiscal deficits and debt—including through the government policy response to these shocks. In 2014, the authorities undertook significant entitlement reforms to address the fiscal challenges and made efforts to diversify the economy. Nonetheless, growth remained lackluster and the economy entered a recession in 2015. At the same time, the sustainability of public finances remained a concern—by end-2017, public debt reached 86.7 percent of GDP, up from about 42 percent in 2008.[1]

3. **A new government was sworn in by end-2017.** Prime Minister Wever-Croes of the Movimiento Electoral di Pueblo (MEP) has entered the second year of her four-year term. The MEP leads a coalition with two junior parties, holding a 12-seat majority in the 21-seat parliament. The next election is in 2021.

4. **The government devised a reform agenda with fiscal consolidation as a key pillar.** Facing a deteriorating fiscal position, it focused on "crisis management", by temporarily increasing turnover taxes (Annex VI), while devising a home-grown medium-term fiscal consolidation plan—the Financial Economic Memorandum. The plan served as the basis of a new agreement with the Netherlands, made in November 2018, that pinned down fiscal targets for 2019 and the medium term (Annex VII).[2]

RECENT ECONOMIC DEVELOPMENTS

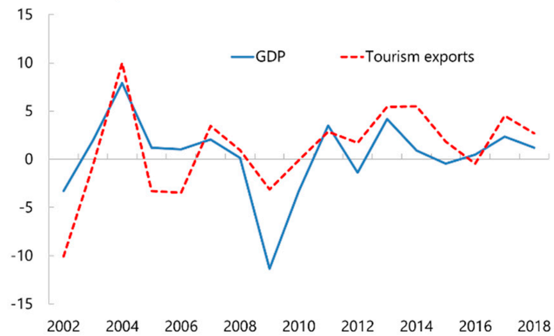
5. **Aruba's economic recovery continued, though at a slowing pace.** Following a contraction in 2015 and a modest rebound in 2016, real GDP expanded by 2.3 percent in 2017 on the back of strong public consumption and buoyant tourism growth—with cruise visitors and U.S. tourist arrivals more than offsetting the effects of falling tourism from Venezuela (Figure 1). Aruba's tourism market share grew, supported by the devasting hurricanes in other parts of the Caribbean and its tourism exports continued to be robust in 2018. Despite this, growth is estimated to have slowed to 1.2 percent in 2018, largely because of weaker public consumption, a slight delay in the implementation of key investment projects, and a pick-up in import growth. Unemployment increased from 7.7 percent in 2016 to 8.9 percent in 2017, despite relatively strong growth that year.

[1] All the authorities' GDP figures cited and reported in this document over the period 2010-17 reflect the latest data compiled and published by the Central Bank of Aruba (CBA). The Aruba Central Bureau of Statistics has made good progress on the revision of the national accounts. See also paragraph 42.

[2] The authorities did not seek the Fund's input on their fiscal targets.

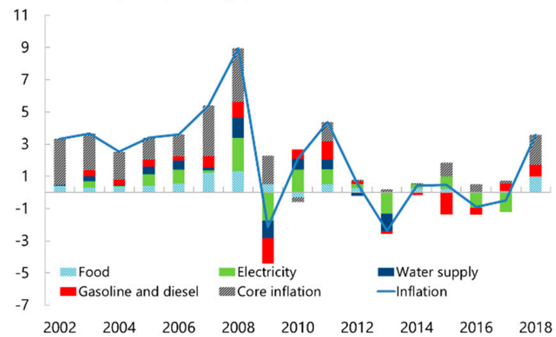
Inflation was in negative territory in 2016-17, but rose to 3.6 percent in 2018, mainly due to increases in the turnover tax rate (mid-2018) and oil prices.

Real GDP and Real Tourism Exports
(Percent change)



Sources: Central Bank of Aruba and IMF staff estimates.

CPI
(Percent change and percentage points)



Source: Authorities' data.

6. **Fiscal deficits and debt have remained high.** The overall deficit increased by 1.4 percentage points to 3 percent of GDP in 2017, mostly because of a decline in non-tax revenues and an increase in current expenditures (Figure 2). The deficit moderated to 2.2 percent of GDP in 2018 mainly due to increases in revenues—supported by continued economic recovery and the turnover tax rate hike in mid-2018—as well as reductions in current expenditures. Public debt reached 84.5 percent of GDP in 2018. The Debt Sustainability Analysis (DSA) shows that Aruba's public debt sustainability risks remain significant, although the debt-to-GDP ratio is expected to decline gradually over the medium term. Aruba is particularly sensitive to adverse shocks to growth and a failure to carry out the needed fiscal reforms as its historical policies have led to the high public debt ratio (Annex IV).

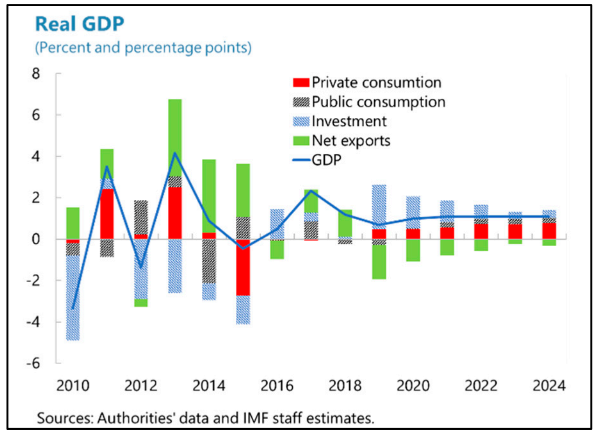
7. **The current account balance has moderated.** The surplus declined to 1 percent of GDP in 2017, from 5 percent of GDP in 2016 as the deterioration in the trade and income balances more than offset the improvement in the service balance brought about by tourism growth. The smaller current account surplus and modest financial outflows led to a loss of US$29 million in reserves in 2017—the stock stood at 4.9 months of imports at end-year. In 2018, the current account registered a deficit of 0.5 percent of GDP, mostly due to a decrease in the income balance. Reserves nudged up to 5.1 months of imports, helped by an increase in foreign direct investment (FDI) and portfolio inflows. Aruba's external debt fell by close to 4 percentage points of GDP to 102.5 percent in 2017 and is estimated to have fallen further to 99.3 percent of GDP in 2018 as the government reduced external borrowing.

8. **Private sector credit has picked up.** It rose by close to 4 percent in 2017-18, up from 1.8 percent in 2016, mainly supported by steady growth in mortgages (Figure 3). The latter is partly driven by the remodeling of houses for alternative tourism accommodations and a pent-up demand to build houses brought about by a backlog of applications for land. Asking prices for houses have been relatively stable in recent years.

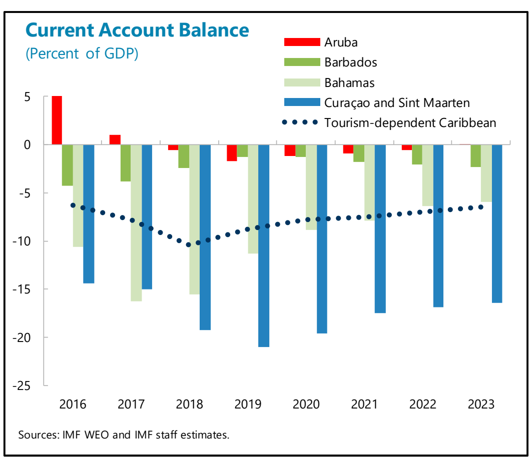
OUTLOOK AND RISKS

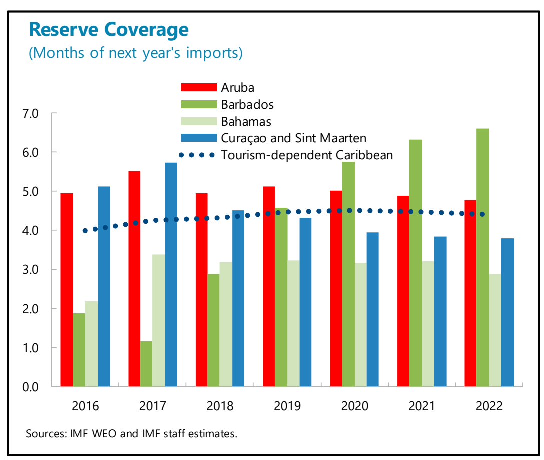
Staff Views

9. **Growth is projected at 0.7 percent in 2019, and 1.1 percent over the medium term.** The fiscal consolidation plan—while essential to put public debt on a downward trajectory—will lower real GDP growth in 2019.[3] However, this effect will be mitigated by continued strong growth in tourism from the U.S., and the implementation of multiple large investment projects (including the airport, utilities, hospital, and hotels) in 2019 and subsequent years. Over the medium term, real tourism exports are expected to grow steadily at around 1.2 percent, and together with contributions from domestic demand, growth is expected to increase to 1.1 percent, broadly in line with the historical average. Inflation is projected to fall to 1.8 percent in 2019 as the base effect of the turnover tax rate hike disappears, and oil prices decrease, before gradually rising towards 2.2 percent over the medium term.



10. **The current account balance is forecast to decline further in 2019 before gradually improving through the medium term and will remain high relative to regional peers.** Staff foresees a deficit of 1.7 percent of GDP in 2019, followed by shrinking deficits, and then a small surplus in the outer years. This path is largely driven by high imports in 2019-21 associated with the implementation of above-mentioned infrastructure projects. In the medium term, robust tourism growth, brought about by an anticipated increase in hotel capacity, and reduced oil imports for electricity generation—due to the implementation of energy saving technologies—are the main





[3] Empirical and model-based estimates for Aruba suggest that fiscal multipliers are small over the medium term but somewhat larger on impact.

drivers. The increased demand for foreign workers in the tourism sector will likely lead to positive spillovers for the rest of the region, due to increased remittance outflows (Annex X). By 2024, reserves would stand at around 5 months of imports, in line with regional peers.

11. **Risks to the outlook are tilted to the downside.** Aruba is susceptible to a possible downturn in the U.S. economy. Risks from the crisis in Venezuela have largely materialized over the last few years as bilateral trade saw disruptions and Venezuelan tourist arrivals declined sharply. Nevertheless, Aruba has managed to absorb the crisis impact by diversifying both suppliers and tourist markets. The Venezuelan immigrant and refugee influx appears to have been limited so far, although available estimates of these flows are highly uncertain. A worsening crisis that leads to sizable refugee inflows would put pressure on labor markets and infrastructure and may cause tourists to postpone plans or seek other destinations. The planned fiscal consolidation would address important medium-term downside risks but could have greater-than-expected effects on growth in the near term. On the upside, the implementation of needed structural reforms as well as investments in energy-saving technologies and renewable energy would boost potential growth (Annex II, RAM). Albeit a somewhat remote possibility, a re-opening of the refinery would bring associated investments and employment gains.

Authorities' Views

12. **The authorities broadly agreed with staff's assessment of the outlook and risks.** They noted that robust tourism growth has underpinned economic activity in 2017-18, and they foresee tourism as continuing to play a key role going forward. At the same time, the authorities expect multiple planned and ongoing investment projects to boost the economy. As a result, they do not see a need to actively mitigate any adverse growth effects from their fiscal consolidation plan. The authorities acknowledged the risks from the Venezuela crisis. So far, the effects from immigrants and refugees have been relatively limited. Notwithstanding the limited effects of the crisis to date, the authorities noted that they are discussing financing of their contingency plan with both the European Union and the United Nations High Commissioner for Refugees. The contingency plan aims to prepare them in case there is a worsening of the crisis and a potential "mass influx" situation. The authorities agreed that the reopening of the refinery is an upside risk and, given the highly uncertain situation, they have not factored it in the budget or in any forecasts.

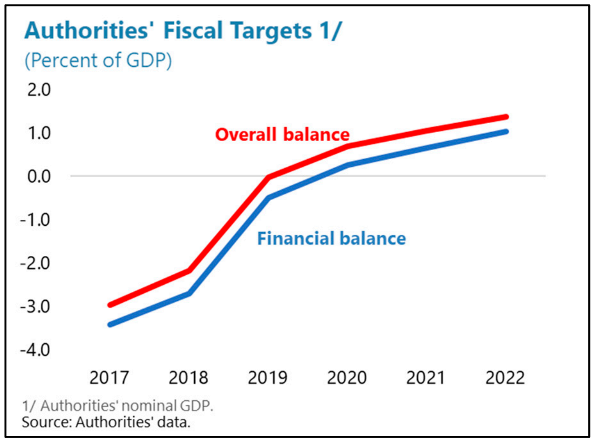
POLICY ISSUES

13. **The key policy challenges are:** (A) Continuing fiscal consolidation and underlying reforms to put public debt on a downward trajectory; (B) maintaining international reserve buffers and safeguarding financial stability; (C) removing structural impediments to sustained and inclusive growth; and (D) bridging data gaps for effective policy making.

A. Maintaining the Momentum on Fiscal Reform

Background

14. **The new agreement with the Netherlands has established Aruba's fiscal targets.** These fiscal targets were set in terms of the "financial" balance, defined as the overall fiscal balance plus net acquisition of financial assets.[4] For 2019, the target was set at -0.5 percent of GDP; this corresponds to an overall balance of 0 percent of GDP. A financial balance of 0.3 percent of GDP was set for 2020, increasing to 1.0 percent in 2022 and beyond. These map into an overall balance of 0.7 percent and 1.4 percent of GDP, respectively.



15. **The 2019 approved budget is in line with the authorities' target and envisions sizable tightening.** It foresees a balanced budget, 2.3 percentage points of GDP tighter than the 2018 outcome (text Table).[5] The adjustment comes mainly from the revenue side:

- ***Revenues.*** The large upfront revenue increase of 2.3 percent of GDP would come mostly from indirect taxes (Annex VIII): the full-year impact of the mid-2018 turnover tax increase (+1.4 percent of GDP), an increase in excise taxes on alcohol, tobacco, and cider in early 2019 (+0.3 percent of GDP), and the introduction of an excise tax on sugary drinks in mid-2019 (+0.3 percent of GDP). Direct tax revenues are expected to decline by 0.4 percent of GDP as a result of the early 2019 simplifications to the personal income tax (-0.3 percent of GDP) and reform of property taxes (+0.3 percent of GDP); the expected collection of tax arrears through improvements in tax administration (+1.2 percent of GDP); and base effects (-1.6 percent of GDP).[6]

- ***Expenditures.*** Savings are expected to come from reductions in the transfers to the General Health Insurance (AZV)[7] and in capital spending. However, these are fully offset by increased spending elsewhere in the budget, leading to zero adjustment from the expenditure side.

[4] The net acquisition of financial assets comprises mostly student loans.

[5] The authorities' 2018 overall fiscal deficit of 2.28 percent of GDP differs marginally from staff 's estimate of 2.22 percent. This is due to slightly different nominal GDP estimates for 2018.

[6] The negative base effects are due to the authorities' conservative 2019 base relative to the 2018 outcome as well as a nominal GDP growth assumption of a mere 1 percent.

[7] The main sources of income for the AZV are premiums, the health sales tax (BAZV tax), and budget transfers (Annex IX). Since the authorities raised the BAZV tax rate in mid-2018 (Annex VI), they built in zero budget transfers to AZV in their 2019 budget and beyond.

Central Government Fiscal Plan, 2019-2022

(Percent of GDP)

	Outcome	Budget	Authorities medium term			Fiscal adjustment	
	2018	**2019**	**2020**	**2021**	**2022**	**2018-19**	**2018-22**
Total revenue	**26.5**	**28.7**	**29.1**	**28.9**	**28.9**	**2.3**	**2.4**
Tax revenue	23.6	25.3	25.5	25.4	25.3	1.7	1.8
Direct taxes	12.2	11.9	9.8	9.8	9.8	-0.4	-2.4
Indirect taxes	10.4	12.4	14.7	14.6	14.6	2.0	4.1
Foreign tax	0.9	1.0	1.0	1.0	1.0	0.1	0.1
Nontax revenue	2.9	3.4	3.6	3.5	3.5	0.5	0.6
Total Expenditure	**28.7**	**28.7**	**28.4**	**27.9**	**27.5**	**0.0**	**-1.2**
Expense	27.7	28.1	27.9	27.4	27.0	0.4	-0.7
Wages	7.7	7.7	7.6	7.4	7.3	0.0	-0.4
Employer's contribution	2.0	2.0	2.0	1.9	1.9	0.0	-0.1
Domestic transfers	3.0	3.0	2.9	2.9	2.9	0.0	-0.1
Goods and services	3.8	3.7	3.4	3.4	3.4	-0.1	-0.4
Interest	4.2	4.7	4.6	4.6	4.5	0.5	0.3
Transfer to General Health Insurance (AZV)	0.4	0.0	0.0	0.0	0.0	-0.4	-0.4
Other items	6.6	7.1	7.3	7.1	7.1	0.5	0.5
Net acquisition of non-financial assets	1.0	0.7	0.5	0.5	0.5	-0.4	-0.5
Overall Balance	**-2.3**	**0.0**	**0.7**	**1.0**	**1.4**	**2.3**	**3.7**
Net acquisition of financial assets	-0.4	-0.5	-0.4	-0.4	-0.3	-0.1	0.0
Financial Balance 1/	**-2.7**	**-0.5**	**0.3**	**0.7**	**1.0**	**2.2**	**3.7**
Nominal GDP (millions of Afl.) 2/	4,903.3	4,952.3	4,980.0	5,030.0	5,081.0		

Source: Authorities' data.
1/ The authorities' financial balance is defined as the overall fiscal balance plus net acquisition of financial assets.
2/ GDP figures are based on the 2019 budget document and the authorities' assumptions of one percent nominal growth for 2019 and beyond.

16. **The authorities are embarking on an ambitious fiscal adjustment program.** Their projections show a cumulative adjustment of 3.7 percent of GDP over 2018-22 under the assumption of nominal GDP growth of 1 percent per year. On the revenue side, they plan to boost tax revenues including through broadening the tax base via a shift from direct to indirect taxation. On the expenditure side, savings are expected to come mainly from reductions in the wage bill, transfers to AZV,[8] capital spending, and goods and services which are partially offset by increases in other current expenses and interest payments. This adjustment would put public debt on a firm downward trend.

Staff Views

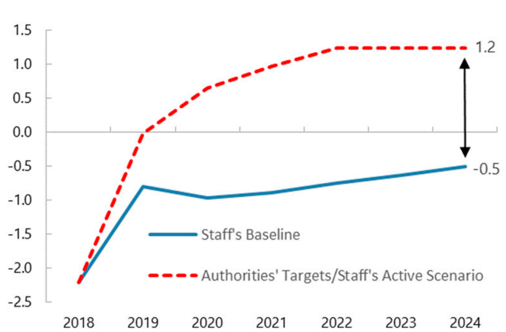
17. **Staff supports the authorities' fiscal consolidation efforts.** While good progress has been made in implementing reforms, staff noted that the announced measures appear insufficient to achieve the authorities' targets. Staff built a baseline scenario based on the available and quantifiable information on the authorities' plans:

- For 2019, the baseline takes on board the authorities' expenditures, as specified in the budget, but builds in higher transfers to AZV based on AZV's own deficit projections. On the revenue side, it incorporates the effects of the income and property tax reform as well as the tax increases on tobacco, alcohol, and cider, and the new tax on sugary drinks, but estimates a lower

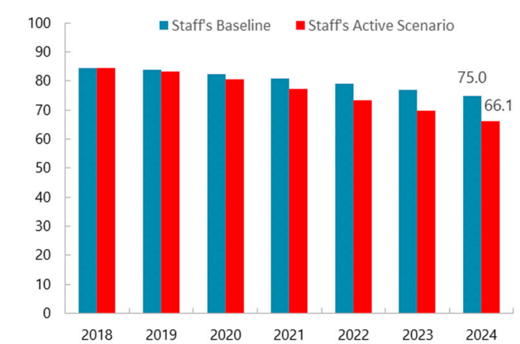
[8] For more information on AZV, see footnote 7 and Annex IX.

yield for the full-year impact of the mid-2018 turnover tax increase than the authorities.[9] Also, the baseline does not incorporate the projected collection of the sizable amount of tax arrears as the authorities have not put in place a concrete strategy on how this would come about. Thus, staff projects a higher fiscal deficit than the authorities, at 0.8 percent of GDP (chart).

- Over the medium term, staff projects deficits that are also larger than the authorities' targets despite staff's higher nominal GDP growth path.[10] This largely derives from staff's higher expenditure projections, as the authorities have not specified reform measures and their plans for a reduction in the wage bill by an average of 3.0 million Aruban Florins per year seem too ambitious. As in 2019, the baseline also does not factor in arrears collection for the medium term.



Sources: Authorities' data and IMF staff calculations.



Sources: Authorities' data and IMF staff calculations.

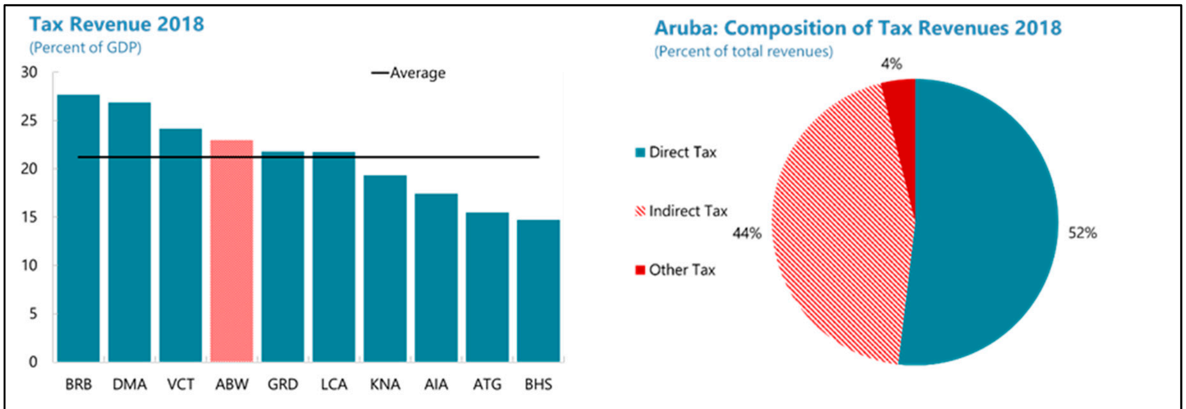
18. **Additional measures of about 1.7 percent of GDP are needed to achieve the authorities' targets**. Staff recommended that the additional consolidation be achieved through a mix of expenditure and revenue measures, while creating space for growth-friendly expenditure and protecting capital spending. Effective prioritization and sequencing of reforms are also important to mitigate potential adverse effects of the consolidation. Staff encouraged the authorities to identify and execute a few, easy-to-implement measures first, while ensuring that reforms are equitable, transparent, and well-communicated to ensure their durability. Staff discussed with them a set of potential measures to close the gap, some of which were identified in previous Fund advice:

[9] Staff's projections of some revenue items also differ from the authorities due to differences in nominal GDP growth projections.

[10] Staff believes that the authorities' assumption of a nominal GDP growth rate of 1 percent over the medium term, while conservative, implies implausibly low real GDP growth and/or inflation.

Revenues

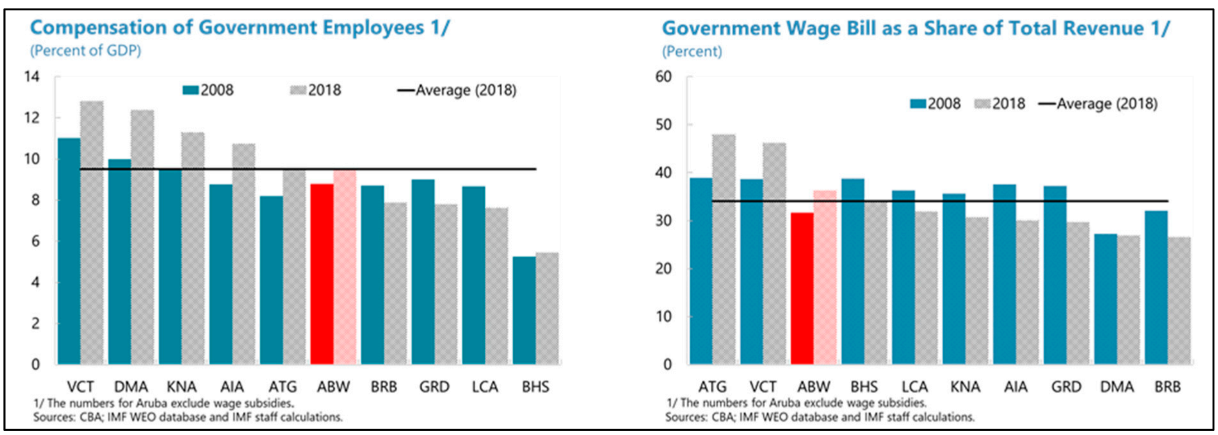
- *There is scope to increase tax revenues through indirect taxes.* The authorities could follow up on the recommendations of a recent technical assistance mission on tax policy carried out by the Fiscal Affairs Department (FAD) of the IMF and introduce a value-added tax (VAT) with a uniform rate of 10 percent to replace the current various indirect taxes (Annex VIII).[11] Efforts to improve revenue administration would also yield tangible benefits.



Sources: IMF WEO database and IMF staff calculations.

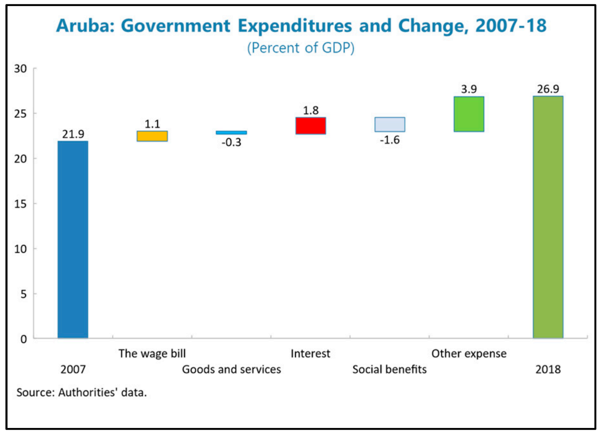
Expenditures

- The *government wage bill needs to be contained further.* Staff recommended a comprehensive review of the wage bill—more than 36 percent of total revenues in 2018—to understand its main drivers (including compensation vs. employment) and to put in place lasting measures that address the root causes of its structurally high level.



[11] Other recommendations include broadening the base for excises on alcohol and tobacco while increasing rates for petroleum products.

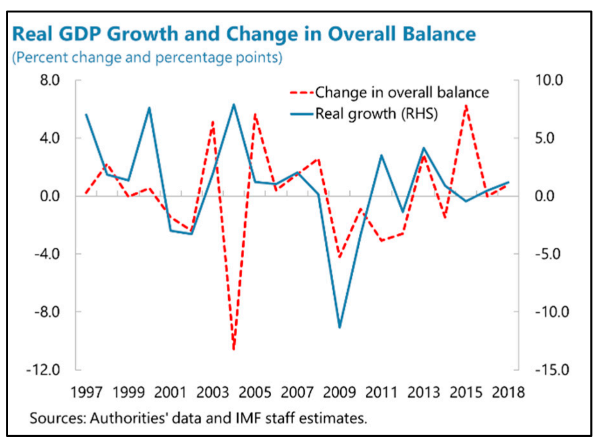
- *Other current spending could be rationalized.* This category includes education wage subsidies, fees for public private partnerships (PPP), subsidies to public transportation, transfers to social programs, and cash transfers to low income individuals. It is large—6.4 percent of GDP—and accounts for much of the increase in total spending over the past decade. Staff proposed that the authorities review such spending with an eye on efficiency enhancement and better targeting.



- *Further measures to ensure that healthcare does not pressure the government's budget should be considered*. Population aging poses a risk that the healthcare system would remain budget dependent (Annex IX). Aruba could contain costs through more preventive care; it could also introduce targeted user-fees for certain services and/or reduce entitlements for non-essential treatments. If the recent increase in the health sales tax is reversed, it needs to be replaced by a measure generating equal revenue.

- *There is much room to improve the quality of public spending on education*. An efficiency frontier analysis shows that for secondary education, outcomes do not reflect the high level of spending (text panel chart).

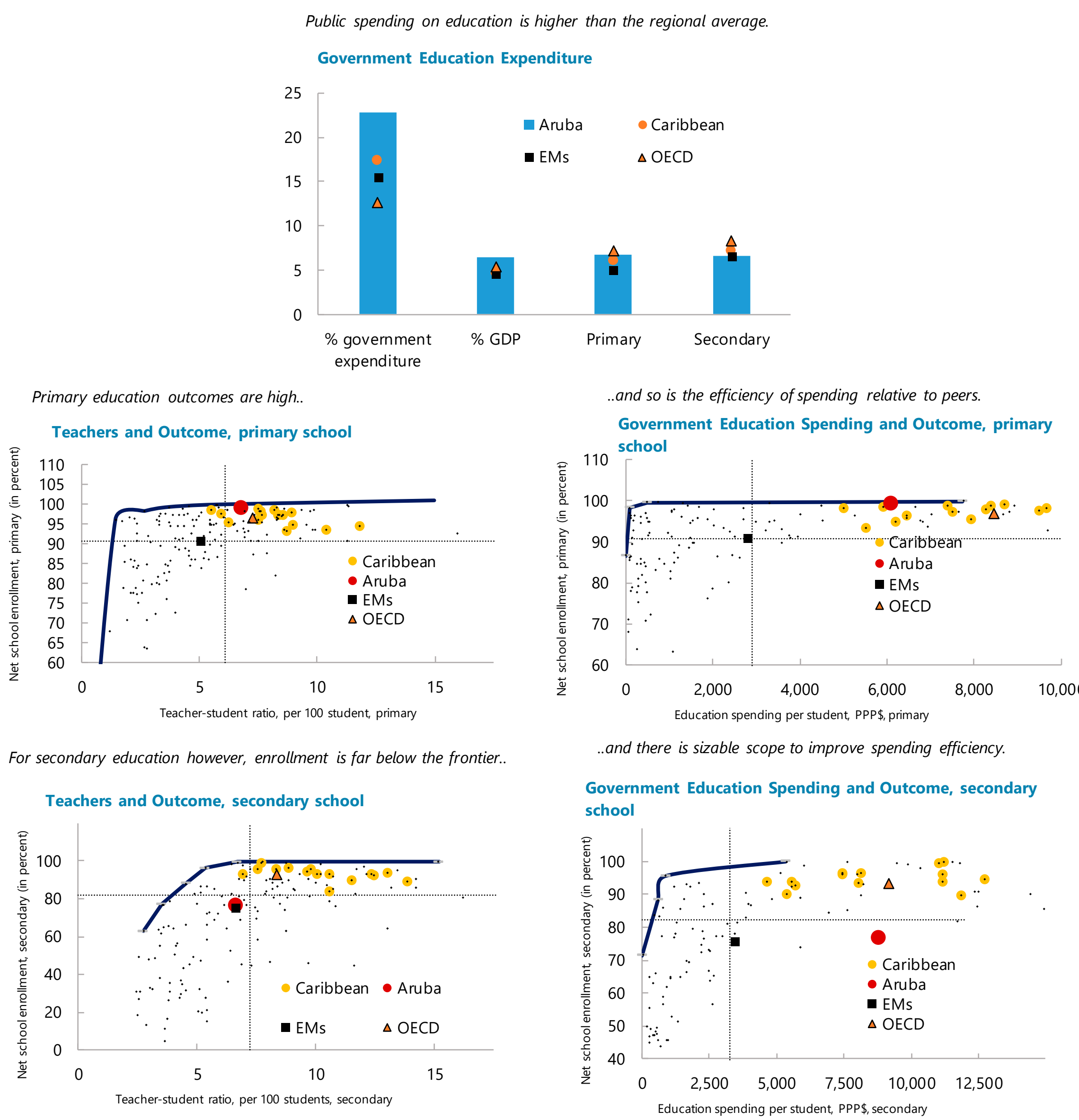
19. **The envisaged fiscal consolidation, while sizable, is not likely to be a major drag on growth over the medium term, although this consolidation is expected to have adverse short-term growth effects.** Compared to the historical experience of other countries, Aruba's adjustment is indeed large (Annex IV). But Aruba's own historical data reveal that even with large adjustments, the negative effects on growth appear to have been relatively small on average. Empirical work on Aruba and other Caribbean countries shows medium-term fiscal multipliers to be small, partly because of their highly open nature.[12] Specifically, the cost to real GDP over 4-5 years from higher consumption taxes or lower government consumption of 1 percent of GDP is estimated to be close to zero. On impact, though, the multipliers are estimated to be larger. Hence, attention should be given to



[12] An exception is the multiplier for public infrastructure spending, which tends to be large. See Box 2 in Aruba's 2017 Article IV staff report and "Fiscal Policy Multipliers in Small States," IMF WP/19/72.

providing targeted and effective social safety nets to the vulnerable and less well-off during the adjustment process. Should the authorities deliver on staff's recommended measures and gradually close the fiscal gap of 1.7 percent of GDP from now through the medium term—through introducing the VAT and rationalizing the wage bill and other spending—growth would be marginally lower over the near term than in the baseline (see active scenario in text tables). Structural reforms to boost growth (see section C) would also support fiscal consolidation over the medium term.

Government Education Expenditure 1/



Source: FAD Expenditure assessment tool.
1/ The blue lines in charts 2-6 refers to the frontier. Latest value available.

20. **Staff sees the frontloaded nature of the adjustment as justified, but downside risks will need to be carefully managed.** There were slippages in meeting fiscal targets in earlier years (Annex VII), public debt is high, there is already a reform momentum, the near-term outlook of the most important economic partner, the U.S., is favorable, and Aruba is still benefiting from tourism diversion from the hurricane-hit Caribbean. At the same time, the envisaged large infrastructure investment projects would cushion potential adverse effects in the short term.[13] In short, it is prudent to adjust in good times. At the same time, the authorities should consider putting in place a contingency plan to cushion the economy if the adverse growth effects of fiscal consolidation proved larger than expected. While still adhering to the targets, this plan could entail changing the composition of the adjustment in the short term including through preserving capital and social spending.

Additional Fiscal Adjustment Needed to Fill the Gap Between the Authorities' Fiscal Plan and Fund Staff Baseline Scenario

(Percent of GDP)

	Additional adjustment 2019-2024	Measures
Revenue measures	0.5	
Indirect taxes	0.5	Introduction of VAT replacing other indirect taxes in 2021
Expenditure measures	-1.2	
Personnel expenses	-0.4	Freezing the wage bill in real terms
Interest	-0.4	Savings in interest payments from additional fiscal
Others	-0.4	Additional cuts from other current spending
Total adjustment	**1.7**	

Source: Fund staff estimates.

21. **Fiscal efforts should be guided by a robust medium-term framework with a clear objective.** Staff welcomed the authorities' formulation of medium-term projections. The focus going forward should be on further developing a robust medium-term fiscal framework (MTFF). Such a framework would: (i) strengthen multi-year fiscal discipline and help the government take into account both the short- and medium-term impact of new policies; (ii) facilitate the setting of medium-term fiscal measures to achieve the objectives; and (iii) provide early warning signals about fiscal sustainability and looming fiscal risks, thereby enabling timely actions, if needed. Broadening the coverage of fiscal data beyond the central government would ensure a more complete assessment of the government's impact on the economy and any attendant risks.[14] After

Aruba: Fiscal Scenarios, 2019-2024

(Percent of GDP, unless otherwise indicated)

	Est.	Projections					
	2018	2019	2020	2021	2022	2023	2024
Staff's Active Scenario							
GDP growth (percent)	1.2	0.3	0.7	1.0	1.2	1.3	1.3
Overall balance	-2.2	0.0	0.6	1.0	1.2	1.2	1.2
Gross public debt	84.5	83.3	80.7	77.2	73.4	69.7	66.1
Baseline							
GDP growth (percent)	1.2	0.7	1.0	1.1	1.1	1.1	1.1
Overall balance	-2.2	-0.8	-1.0	-0.9	-0.8	-0.6	-0.5
Gross public debt	84.5	83.8	82.5	80.8	78.9	77.0	75.0

Sources: Aruban authorities and IMF staff estimates.

[13] Most capital projects in Aruba are carried out through public private partnerships (PPPs) and by state-owned enterprises (SOEs). This explains why central government capital expenditures are very low—the Island's infrastructure needs are met outside of the budget.

[14] The debt of state-owned enterprises (SOEs) presents a very low fiscal risk to the central government: the three largest SOEs (Aruba Airport Authority, Aruba Port Authority, and Utilities Aruba) are profitable companies and have a good credit standing. There are also no explicit contingent liabilities or guarantees. There is also low fiscal risk from

(continued)

the adjustment period, a formal fiscal rule could be considered to safeguard fiscal sustainability and create fiscal space. These reforms could be reinforced by establishing a unit to improve macro-fiscal analysis.

22. **There is a need to coordinate across agencies the strategies for budget financing and debt management.** In 2019, the authorities decided to rely fully on domestic markets to meet their gross financing needs and their preference is to continue to do so over the medium term. While domestic debt issuance provides an opportunity for the government to develop a domestic debt market, staff indicated that deficit financing should avoid crowding out private sector credit or unduly pressuring central bank's foreign reserves (see also ¶24). Staff also emphasized the importance of an asset-liability management framework that would help clarify the desired government-debt portfolio, capture cost-risk tradeoffs, provide more predictability to the financial system, and minimize macro-financial risks.

Authorities' Views

23. **The authorities stressed the importance of achieving their fiscal targets to put debt on a sustainable path.** They reiterated their commitment to fiscal reforms and took keen note of staff's proposed revenue and expenditure measures. The authorities agreed with staff on the importance of effective prioritization and sequencing. They suggested that while there could be merit in eventually considering a formal fiscal rule, the emphasis now should remain on strengthening the budget process to achieve the government policy objectives and fiscal targets. The authorities underscored the good progress made in developing a medium-term debt management strategy and highlighted that enhanced capacity and technical assistance from the IMF could be required to move to a medium-term budget framework.

B. Preserving Reserve Buffers and Financial Stability

Background

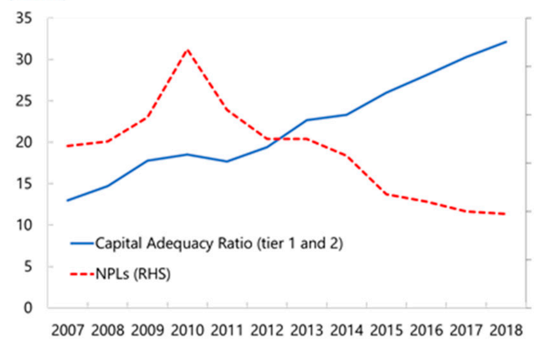
24. **The Central Bank of Aruba (CBA) recently announced an increase in the reserve requirement ratio, its main policy instrument**. Effective May 2019, the CBA will raise the ratio to 12 percent of deposits from 11 percent, the rate it had kept constant since 2010 given adequate reserves, modest economic growth, and deflation. There is no evidence of capital outflows in high-frequency data and the CBA does not currently see pressures on international reserves. Rather, the decision to raise banks' reserve requirement was mainly driven by the CBA's desire: to increase international reserve coverage relative to the IMF's risk-weighted measure (the ARA metric); and to stem potential forward-looking pressures brought about by the central government's decision to finance all of 2019's borrowing needs domestically—a shift in government financing from foreign to

public private partnerships (PPPs): there are no explicit guarantees, most existing projects are at stages where central government exposure is limited and, as per the new agreement with the Netherlands, Aruba will not enter into any new PPP commitments through 2021. Staff's understanding is that the motivation of the latter is more to limit the impact on current expenditures through user fees, rather than to limit any potential contingent debt liabilities.

domestic sources would lead to reserve losses because government imports would not be supported by the corresponding external capital inflows.

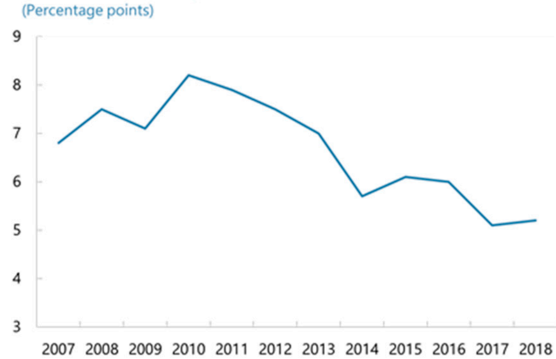
25. **Staff's assessment is that the external position of Aruba is broadly in line with fundamentals.** The 2018 current account balance was close to its estimated norm, although the fiscal balance remained below its desired value (Annex III). Over time, continued fiscal consolidation together with completion of ongoing investment projects and the attendant increase in tourism would be expected to improve the current account balance. Removing structural impediments to growth, such as those discussed in section C below, would be key to increasing investments over the medium term. The Florin appears to be roughly fairly valued on a variety of metrics, including the EBA-lite, and its current valuation does not appear to hinder competitiveness (see ¶31 for a discussion on tourism).

Banks Capital Adequacy and Non-Performing Loans (NPLs)
(Percent)



Source: Central Bank of Aruba.

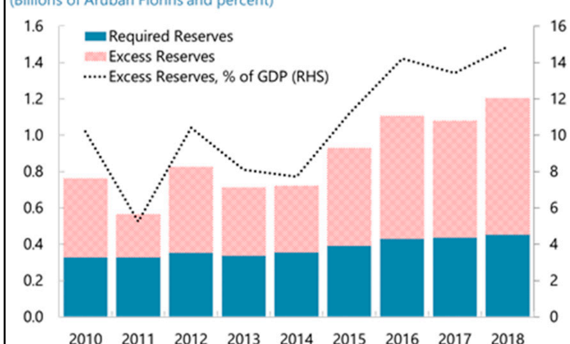
Interest Rate Margin, Commercial Banks
(Percentage points)



Source: Central Bank of Aruba.

26. **The banking sector remains sound.** Banks enjoy healthy profits and interest rate margins remain sizable, which reflect, in part, weak competition among banks. The capital adequacy ratio (CAR) of 32 percent is double the regulatory minimum, and CBA's stress tests reveal high capital resilience to severe shocks. Banks have liquidity buffers that largely surpass the regulatory requirements, continue to see declining non-performing loans, and set loan-to-value ratios on mortgages at safe levels. While a high CAR mitigates financial sector risks, it could indicate anemic demand or lack of viable business projects. The latter is reinforced by the fact that banks are flushed with excess liquidity (excess reserves rose to almost 15 percent of GDP in 2018) and credit growth is relatively modest.[15] Discussions with the authorities and stakeholders suggest that the high CAR is in part a result of a lack of bankable

Commercial Banks' Claims on the Central Bank
(Billions of Aruban Florins and percent)



Sources: Central Bank of Aruba and IMF staff estimates.

[15] CBA's own measure of excess reserves, which also excludes prudentially required reserves, is on average 1.3 percentage points of GDP lower over 2010-2018.

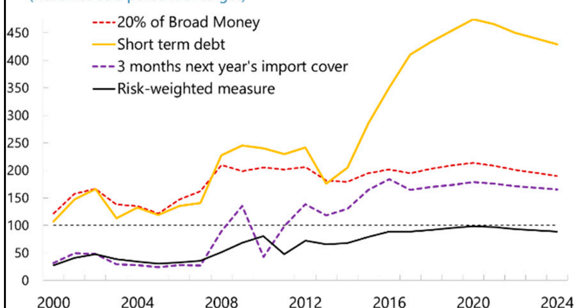
projects outside of the tourism sector, and also relates to the CBA's large exposure rule, which requires banks to maintain high capital buffers in case of large exposures to a single debtor or connected group of debtors. The upcoming results from the financial inclusion survey could shed more light on possible issues and policy solutions.

27. **Financial sector oversight has been progressing.** Over the years, the CBA has shifted to a risk-based approach to supervision, from a compliance-oriented one, thereby allocating supervisory resources to institutions with the highest risk profiles. After significant efforts to enhance the anti-money laundering and combating the financing of terrorism (AML/CFT) framework, Aruba was removed from the Financial Action Task Force (FATF) and Caribbean FATF follow-up process in 2014. Preparations are ongoing for the 2020 Caribbean FATF (CFATF) assessment, which will take place under the revised FATF standards that focus on effectiveness and implementation of AML/CFT measures. To date, Aruban banks have not been affected by the withdrawal of Correspondent Banking Relationships in the Caribbean. Aruba was recently moved to the European Union tax haven blacklist, due to unmet tax reform commitments. The authorities have already made the required legislative amendments to be removed from the list, which parliament approved on April 4, 2019.

Staff Views

28. **Foreign exchange reserves are currently adequate to safeguard the peg but should be increased over the medium term to maintain the foreign exchange reserve ratios in the recommended range.** They are well-above the levels suggested by a variety of simple metrics, and only slightly below the floor of the recommended range of 100-150 percent of the Fund's risk-weighted measure, the ARA metric. Sustained fiscal consolidation and implementation of structural reforms to raise growth (as per ¶s 36–39) would reduce trade and financial outflows thereby supporting reserve accumulation and the current account balance.

Reserve Adequacy
(Reserves as a percent of target)



Sources: Authorities' data and IMF Staff estimates.
Note: values >100 indicate reserves in excess of the metric recommended level.

29. **Monetary policy should remain data dependent.** Staff sees the CBA's move to raise banks' reserve requirement as prudent and does not expect any potential negative effects on activity given that banks have excess liquidity—if applied to 2018, a 12 percent required reserve ratio would still imply excess liquidity above 14 percent of GDP. Going forward, the CBA should continue to be vigilant, standing ready to tighten policy if incoming data or expectations point to downward pressures on international reserves. However, in the absence of such pressures, the CBA should be prepared to stimulate activity if downside risks materialize—for example, if the growth effects of fiscal consolidation turn out to be larger than anticipated. In this case, an unwinding of the increase in required reserves may be warranted.

Authorities' Views

30. **The CBA reiterated its commitment to maintaining reserve buffers and financial stability.** CBA officials emphasized that the recent increase in banks' reserve requirement is a testimony to the CBA efforts to maintain sufficient international reserve coverage. They also stressed that, over the medium term, balance of payments stability and foreign reserve adequacy will be ensured by a combination of reforms and policy measures. These include the fiscal reform package, government financing decisions, renewable energy and efficiency improvements, and enhancing service-oriented tourism activities. The authorities see the financial system as prudently regulated. Additionally, they stressed that it remains of utmost importance for Aruba to maintain a high level of compliance with international best practices in supervision and AML/CFT. To prepare for the upcoming CFATF they are currently conducting an AML/CFT national risk assessment with help from the World Bank and are working on an update of their AML/CFT state ordinance.

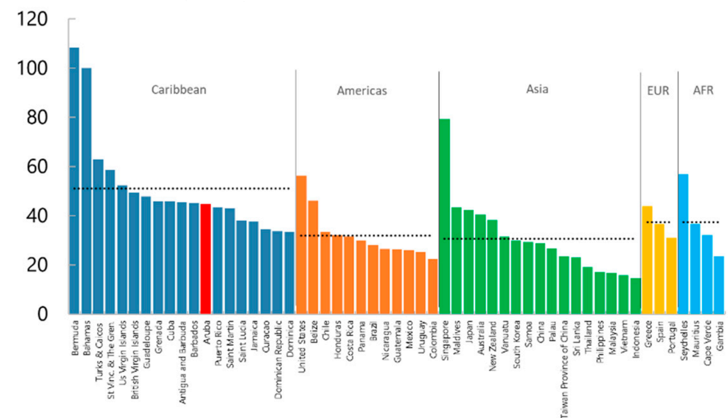
C. Unlocking the Potential for High and Sustained Growth

Background

31. **Aruba's tourism sector—the main growth engine—has been competitive.** The island's share of overall stay-over tourism in the Caribbean has been the third largest at around 16 percent (Annex X). Aruba's reputation as a high-end destination coupled with timeshare arrangements among repeated stay-over tourists has ensured high and stable revenues. At the same time, and partly reflecting lower input costs, the cost to tourists is slightly lower than in other Caribbean countries—the Week at the Beach Index, which captures the average cost of food and lodging, puts Aruba in a competitive position.[16]

Week at the Beach Index, January 2019 1/

(12 month moving average, Bahamas=100)



Source: IMF staff calculations.

1/ "Week at the Beach Index (W@TB)" measures the average cost of a 7-day-trip in a country's beach destinations. The Index is a composition of an average hotel price (3 to 4 'bubble' rating) from TripAdvisor and over 80 million crowdsourced data on meals, taxi fares, water, coffee, and beer.

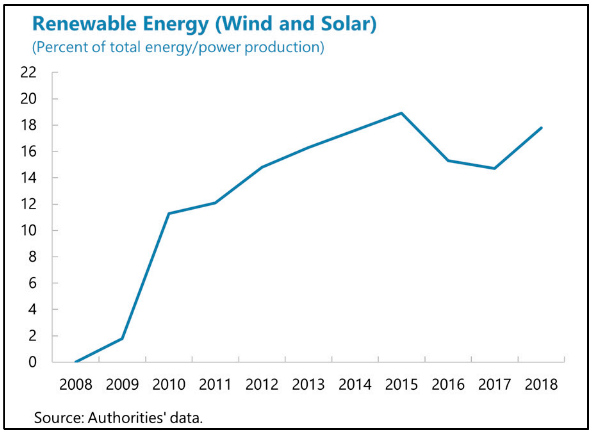
32. **Aruba may be close to a saturation point where additional tourists bring smaller growth benefits.** Staff's empirical analysis shows that tourist arrivals have a positive effect on growth (Annex X). However, it also identifies an "exhaustion" effect, pointing to potentially diminishing returns from additional tourists. Aruba's very high tourism density in terms of both population and land area; limited availability of still-to-be-developed land; the need for foreign

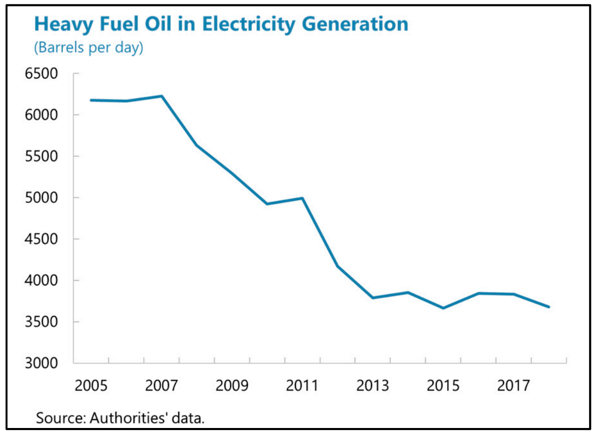
---

[16] Import costs, wages, and electricity tariffs are relatively low in Aruba compared to other Caribbean countries. See IMF country report No. 13/259.

labor and potential pressures on infrastructure; and leakages through imports and foreign labor remittance outflows, are all potential explanations of such effect.

33. **The authorities are pursuing new engines of growth.** In the past, they have made sizable efforts to develop the renewable energy sector and reduce oil-dependency. Going forward, they plan to diversify the economy by promoting investments in sectors that have potential—the "promising sectors" initiative. Given the limited size and availability of physical land and local markets, the authorities see digitalization and technology as the way forward. Hence, the initiative focuses on pursuing technological innovations in agriculture, developing a knowledge-based economy and specific niche products within tourism, among others.

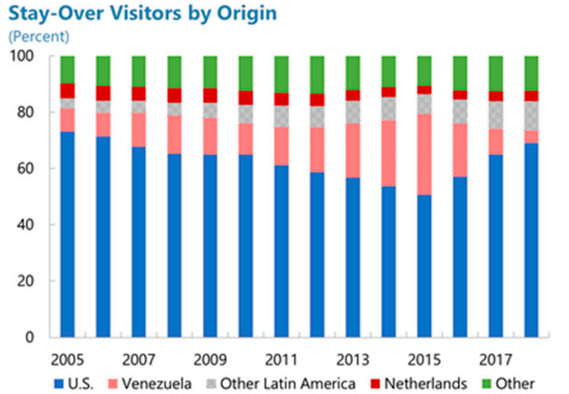




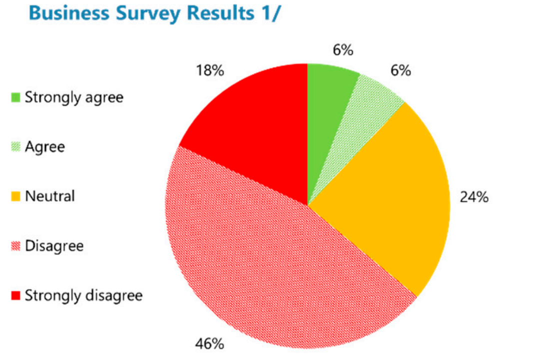
Staff Views

34. **Aruba should maintain its high-end tourism brand, while striving to diversify tourism sources.** Rather than just a quantitative expansion to tourism, Aruba should focus on offering high quality services and physical tourism infrastructure to maximize spending per visitor. The focus on renewable energy in production will further bolster competitiveness and the economy's resilience. Strengthening tourism linkages with the local economy would minimize leakages. Continued efforts to diversify the tourism base including to Latin American countries (besides Venezuela) are encouraged. Ongoing efforts to expand and modernize the health care system could create opportunities for medical tourism.

35. **The "promising sectors" initiative is welcome, but several structural challenges need to be addressed.** Staff supports the authorities' efforts to diversify but, in doing so, and particularly in carrying out the "promising sectors" initiative, the authorities should be mindful of potential fiscal costs and contingent liabilities. Also, for diversification efforts to reap dividends, Aruba will need to tackle several structural impediments to growth related to the business environment, governance, and labor markets (¶s 36–39).



Sources: Central Bank of Aruba, Caribbean Tourism Organization.



Source: Authorities' data.
1/ In general, do you believe that the current legislation in Aruba strengthens/stimulates the capacity of the private sector to create jobs and to offer greater opportunities for a thriving economy?

36. **Reforms to improve the business climate need to be reinvigorated.** A recent business survey reveals that 64 percent of firms perceive current legislation as impeding job creation and a thriving economy.[17] Several national ordinances were identified as problematic but the two most cumbersome were Establishment of Businesses and Permits and Licensing—about 70 percent of firms believe they create unnecessary red tape. Staff emphasized that addressing these challenges is necessary to stimulate investment, productivity, and growth.

37. **Addressing potential governance vulnerabilities, including corruption, is paramount.** Respondents to the same survey perceive problems regarding the procedures surrounding the ordinances, including lack of transparency and efficiency and elements of unequal treatment. At the same time, preliminary results from the recent CBA-conducted survey on perceived corruption raises some concerns—almost 70 percent of respondents agree that there is corruption in public institutions in Aruba. The CBA plans to launch a follow-up survey in November 2019 to hone in more deeply on problem areas identified in the first survey and the authorities are working on a proposal for an anti-corruption strategy. Staff welcomed these efforts and underlined that such a strategy should include the identification of core challenges (based on the surveys' results), targeted measures to address those, a timeline with performance targets, implementation infrastructure and budget allocation.

38. **Policy should protect the worker—not the job—and bolster human capital.** Labor market regulations are rigid. Procedures for terminating employment contracts appear cumbersome and costly—creating disincentives for voluntary resignations and hiring, thereby impeding labor mobility and job growth. Policy should promote labor market flexibility and at the same time provide effective protection to workers. Severance pay could be replaced by an unemployment insurance program. Additionally, there is a need to strengthen vocational training and better align education curricula with private sector job needs.

[17] See, "Recommendations concerning the National Ordinance on Economic Recovery (LEH)," Social Economic Council, 2018.

39. **There is a need to reverse brain-drain.** Much of the authorities' diversification focus is in skill-intensive sectors but there are domestic skill-shortages. The authorities should foster an enabling environment to encourage skilled Arubans working abroad to come back.

Authorities' Views

40. **The authorities concurred on the need to diversify the economy.** They acknowledged that there is a limit to how much further the tourism sector can expand. Thus, they are working on a "High Value Low Impact" model for tourism growth which aims at targeting affluent visitors and increasing their on-island spending. Efforts are also being made to attract more tourism from countries in South America. At the same time, the authorities are working on an action plan to promote domestic and foreign investments in the "promising sectors".

41. **The authorities acknowledged the need for further structural reforms.** To speed up the process of getting business permits and licenses and, more generally, to enhance the ease of doing business, the authorities are in the process of introducing an "e-Government" platform. The e-Government strategy includes a redesign and digitization of key government administrative procedures to improve the citizen experience of government services and facilitate doing business in Aruba. A digital "one stop shop" to facilitate licensing is one of the priority projects. Regarding labor markets, the authorities' focus is currently on addressing youth unemployment and issues with other vulnerable parts of the population who are currently outside the labor force. They recognize the need to attract skilled labor and pointed out that they have modified the immigration laws in 2018 to facilitate the employment of non-residents with bachelor's degree and higher. They are taking measures to address corruption and governance issues through the establishment of a Bureau of Integrity, Integrity Chamber, and a Corporate Governance Code.

D. Improving Data Quality to Better Inform Policies

Staff Views

42. **Data gaps and quality hinder effective policy-making and transparency of public sector operations, while making it difficult to fully assess governance vulnerabilities.** Areas needing upgrading are labor statistics, public finances, and public debt. Staff welcomes the good progress made in revising the national accounts. Deflators for the expenditure components of GDP need to be prepared. Staff encouraged the authorities to seek technical assistance from CARTAC—the Caribbean Regional Technical Assistance Center—in this regard. Aruba should aim to be covered in key comparative indicators such as the World Bank's Doing Business and Worldwide Governance Indicators, and Transparency International Corruption Perceptions Index, while recognizing limited local capacity to make quick progress.

STAFF APPRAISAL

43. **Aruba's economic recovery continues, although at a slowing pace.** Following negative growth in 2015 and a modest pick-up in 2016, output has gained momentum over the past two years supported by strong growth in tourism from the U.S., which more than compensated for declining tourism from Venezuela. The economic recovery is foreseen to continue, underpinned by buoyant tourism activity and the coming on stream of multiple large investment projects in 2019 and subsequent years.

44. **Risks to the outlook are skewed to the downside.** A deepening crisis in Venezuela that leads to large immigrant and refugee inflows would put pressure on Aruba's infrastructure, labor markets, and tourism. Aruba is also vulnerable to a cyclical downturn in the U.S. economy and the short-term growth effects of Aruba's fiscal consolidation may turn out greater than expected. On the upside, the implementation of needed structural reforms would boost potential growth and, although a remote possibility, the reopening of the refinery could bring associated investments and job gains.

45. **The authorities are making good progress in implementing their fiscal reform agenda.** They are encouraged to sustain reform momentum to keep the public debt ratio on a downward path. Reforms should be prioritized, sequenced, equitable, and well-communicated to ensure their durability. Attention should be given to ensuring that social safety nets remain effective and adverse growth effects remain manageable.

46. **Additional measures are needed to achieve the authorities' fiscal targets.** The additional adjustment should contain a mix of tax reforms and expenditure rationalization. The fiscal measures in 2019 are expected to deliver a large upfront increase in revenues but it will be important to strike a balance between revenue increases and expenditure restraint in subsequent years. Tax reform efforts could follow previous IMF advice and emphasize broadening the base and shifting toward indirect taxation—a VAT could be introduced in this regard. Expenditure rationalization should minimize adverse growth effects and protect capital spending and essential government services. The priorities are to rationalize the wage bill, improve the efficiency of other public spending, and contain increasing healthcare costs.

47. **Having a robust fiscal framework is paramount.** It is essential to further develop a formal medium-term fiscal framework to enhance the credibility of the consolidation plan. Eventually, a formal fiscal rule could be considered to preserve sustainability.

48. **The strategy for budget financing and debt management needs to be finalized.** Financing should avoid crowding out private sector credit or unduly pressuring international reserves. It is crucial to develop an asset-liability management framework to guide financing decisions, including the desired composition of the government-debt portfolio, and to help assess implications of alternative financing options.

49. **The monetary policy stance and financial sector supervision and regulation remain appropriate.** The CBA's policy decisions should remain data driven, balancing domestic and external stability considerations. Tightening is warranted if incoming data or expectations point to downward pressures on international reserves. In the absence of such pressures and should risks to growth surprise on the downside, the CBA could consider unwinding the increase in reserve requirement. Banks remain sound and liquid under a solid supervisory and regulatory framework.

50. **Aruba's external position is broadly in line with fundamentals.** In the medium term, the current account is expected to improve due to increasing tourism and continued fiscal consolidation. International reserves are adequate to safeguard the peg but should be raised over the medium term to maintain sufficient coverage.

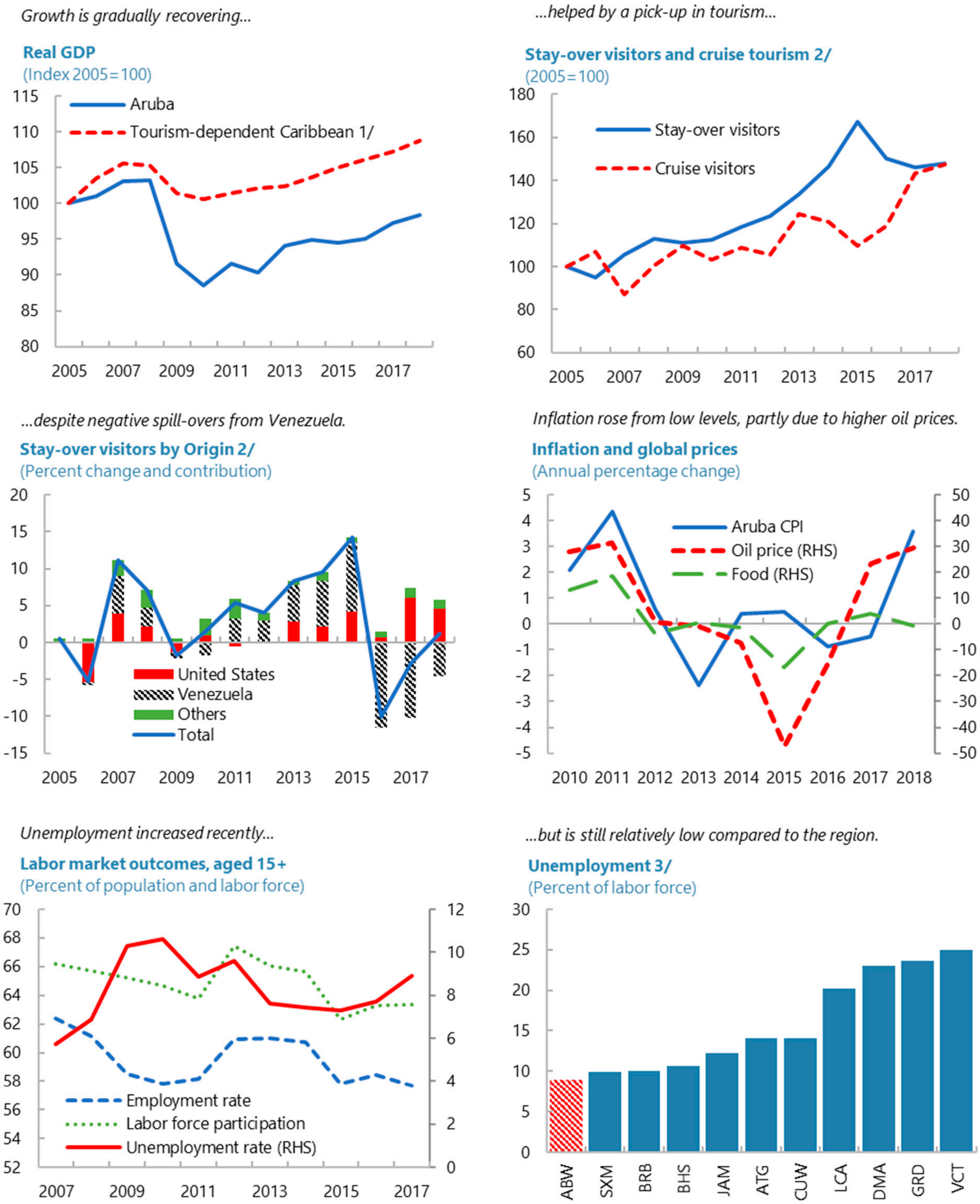
51. **Aruba should maintain its high-end tourism brand and diversify tourism sources.** The "exhaustion effect" necessitates a focus on increasing spending per visitor, including through offering high quality services and adequate physical tourism infrastructure. Diversification of tourism sources beyond the U.S. would reduce concentration risks.

52. **There is a pressing need to address structural challenges.** The authorities are making efforts to diversify the economy including through the "promising sectors" initiative. To maximize the benefits of such efforts, Aruba will need to pursue structural reforms that: improve the business climate and reduce red tape; foster labor market flexibility while protecting workers; enhance human capital; and address governance vulnerabilities—though welcome efforts in this area are already underway. Increasing renewable energy use and energy efficiency and FDI-attracting structural reforms would further boost competitiveness.

53. **Bridging data gaps would make policy-making more effective.** Good progress has been made in revising the national accounts. Efforts need to continue with a focus on compiling deflators for the expenditure components of GDP. CARTAC technical assistance could help in this regard. Aruba should strive to be covered in key international surveys like Doing Business and Transparency International.

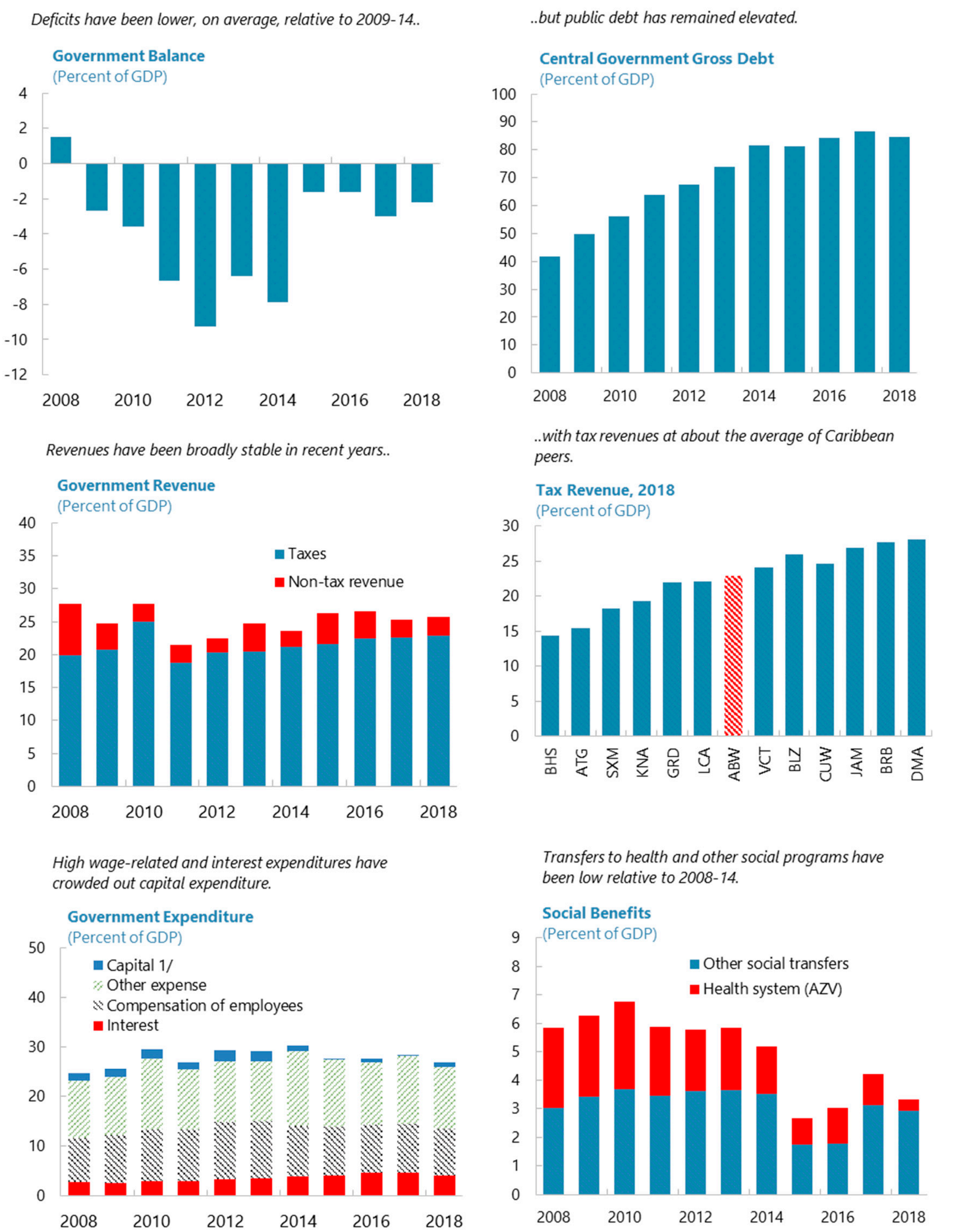
54. **It is envisaged that the next Article IV consultation discussions with Aruba will be held on a 24-month cycle.**

Figure 1. Aruba: Real Sector Developments



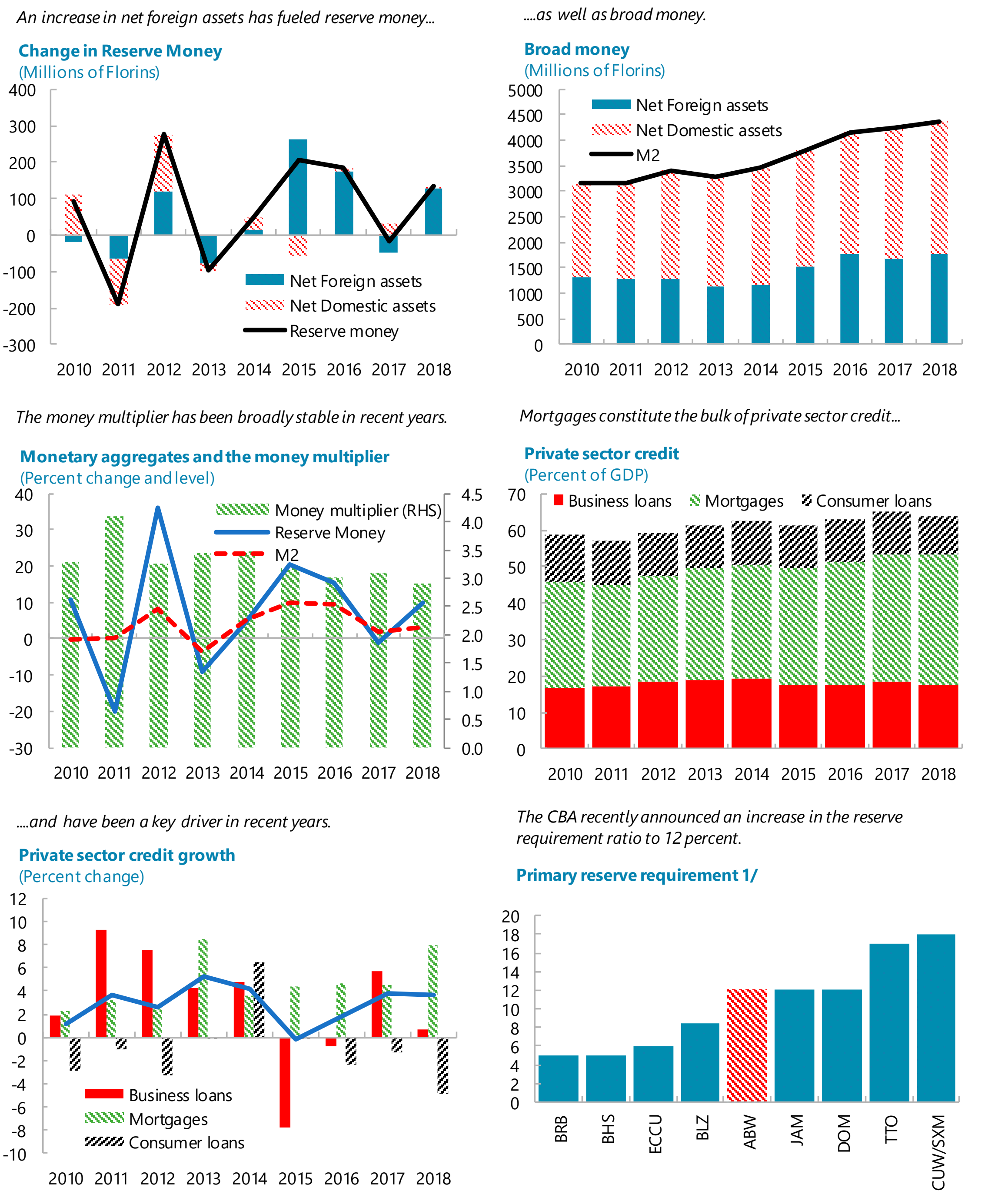
Sources: Authorities' data, Caribbean Tourism Organization, IMF WEO database, and IMF staff estimates.
1/ Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Jamaica, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines.
2/ Data up until October 2018.
3/ Latest data available between 2015-2018.

Figure 2. Fiscal Sector Developments



Sources: Authorities' data, IMF WEO database, and IMF staff estimates.
1/ Net acquisitions of non-financial assets.

Figure 3. Aruba: Monetary Developments



Sources: Central Bank of Aruba, IMF WEO database, and IMF staff estimates.

1/ For countries with differentiated reserve requirements (RR), the RR for commercial banks and domestic currency is shown.

Table 1. Aruba: Selected Economic Indicators, 2014-2024

Basic Data, Social and Demographic Indicators

Area (sq. km)	180		
Population (thousands, 2017 est.)	110.8	Literacy rate (percent, 2015)	97.5
Population growth rate (percent, 2017)	0.4	Percent of population below age 15 (2017)	18.4
Nominal GDP (millions of U.S. dollars, 2017)	2,679	Percent of population age 65+ (2017)	13.4
GDP per capita (thousands of U.S. dollars, 2017)	24.2	Life expectancy at birth (years, 2015)	75.4
Unemployment rate (percent, 2017)	8.9		

Economic Indicators

	Average					Est.	Projections					
	1996-2017	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	(Percent change)											
Real economy												
Real GDP	1.0	0.9	-0.4	0.5	2.3	1.2	0.7	1.0	1.1	1.1	1.1	1.1
GDP deflator	2.4	1.8	2.0	-1.8	-1.5	4.1	1.2	1.7	2.2	2.2	2.2	2.2
Consumer prices												
Period average	2.3	0.4	0.5	-0.9	-0.5	3.6	1.8	2.0	2.1	2.2	2.2	2.2
End-period	1.5	2.2	-0.9	-0.3	-0.3	4.6	0.6	2.8	2.1	2.2	2.2	2.2
	(Percent of GDP)											
Central government operations												
Revenues	23.8	23.6	26.3	26.6	25.4	25.7	27.0	27.0	27.0	27.0	27.0	27.0
Expenditures	26.6	31.4	27.9	28.2	28.4	27.9	27.9	28.0	27.9	27.8	27.7	27.6
Of which: capital	1.4	1.1	0.3	0.6	0.1	1.0	0.6	0.6	0.6	0.6	0.6	0.6
Overall balance	-2.8	-7.9	-1.6	-1.6	-3.0	-2.2	-0.8	-1.0	-0.9	-0.8	-0.6	-0.5
Primary Balance	-0.9	-3.9	2.5	2.9	1.7	1.9	3.7	3.7	3.7	3.7	3.7	3.7
Gross central government debt	55.7	81.6	81.3	84.4	86.7	84.5	83.8	82.5	80.8	78.9	77.0	75.0
Savings and investment												
Gross investment	28.1	22.9	21.5	23.0	23.4	22.7	24.5	24.1	23.6	23.1	22.5	21.9
Of which: public	1.4	1.1	0.8	1.1	0.8	1.2	0.8	0.8	0.8	0.8	0.8	0.8
External saving	0.5	5.1	-4.2	-5.0	-1.0	0.5	1.7	1.2	0.9	0.5	-0.1	-0.3
Domestic saving	27.6	17.8	25.7	28.1	24.4	22.2	22.8	22.9	22.7	22.6	22.6	22.2
Balance of payments												
Current account balance	-0.6	-5.1	4.2	5.0	1.0	-0.5	-1.7	-1.2	-0.9	-0.5	0.1	0.3
FDI	2.4	9.2	-1.4	1.1	3.0	3.4	4.6	4.1	3.6	2.1	2.1	2.1
Gross official reserves (millions of U.S. dollars)	565.6	693	828	937	922	995	1,043	1,095	1,103	1,097	1,103	1,107
Gross official reserves (months of next year's import	2.5	3.9	4.9	5.5	4.9	5.1	5.2	5.4	5.3	5.1	5.0	5.0
External debt	99.7	106.5	103.6	106.3	102.5	99.3	97.5	95.4	94.9	94.5	94.0	93.6
	(Millions of Aruban florins, unless otherwise indicated)											
Monetary												
NFA of Banking System	956	1,173	1,516	1,778	1,685	1,776	1,876	1,982	...	...	...	...
NDA of Banking System	1,696	2,288	2,289	2,390	2,555	2,601	2,584	2,601	...	...	...	...
Credit to private sector (percent change)	5.3	4.2	-0.2	1.8	3.8	3.6	3.4	3.3	...	...	...	...
Broad money	2,652	3,461	3,805	4,168	4,240	4,377	4,459	4,582	...	...	...	...
Deposits (percent change)	9.2	4.4	16.3	10.1	7.5	0.8	1.9	2.8	...	...	...	...
Memorandum items												
Nominal GDP (millions of Aruban florins)	4,038	4,743	4,818	4,756	4,795	5,053	5,148	5,290	5,464	5,646	5,836	6,032
Nominal GDP (millions of U.S. dollars)	2,256	2,649	2,691	2,657	2,679	2,823	2,876	2,955	3,052	3,154	3,260	3,370
Unemployment rate (percent)	8.0	7.5	7.3	7.7	8.9	...	...	...	...	...	...	

Sources: Aruban authorities and IMF staff estimates and projections.

Table 2. Aruba: Baseline Scenario: Medium-Term Outlook, 2014-2024

	Average					Est.	Projections					
	1996-2017	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	(Percent change contribution to real GDP growth)											
GDP	1.0	0.9	-0.4	0.5	2.3	1.2	0.7	1.0	1.1	1.1	1.1	1.1
Consumption	1.3	-1.8	-1.7	-0.1	0.8	-0.2	0.2	0.5	0.8	1.0	1.0	1.0
Private	0.9	0.3	-2.7	0.0	-0.1	0.0	0.5	0.5	0.6	0.7	0.7	0.8
Public	0.4	-2.1	1.1	0.0	0.9	-0.2	-0.3	0.0	0.3	0.3	0.3	0.3
Investment	0.1	-0.8	-1.4	1.4	0.4	0.1	2.2	1.5	1.1	0.7	0.4	0.4
Private	0.1	-1.0	-1.0	1.1	0.7	-0.4	2.6	1.5	1.0	0.6	0.3	0.4
Public	-0.1	0.2	-0.4	0.3	-0.3	0.5	-0.5	0.0	0.0	0.0	0.0	0.0
Imports	0.6	-1.3	-2.6	-0.1	1.0	2.6	2.5	2.0	1.6	1.4	1.0	1.1
Exports	0.2	2.3	0.0	-1.0	2.1	4.0	0.8	0.9	0.8	0.8	0.8	0.8
Tourism exports	0.8	2.6	0.9	-0.2	2.3	1.4	1.2	0.8	0.7	0.7	0.7	0.7
Non-tourism exports	-0.6		-0.9	-0.8	-0.2	2.6	-0.4	0.1	0.1	0.1	0.1	0.1
	(Percent of GDP)											
Fiscal												
Revenues	23.8	23.6	26.3	26.6	25.4	25.7	27.0	27.0	27.0	27.0	27.0	27.0
Expenditures	26.6	31.4	27.9	28.2	28.4	27.9	27.9	28.0	27.9	27.8	27.7	27.6
Of which: capital	1.4	1.1	0.3	0.6	0.1	1.0	0.6	0.6	0.6	0.6	0.6	0.6
Overall balance	-2.8	-7.9	-1.6	-1.6	-3.0	-2.2	-0.8	-1.0	-0.9	-0.8	-0.6	-0.5
Debt	55.7	81.6	81.3	84.4	86.7	84.5	83.8	82.5	80.8	78.9	77.0	75.0
External												
Current account	-0.6	-5.1	4.2	5.0	1.0	-0.5	-1.7	-1.2	-0.9	-0.5	0.1	0.3
External debt	99.7	106.5	103.6	106.3	102.5	99.3	97.5	95.4	94.9	94.5	94.0	93.6
Memorandum items:	(Percent change)											
U.S. GDP growth	1.5	2.5	2.9	1.6	2.2	2.9	2.5	1.8	1.7	1.5	1.4	1.6
U.S. CPI (average)	1.6	1.6	0.1	1.3	2.1	2.4	1.8	2.3	2.2	2.2	2.2	2.2
CPI (average)	2.3	0.4	0.5	-0.9	-0.5	3.6	1.8	2.0	2.1	2.2	2.2	2.2
GDP deflator	2.4	1.8	2.0	-1.8	-1.5	4.1	1.2	1.7	2.2	2.2	2.2	2.2
GDP per capita (Aruban florins)	40,736	44,033	44,188	43,095	43,254	45,414	46,064	47,128	48,487	49,919	51,418	52,982
GDP per capita (U.S. dollars)	22,758	24,599	24,686	24,076	24,164	25,371	25,734	26,329	27,088	27,888	28,725	29,599
Population (thousands)		108	109	110	111	111	112	112	113	113	113	114
Unemployment rate (percent)	8.0	7.5	7.3	7.7	8.9	…	…	…	…	…	…	…

Sources: Aruban authorities and IMF staff estimates and projections.

Table 3a. Aruba: Operations of the Central Government, 2014–2024 1/

(Percent of GDP, unless indicated otherwise)

					Est.	Projections					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total revenues	**23.6**	**26.3**	**26.6**	**25.4**	**25.7**	**27.0**	**27.0**	**27.0**	**27.0**	**27.0**	**27.0**
Taxes	21.1	21.7	22.5	22.6	22.9	23.8	23.8	23.8	23.8	23.8	23.8
Direct taxes	18.1	18.5	19.4	19.4	19.1	19.3	19.3	19.3	19.3	19.3	19.3
Income and profit	9.4	10.3	10.6	10.2	9.9	9.3	9.3	9.3	9.3	9.3	9.3
Commodities	6.2	5.8	6.0	6.2	6.3	6.9	6.9	6.9	6.9	6.9	6.9
Property	1.6	1.5	1.8	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
Services	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indirect taxes	3.1	3.2	3.0	3.2	3.7	4.5	4.5	4.5	4.5	4.5	4.5
BBO	2.0	1.9	2.0	2.2	2.8	3.5	3.5	3.5	3.5	3.5	3.5
Foreign exchange	1.1	1.2	1.1	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Grants	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other current revenues	2.4	3.3	4.1	2.8	2.8	3.2	3.2	3.2	3.2	3.2	3.2
Total expenditures	**31.4**	**27.9**	**28.2**	**28.4**	**27.9**	**27.9**	**28.0**	**27.9**	**27.8**	**27.7**	**27.6**
Current expenditures	30.3	27.7	27.6	28.3	26.9	27.2	27.4	27.3	27.2	27.0	26.9
Compensation of employees	10.1	9.7	9.7	9.9	9.4	9.3	9.3	9.3	9.3	9.3	9.3
Wages and salaries	8.3	7.7	7.8	7.9	7.5	7.4	7.4	7.4	7.4	7.4	7.4
Employer contribution and benefits	1.8	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9
Goods and services	4.6	3.9	3.3	3.2	3.7	3.6	3.6	3.6	3.6	3.6	3.6
Interest	4.0	4.2	4.6	4.6	4.1	4.5	4.7	4.6	4.5	4.4	4.2
Subsidies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social benefits	5.2	2.7	3.0	4.2	3.3	3.0	3.0	3.0	3.0	3.0	3.0
Pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health system (AZV)	1.7	0.9	1.2	1.1	0.4	0.2	0.2	0.2	0.2	0.2	0.2
Other social transfers	3.5	1.8	1.8	3.1	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Other expenses	6.4	7.3	6.9	6.3	6.4	6.8	6.8	6.8	6.8	6.8	6.8
Capital expenditure	1.1	0.3	0.6	0.1	1.0	0.6	0.6	0.6	0.6	0.6	0.6
Of which: Development Fund	0.9	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	**-7.9**	**-1.6**	**-1.6**	**-3.0**	**-2.2**	**-0.8**	**-1.0**	**-0.9**	**-0.8**	**-0.6**	**-0.5**
Primary balance	**-3.9**	**2.5**	**2.9**	**1.7**	**1.9**	**3.7**	**3.7**	**3.7**	**3.7**	**3.7**	**3.7**
Net acquisition of financial assets	-0.7	-0.4	-0.5	-0.5	-0.4	-0.5	-0.4	-0.4	-0.3	-0.3	-0.3
Net incurrence of liabilities	8.6	2.0	2.1	3.4	2.6	1.3	1.4	1.3	1.1	1.0	0.8
Memorandum items:											
Public gross debt	81.6	81.3	84.4	86.7	84.5	83.8	82.5	80.8	78.9	77.0	75.0
Nominal GDP (millions of Aruban florins)	4,743	4,818	4,756	4,795	5,053	5,148	5,290	5,464	5,646	5,836	6,032

Sources: Aruban authorities and IMF staff estimates and projections.
1/ This table is presented on adjusted cash basis.

Table 3b. Aruba: Operations of the Central Government, 2014–2024 1/

(Millions of Aruban florins, unless otherwise indicated)

					Est.	Projections					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total revenues	**1,118**	**1,267**	**1,264**	**1,216**	**1,297**	**1,392**	**1,430**	**1,477**	**1,527**	**1,578**	**1,631**
Taxes	1,002	1,044	1,068	1,082	1,156	1,225	1,259	1,300	1,344	1,389	1,436
Direct taxes	856	891	924	929	967	995	1,022	1,056	1,091	1,128	1,166
Income and profit	444	495	502	488	499	481	494	511	528	545	564
Commodities	293	281	287	299	318	357	367	379	392	405	419
Property	78	73	87	94	101	106	109	113	116	120	124
Services	41	41	48	48	50	51	52	54	55	57	59
Indirect taxes	145	154	144	153	188	230	237	244	253	261	270
BBO	93	94	94	104	143	180	185	191	198	204	211
Foreign exchange	52	60	50	49	45	50	52	53	55	57	59
Grants	0	65	0	0	0	0	0	0	0	0	0
Other current revenues	116	158	196	134	142	167	171	177	183	189	195
Total expenditures	**1,491**	**1,346**	**1,342**	**1,359**	**1,409**	**1,434**	**1,482**	**1,527**	**1,569**	**1,615**	**1,662**
Current expenditures	1,437	1,333	1,311	1,356	1,359	1,401	1,448	1,492	1,533	1,578	1,624
Compensation of employees	481	467	464	474	476	479	492	508	525	543	561
Wages and salaries	393	371	369	377	378	380	390	403	417	431	445
Employer contribution and benefits	87	96	95	97	99	99	102	105	108	112	116
Goods and services	220	186	158	153	185	183	188	194	201	208	215
Interest	188	200	218	223	208	232	248	252	252	254	256
Subsidies	0	0	0	0	0	0	0	0	0	0	0
Social benefits	246	129	144	202	168	157	161	166	171	176	182
Pensions	0	0	0	0	0	0	0	0	0	0	0
Health system (AZV)	80	44	59	53	20	10	10	10	10	10	10
Other social transfers	167	85	85	149	148	147	151	156	161	166	172
Other expenses	302	350	328	303	322	350	360	372	384	397	410
Capital expenditure	54	13	30	3	51	33	34	35	36	37	38
Of which: Development Fund	42	32	0	0	0	0	0	0	0	0	0
Overall balance	**-373**	**-78**	**-78**	**-143**	**-112**	**-42**	**-52**	**-49**	**-43**	**-37**	**-31**
Primary balance	**-185**	**122**	**140**	**80**	**95**	**190**	**196**	**203**	**210**	**217**	**225**
Net acquisition of financial assets	-33	-18	-22	-22	-18	-24	-24	-22	-20	-20	-20
Net incurrence of liabilities	406	97	100	165	131	66	75	71	62	57	51
Memorandum items:											
Public gross debt	3,869	3,918	4,012	4,159	4,271	4,313	4,365	4,414	4,457	4,494	4,525
Nominal GDP (millions of Aruban florins)	4,743	4,818	4,756	4,795	5,053	5,148	5,290	5,464	5,646	5,836	6,032

Sources: Aruban authorities and IMF staff estimates and projections.
1/ This table is presented on adjusted cash basis.

Table 4. Aruba: Central Bank Survey, 2014–2020

(Millions of Aruban florins)

					Est.	Projections	
	2014	2015	2016	2017	2018	2019	2020
Net Foreign Assets	1,124	1,385	1,558	1,510	1,636	1,724	1,818
Gross Foreign Assets	1,241	1,482	1,677	1,650	1,781	1,866	1,960
Gross Foreign Liabilities	-1.1	-2.2	-3.9	-0.7	-2.6	-1.7	-1.7
Valuation Changes	-116	-95	-115	-139	-142	-141	-141
Net Domestic Assets	-126	-183	-172	-140	-134	-192	-244
Government Deposits (net)	-51	-74	-36	-47	-49	-48	-48
Development Funds Deposits	-6	-34	-49	-11	0	-5	-5
Other Domestic Entities (net)	-1	-1	-1	-1	-1	0	0
Other Items (net)	-68	-74	-86	-81	-84	-139	-190
Reserve Money	999	1,203	1,386	1,370	1,503	1,532	1,574
Bank Notes Issued	262	271	270	296	298	304	312
Bank Reserves	737	932	1,116	1,074	1,205	1,228	1,262
Demand	262	307	333	420	400	407	418
Time	474	625	783	653	806	821	844
				(Percent change)			
Net Foreign Assets	1.5	23.2	12.5	-3.1	8.4	5.4	5.4
Net Domestic Assets	-19.2	44.7	-5.8	-18.8	-4.2	43.7	26.8
Reserve Money	5.0	20.4	15.3	-1.2	9.7	1.9	2.8
				(Percent of GDP)			
Government Deposits at Central Bank	1.2	2.2	1.8	1.2	1.0	1.0	1.0
Central Government	1.1	1.5	0.8	1.0	1.0	0.9	0.9
Development Fund	0.1	0.7	1.0	0.2	0.0	0.1	0.1

Sources: Central Bank of Aruba and IMF staff estimates and projections.

Table 5. Aruba: Monetary Survey, 2014–2020

(Millions of Aruban florins)

						Projections	
	2014	2015	2016	2017	2018	2019	2020
Net foreign assets	1,173	1,516	1,778	1,685	1,776	1,876	1,982
Central bank	1,124	1,385	1,558	1,510	1,636	1,724	1,818
Gross Foreign Assets	1,241	1,482	1,677	1,650	1,781	1,866	1,960
Gross Foreign Liabilities	-1	-2	-4	-1	-3	-2	-2
Valuations	-116	-95	-115	-139	-142	-141	-141
Commercial banks	49	131	219	175	140	152	164
Net domestic assets	2,288	2,289	2,390	2,555	2,601	2,584	2,601
Domestic credit	3,100	3,126	3,267	3,492	3,638	3,732	3,838
Net claims on the government	132	164	254	365	398	382	379
Deposits	-185	-174	-107	-114	-126	-120	-123
Claims	317	338	360	479	524	501	501
Claims on the private sector	2,967	2,961	3,013	3,127	3,240	3,351	3,460
Other items net	-812	-836	-876	-936	-1,037	-1,149	-1,238
Money supply (M2)	3,461	3,805	4,168	4,240	4,377	4,459	4,582
Money (M1)	1,793	2,061	2,252	2,422	2,434	2,480	2,548
Currency in circulation outside banks	227	240	246	266	261	266	273
Demand deposits	1,566	1,821	2,005	2,155	2,173	2,214	2,275
Local currency	1,296	1,516	1,657	1,793	1,798	1,832	1,882
Foreign currency	270	305	349	362	375	382	393
Quasi money	1,668	1,744	1,916	1,818	1,943	1,980	2,034
			(Percent change)				
Net foreign assets	3.8	29.2	17.3	-5.2	5.4	5.6	5.6
Net domestic assets	6.0	0.1	4.4	6.9	1.8	-0.7	0.7
Credit to the private sector	4.2	-0.2	1.8	3.8	3.6	3.4	3.3
Broad money	5.2	9.9	9.5	1.7	3.2	1.9	2.8
Deposits	5.1	10.2	10.0	1.3	3.6	1.9	2.8
			(Percent of GDP)				
Credit to the private sector	62.6	61.5	63.4	65.2	64.1	65.1	65.4
Government deposits	6.3	6.2	2.2	2.4	2.5	2.3	2.3
Broad money	73.0	79.0	87.6	88.4	86.6	86.6	86.6
Memorandum items:							
Money multiplier	3.5	3.2	3.0	3.1	2.9	2.9	2.9

Sources: Central Bank of Aruba and IMF staff estimates and projections.

Table 6. Aruba: Balance of Payments (6th edition), 2014–2024

						Projections					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
						(Millions of U.S. dollars)					
Current account balance	**-136**	**112**	**134**	**28**	**-14.6**	**-49.7**	**-35.4**	**-28.3**	**-17.0**	**1.7**	**8.7**
Goods	-1,092	-921	-854	-990	-1,050	-1,160	-1,170	-1,177	-1,190	-1,196	-1,217
Exports	255	330	284	135	152	145	147	147	148	150	152
Of which: Oil products 1/	137	235	197	51	66	57	57	56	55	56	56
Imports	1,346	1,250	1,138	1,124	1,202	1,305	1,317	1,324	1,338	1,345	1,369
Of which: Oil products	366	315	249	160	209	182	174	163	163	165	168
Services	1,128	1,227	1,186	1,255	1,342	1,403	1,434	1,464	1,495	1,527	1,573
Credits	2,041	2,110	2,058	2,169	2,385	2,444	2,516	2,590	2,665	2,743	2,825
Of which: tourism exports	1,727	1,787	1,745	1,842	1,986	2,041	2,102	2,165	2,229	2,294	2,363
Debits	912	883	872	914	1,043	1,041	1,083	1,126	1,170	1,216	1,252
Income	-173	-194	-198	-238	-286	-293	-299	-316	-323	-330	-337
Primary income	-103	-125	-135	-171	-196	-200	-204	-207	-211	-214	-218
Secondary income	-71	-69	-62	-67	-91	-93	-95	-108	-112	-116	-119
Capital account balance	**0**	**0**	**8**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Financial account	**-178**	**116**	**125**	**16**	**-9**	**-50**	**-35**	**-28**	**-17**	**2**	**9**
Direct investment (net, inflows -)	-243	37	-28	-79	-95	-131	-121	-110	-66	-68	-71
Portfolio (net)	-109	-61	-38	93	-31	-31	-32	-33	-33	-34	-34
Financial derivatives (net)	4	40	55	24	6	6	6	7	7	7	7
Other investments (net)	161	-48	39	7	39	59	59	100	81	92	103
Reserve Assets, (net change, + increase)	10	146	98	-29	72	48	52	8	-5	6	4
Errors and omissions	**-42**	**3**	**-16**	**-15**	**6**	**0**	**0**	**0**	**0**	**0**	**0**
						(Percent of GDP)					
Current account balance	**-5.1**	**4.2**	**5.0**	**1.0**	**-0.5**	**-1.7**	**-1.2**	**-0.9**	**-0.5**	**0.1**	**0.3**
Goods	-41.2	-34.2	-32.2	-36.9	-37.2	-40.3	-39.6	-38.6	-37.7	-36.7	-36.1
Exports	9.6	12.2	10.7	5.0	5.4	5.0	5.0	4.8	4.7	4.6	4.5
Of which: Oil products 1/	5.2	8.7	7.4	1.9	2.3	2.0	1.9	1.8	1.8	1.7	1.7
Imports	50.8	46.5	42.8	42.0	42.6	45.4	44.6	43.4	42.4	41.3	40.6
Of which: Oil products	13.8	11.7	9.4	6.0	7.4	6.3	5.9	5.3	5.2	5.1	5.0
Services	42.6	45.6	44.6	46.9	47.5	48.8	48.5	48.0	47.4	46.8	46.7
Credits	77.0	78.4	77.5	81.0	84.5	85.0	85.2	84.8	84.5	84.1	83.8
Of which: tourism exports	65.2	66.4	65.7	68.8	70.4	71.0	71.1	70.9	70.7	70.4	70.1
Debits	34.4	32.8	32.8	34.1	36.9	36.2	36.6	36.9	37.1	37.3	37.2
Income	-6.5	-7.2	-7.4	-8.9	-10.1	-10.2	-10.1	-10.3	-10.2	-10.1	-10.0
Primary income	-3.9	-4.6	-5.1	-6.4	-6.9	-7.0	-6.9	-6.8	-6.7	-6.6	-6.5
Secondary income	-2.7	-2.6	-2.3	-2.5	-3.2	-3.2	-3.2	-3.5	-3.5	-3.5	-3.5
Capital account balance	**0.0**	**0.0**	**0.3**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Financial account	**-6.7**	**4.3**	**4.7**	**0.6**	**-0.3**	**-1.7**	**-1.2**	**-0.9**	**-0.5**	**0.1**	**0.3**
Direct investment (net, inflows -)	-9.2	1.4	-1.1	-3.0	-3.4	-4.6	-4.1	-3.6	-2.1	-2.1	-2.1
Portfolio (net)	-4.1	-2.3	-1.4	3.5	-1.1	-1.1	-1.1	-1.1	-1.1	-1.0	-1.0
Financial derivatives (net)	0.1	1.5	2.1	0.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other investments (net)	6.1	-1.8	1.5	0.3	1.4	2.0	2.0	3.3	2.6	2.8	3.0
Reserve Assets, (net change, + increase)	0.4	5.4	3.7	-1.1	2.5	1.7	1.8	0.3	-0.2	0.2	0.1
Errors and omissions	**-1.6**	**0.1**	**-0.6**	**-0.6**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Memorandum items:											
Exports of goods and services (percent change)	6.2	6.3	-4.0	-1.6	10.1	2.1	2.9	2.8	2.8	2.8	2.9
Import of goods and services (percent change)	-0.5	-5.5	-5.8	1.4	10.1	4.5	2.3	2.1	2.4	2.1	2.3
Central Bank Net Foreign Assets (millions of U.S. dollars) 2/	693	827	935	921	993	1,042	1,094	1,102	1,097	1,102	1,106
Gross Foreign Assets (millions of U.S. dollars)	693	828	937	922	995	1,043	1,095	1,103	1,097	1,103	1,107
(months of next years imports)	3.9	4.9	5.5	4.9	5.1	5.2	5.4	5.3	5.1	5.0	5.0
(percent of broad money)	36	39	40	39	41	…	…	…	…	…	…
(percent of short term external debt residual maturity)	205	286	351	410	434	455	475	466	450	440	429
External Debt (percent of GDP)	106.5	103.6	106.3	102.5	99.3	97.5	95.4	94.9	94.5	94.0	93.6
Nominal GDP (millions of U.S. dollars)	2,649	2,691	2,657	2,679	2,823	2,876	2,955	3,052	3,154	3,260	3,370

Sources: Aruban authorities and IMF staff estimates and projections.

1/ Export and imports of oil products includes transhipment of crude oil and imports and re-exports of bunker fuel for airplanes.

2/ Includes revaluation changes.

Table 7. Aruba: Financial Soundness Indicators, 2014-2018

(Percent, unless indicated otherwise)

	2014	2015	2016	2017	2018 1/
Capital					
Tier 1 capital to risk-weighted assets	15.3	17.6	19.6	22.4	24.5
Tier 1 and 2 capital to risk-weighted assets	23.3	26.0	28.1	30.3	32.1
Asset quality					
NPLs to gross loans	6.3	4.7	4.4	4.0	3.9
NPLs net of allocated provisions to gross loans	3.2	1.6	1.5	1.5	1.5
NPLs net of allocated provisions to regulatory capital	14.7	6.8	5.8	5.4	5.0
Large exposures to capital	69.2	56.4	51.4	40.6	41.4
Earnings and profitability					
ROA after taxes	2.2	2.1	2.1	1.7	1.6
ROE after taxes	17.9	16.1	15.1	11.5	10.0
Net interest income to gross income	60.4	57.3	58.6	57.2	55.5
Non-interest expenses to gross income	72.0	73.2	72.0	76.5	78.3
Liquidity					
Liquid assets to total assets	24.1	27.3	30.6	28.6	29.8
Liquid assets to short term liabilities	58.7	62.8	67.4	60.9	63.8
Loans to deposits	73.6	69.9	66.2	68.2	68.2
Sensitivity to market risk					
Interest rate margin (percentage points)	5.7	6.1	6.0	5.1	5.2

Source: Central Bank of Aruba.

1/ Preliminary data.

Table 8. Aruba: External Debt, 2014–2017

(Millions of U.S. dollars)

	2014	2015	2016	2017
Government 1/	1,043.9	1,148.5	1,226.9	1,161.4
Short-term (trade credits)	2.2	2.8	0.9	1.6
Long-term	1,041.7	1,145.8	1,226.0	1,159.8
Bonds and notes	971.5	1,089.3	1,180.3	1,122.2
Loans	65.8	52.2	41.2	32.9
Trade credits and advances	4.5	4.3	4.5	4.6
Centrale Bank van Aruba	0.6	1.2	2.2	0.4
Commercial banks	338.9	300.2	275.4	229.6
Short-term	307.0	257.5	236.0	194.5
Long-term	32.0	42.6	39.3	35.1
Bonds and notes	0.0	0.0	0.0	0.0
Loans	3.4	3.4	0.0	0.0
Of which: currency and deposits	28.5	39.2	39.3	35.1
Other debt liabilities	0.0	0.0	0.0	0.0
Other sectors 2/	260.4	289.7	324.0	325.3
Short-term	28.2	28.2	28.2	28.2
Long-term	232.3	261.6	295.9	297.2
Bonds and notes	0.0	0.0	0.0	2.8
Loans	229.3	258.7	293.0	291.5
Direct investment: intracompany lending	1,171.8	1,041.9	995.1	1,029.6
Gross external debt	2,822.8	2,788.7	2,823.6	2,746.3
Short-term	337.9	289.7	267.2	224.6
Long-term	2,484.9	2,499.1	2,556.4	2,521.7

Sources: Aruban authorities; and IMF staff calculations.

1/ Including official entities.

2/ Include nonmonetary financial institutions, public and private nonfinancial corporations, nonprofit institutions serving households and households.

Annex I. Implementation of the Recommendations of the 2017 Article IV Consultation Discussions

IMF Recommendations	*Implementation status*
Fiscal Policy	
Broaden the tax base and make the tax system less complex (fewer rates) with more reliance on indirect taxation, including higher sales taxes.	The government increased the turnover tax in mid-2018, and, in early 2019, simplified the personal income tax system and carried out reforms to property taxes. The authorities will implement indirect tax reforms by mid-2019.
Reduce wage-related expenses, slowing down the wage drift due to automatic raises and promotions for time in grade, and modify public sector workers' benefits and allowances.	The authorities introduced some measures to reduce wage-related expenses.
Implement measures to ensure that the universal health care system (AZV) becomes self-financed. Introduce means-tested user fees (e.g., for emergency room visits for non-urgent care) and the BAZV tax rate.	The government raised sales taxes ear-marked to the health system (BAZV tax). The government is currently reviewing the legal framework and undertaking a cost analysis to introduce structural measures.
Set fiscal targets in nominal (Florin) terms rather than as percent of GDP.	As per the agreement with the Netherlands, fiscal targets are to remain denominated in percentages of GDP in the near term.
Social programs should be means-tested and targeted to the most vulnerable. Regular auditing of cash transfer and social programs should be conducted to measure their effectiveness and control costs.	Public assistance programs are all means-tested. They are subjected to periodic audits on their legality and effectiveness by the public accountant agency.
Improve overall public financial management (PFM).	CARTAC technical assistance on PFM is in the pipeline.
Structural Policies	
Labor market reform and development of sustainable skill-based immigration policies to increase labor force participation and productivity.	The intention of the Government is to introduce an integrated and sustainable skill-based immigration, where attention will be placed on the level of education and integration, as well as the financial implications. As for labor market reform, there are some ongoing initiatives (e.g., National Action Plan on Youth Employment; and initiative to (re) educate and provide guidance to teenage/single mothers to enter the labor force) and others (upcoming) are currently under evaluation (e.g., introduction of part time work).
Ease of doing business should be improved.	The e-government project is expected to help. The time it takes to issue business licenses has been reduced from an average of 8 weeks in 2017 to 4 weeks in 2019.
The tourism sector could be diversified through polices that would attract tourists from broader group of countries, including from Latin American countries.	The increase in airlift has helped to attract tourists from other countries and the Airport Authority is carrying out US$250 million expansion of the international airport.

Annex II. Risk Assessment Matrix[1]

Source of Risks	Up/ Downside	Relative Likelihood	Time Horizon	Impact	Policy Response
Weaker-than-expected global growth: US Europe	↓	 Medium High	 ST, MT ST, MT	**High** Aruba's economy is highly exposed to developments in the US—its main tourism export market and trading partner. Exposure to Europe is much less.	• Further diversify tourism export markets. • Advance structural and labor market reforms to increase economic resilience. • Improve the business environment for private investment. • Build fiscal space.
Sharp tightening of global financial conditions. Market expectation of tighter U.S. monetary policy Sustained decline in risk appetite	↓	 Low Medium	 ST ST	**Medium** Higher government financing costs and concerns over fiscal sustainability. Possible macroeconomic consequences and risks to financial stability.	• Strengthen fiscal consolidation to reduce the debt burden and interest payments.
Large swings in energy prices	↓	Medium	ST, MT	**High** Aruba is highly dependent on imported fuel.	• Expedite investments in renewable energy and energy saving technology.
Reduced financial services by correspondent banks	↓	Low	ST	**High** Aruba has very few banks. One or two affected banks could weigh heavily on credit provision.	• Enhance financial supervision and enforcement of AML/CFT framework.
Venezuela's crisis	↓	Medium	ST	**High** Higher inflow of refugees.	• Seek support from the Netherlands and the international community.
New renewable energy projects and infrastructure investments	↑	Low	MT	**Medium** Lower production costs, higher tourism exports (via improved competitiveness) and potential growth.	• Accelerate diversification of tourism export markets. • Strengthen the implementation of the ongoing renewable energy program.

[1/] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff's views on the source of the risks and overall level of concern as of the time of the discussion with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

Annex III. External Sector Assessment

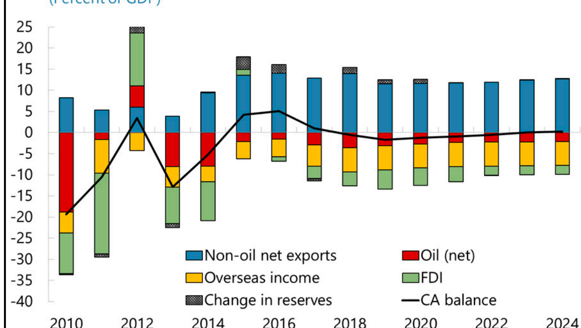
Aruba's external position is broadly in line with fundamentals and international reserves are largely adequate but should be increased in the medium term to increase buffers against future external shocks. Aruba's lack of exposure to hurricanes implies that it has less need for reserves than most other Caribbean economies. Against the U.S., which is Aruba's largest source of tourists and goods trade, at about 75 percent of gross flows, the Florin appears to be fairly valued.

External Assessment Summary	Current account approach	IREER approach	
		(all countries)	(U.S. only)
Current account (2018)	-0.5		
Cyclically adjusted current account	-0.6		
Multilaterally consistent current account norm /1	-0.9		
Current Account Gap (2018; percent of GDP) /1	0.3		
Total policy gaps' impacts	-1.0		
Residual	1.3		
Real exchange rate gap (2018; percent)	-0.4%	-9.7%	-3.2%
Real exchange rate elasticity (percent)	-0.6		

1/ Includes adjustments for policy stance, the business cycle, international comparisons, and multilateral consistency.
Sources: Aruban authorities and IMF staff calculations.

1. **Analysis of the 2018 current account balance points to an adjusted current account gap of 0.3 percent of GDP.**[1] The EBA-lite current account approach, a methodology used for external balance assessment in small open economies, suggests that Aruba's estimated current account deficit of 0.5 percent of GDP is broadly in line with fundamentals.

Aruba's External Situation
(Percent of GDP)



Note: Negative FDI numbers denote inflows.
Sources: Aruban authorities and IMF Staff estimtates.

2. **The gaps between recommended and observed policies have a modest impact on the current account norm.** Under the baseline scenario, Aruba's overall fiscal balance

[1] Due to data limitations, staff's analysis using the EBA-lite begins in 2010. As the oil refinery was temporarily in operation during 2012, and is not expected to reopen in staff's baseline, staff believes that excluding this year from the analysis is prudent. The refinery's temporary opening had large impacts on the current account (increasing it by 14 percentage points of GDP in a year in which it had only partial operations), balance of payments, and led to a one-off increase in foreign direct investment (FDI). Prior to the refinery's closure, Aruba's gross trade flows had averaged around 370 percent of GDP, with accompanying foreign investment flows as well. Since its closure, gross trade flows have been closer to 170 percent of GDP. Given the volatility in Aruba's current account balances, EBA-lite results should be interpreted with caution.

is forecast to increase from -2.2 percent of GDP in 2018 to -0.5 percent over the medium term. This underscores staff's recommended fiscal consolidation and debt reduction. If the authorities meet their fiscal targets, it will put additional upward pressure on the current account balance. Staff sees other policy gaps as not having qualitatively significant impacts on the current account as recent observed values have been close to recommended levels (for example, international reserves increased by 0.8 percent of GDP in 2018, which is slightly above staff's medium-term recommendation that reserves grow broadly in line with GDP).

3. **In the short term, staff expects the current account balance to deteriorate slightly due to increased FDI and infrastructure investment.** Import demand has increased at a faster pace than export earnings due to improving economic conditions and large ongoing investment projects, including the airport, hospital modernizations and hotel projects. Over the medium term, staff expects the current account to improve to a slightly positive value as Aruba's steady state tourism exports increase, fiscal consolidation continues, and fuel oil imports are reduced.

4. **After many years of real depreciation, Aruba's Florin has appreciated in 2018.** EBA-lite estimates based on the current account and currency elasticities suggest that the real Florin is fairly valued. Using the EBA-lite IREER approach, the Florin is undervalued by around 10 percent, but this is mostly due to large exchange rate and inflation swings in Venezuela. It is useful to assess Aruba's external balance without Venezuela given the country's ongoing data dissemination issues, black-market exchange rate, and the sharp decline in its tourist arrivals and other trade. Relative to the U.S. Aruba's real effective exchange rate has been much less volatile in recent years and estimates suggest that it is roughly fairly valued.[2]

Real Effective Exchange Rate

(Index, 2010=100)

Note: Due to data limitations for Venezuala, the overall index's last values should be treated with skepticism after December 2016.

Source: IMF staff calculations.

5. **Concerns about lost competitiveness are mitigated as the Florin appears to be close to its fundamental-implied value against the US dollar.[3]** The U.S. is the largest source of tourist revenues and other trade flows to Aruba, so the slight appreciation of the REER relative to other

---

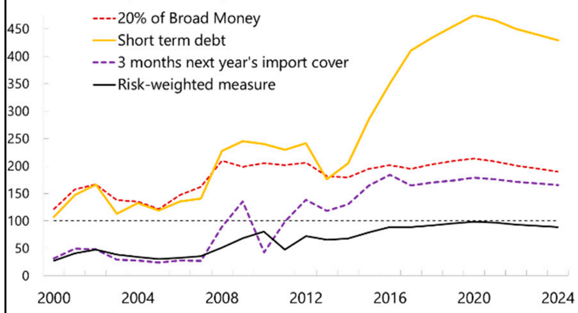
[2] Both staff and the authorities believe that the U.S. is the appropriate benchmark for Aruba's real effective exchange rate given the peg, bilateral tourism and trade dependence, and that Aruba's non-U.S. trade is largely in dollar denominated commodities.

[3] Despite the peg to the U.S. dollar, restrictions on capital mobility (dating back to 1986) allow for some monetary control in Aruba. The CBA has three main capital account restrictions: (i) commercial banks are not allowed to hold a net negative NFA position, and any foreign exchange in excess of a time-varying threshold needs to be sold to the central bank; (ii) institutional investors are obliged to invest at least 40 percent of the first Afl. 10 million of their liabilities locally, as well as 50 percent of the second Afl. 10 million, and 60 percent of the remainder, and (iii) individuals as well as companies, need foreign exchange licenses for transactions above specific thresholds. In addition, Aruba levies a foreign exchange tax (1.3 percent of the transactions value) on payments by residents to non-residents.

trading partners in recent months should pose little risk to competitiveness. Tourism costs in Aruba—measured by the "Week at the Beach" index that captures the average cost of food and lodging—are slightly lower than the average for the region. This further suggests that currency valuations, in either direction, are not a significant source of concern.

6. **Reserves remain broadly adequate but need to be built up over the medium term to increase buffers.** International reserves in 2018 were above traditional measures of reserve adequacy but slightly below the floor of IMF's risk-weighted measure (black line)—the ARA metric—which also takes into account the need for covering medium- and long-term external liabilities.[4] After increasing in 2018, reserves are expected to remain at similar levels over the medium term as the government deficit is financed through a mix of domestic and external issuance and FDI inflows remain at moderate levels. Staff advised the authorities to make further efforts to accumulate more reserves, if the overall policy mix permits it to be done in a way which does not damage growth prospects, thus bringing the reserve level within the adequacy range of the IMF's metrics. The current level of global commodity prices provides an opportunity to buttress reserves against future price shocks.

Reserve Adequacy
(Reserves as a percent of target)



Sources: Authorities' data and IMF Staff estimates.
Note: values >100 indicate reserves in excess of the metric recommended level.

[4] Using an alternative measure such as the SIDS measure (Mwase, 2012), which takes further into account issues relating to small island states, Aruba's reserves are only 70 percent of the suggested level. However, the SIDS might not be generally applicable to Aruba since it doesn't suffer from natural disasters regularly and is a high-middle income country.

Annex IV. Public Debt Sustainability Analysis

Aruba's public debt sustainability risks are significant in the context of a high debt burden and gross financing needs. Despite the government's medium-term consolidation plan, public debt is projected to remain high over the projection period, falling to about 75 percent of GDP in 2024, when gross financing needs are estimated to be around 9.9 percent of GDP. Moreover, the projected path of public debt remains vulnerable to risks, particularly from weak growth and adverse fiscal shocks.

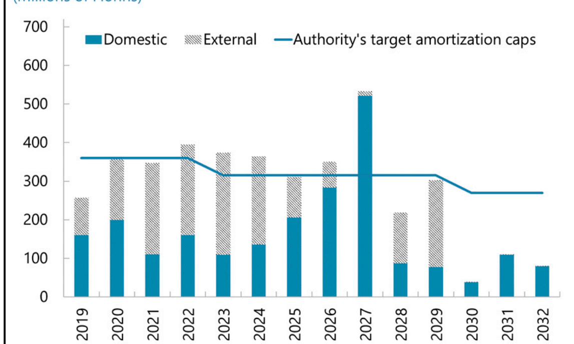
A. Baseline Scenario

1. **Reflecting the government's consolidation efforts, public debt is projected to fall from about 85 percent of GDP in 2018 to 75 percent by 2024.**[1] The baseline debt projections reflect existing fiscal consolidation efforts which began in 2014 and assumes that the government will continue debt stabilization and reduction efforts in the medium term. Under the staff's baseline forecast the primary balance will be sufficiently high to begin reducing the overall debt stock. Debt projections also highlight the high sensitivity of Aruba's debt dynamics to macro shocks.[2]

B. Risk Assessment

2. **Aruba's sizable debt burden and gross financing needs continue to create significant risks to debt sustainability.** As presented below, Aruba's debt ratio significantly exceeds the debt burden benchmark for emerging market economies of 70 percent of GDP throughout the baseline scenario. Aruba's gross financing needs, at 9 percent of GDP in 2019 and above that over the forecast horizon, are significant. However, the public debt stock has a medium risk profile. This is ameliorated by its low spreads to risk-free bonds, modest refinancing needs in the coming years, and the low share of short-term maturity debt. The authorities are in the planning process to reduce their peak refinancing needs, largely by increasing their debt stock's weighted average maturity. To accomplish this, they plan to focus their new issuance on longer-term debt and perform some debt swaps. This combination will help reduce the variability of their overall gross financing needs and some of the risk of possible crowding out effects. The greatest risks come from the country's high total external financing needs (of course this external debt also increases Aruba's reserves and thus has a mixed impact on overall stability).

Outstanding Amortization Schedule
(Millions of Florins)



Source: Authorities' data.

[1] Although Aruba is a high scrutiny case, the realism outputs from the MAC-DSA are not included as Aruba has a limited forecast history making them relatively uninformative.

[2] Unlike Curaçao and Sint Maarten, Aruba does not have a concessional financing arrangement with the Netherlands.

C. Realism of Baseline Assumptions

3. **The baseline assumptions are consistent with past economic performance and the current government's fiscal consolidation commitment.** Staff assumes some contractionary effects from fiscal consolidation and expects that Aruba's real GDP growth will pick up over the medium term to about 1.1 percent. Over the medium term, a gap remains between staff and the authorities' forecasts.

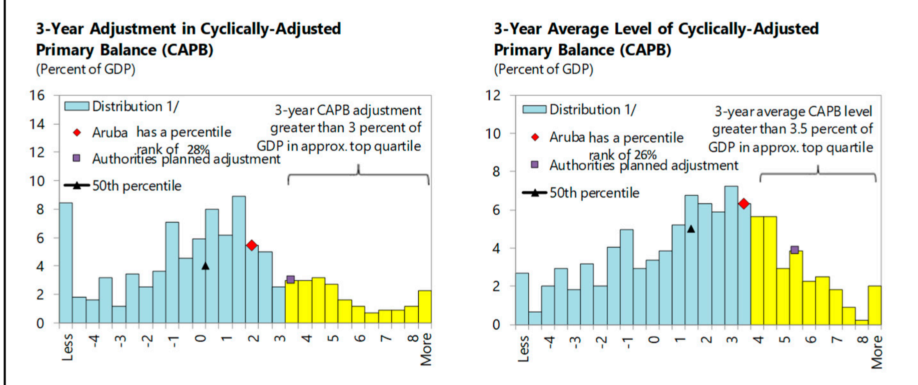
4. **Given Aruba's sizable debt burden and financing needs, the primary balance is expected to exceed its debt-stabilizing level of 1.7 percent of GDP over the projection period by a significant margin.** Under staff's baseline scenario, the primary balance should exceed 3.7 percent of GDP over 2019-24 to significantly lower the debt ratio. Enacting additional fiscal consolidation measures would further reduce debt sustainability concerns.

5. **Under the baseline scenario, the forecasted adjustments are large but within a normal historical range, as shown by the DSA's realism module.** Staff's projected maximum 3-year adjustment in the primary balance over the forecast period has a percentile rank of 28 among all advanced and emerging surveillance economies with debt greater than 60 percent of GDP (see chart below). The 3-year average level of projected primary balance is in the 26th percentile.

D. Realism of the Authorities' Planned Adjustment

6. **The authorities' fiscal targets are tighter than those of staff's baseline.**[3] Under the authorities' fiscal plan, the peak 3-year adjustment in the primary balance would be near the 20th percentile of realized outcomes, making this targeted adjustment slightly less likely to be realized. However, staff emphasizes that the macroeconomic environment of low oil prices, small multipliers, and robust near-term U.S. growth makes this an opportune time for Aruba to engage in fiscal reforms.

Assessing the Realism of Projected Fiscal Adjustment



Source : IMF staff.
1/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.
Note: For Aruba the primary balance, instead of the cyclically adjusted primary balance is used. As staff see growth which is roughly at potential across the forecast horizon, this has little net effect on the assessment of the fiscal adjustments when compared with the cyclically adjusted primary balance.

---

[3] This active scenario is discussed in greater detail in paragraphs 18 and 19 of the main text.

Figure 1. Aruba: Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

(in percent of GDP unless otherwise indicated)

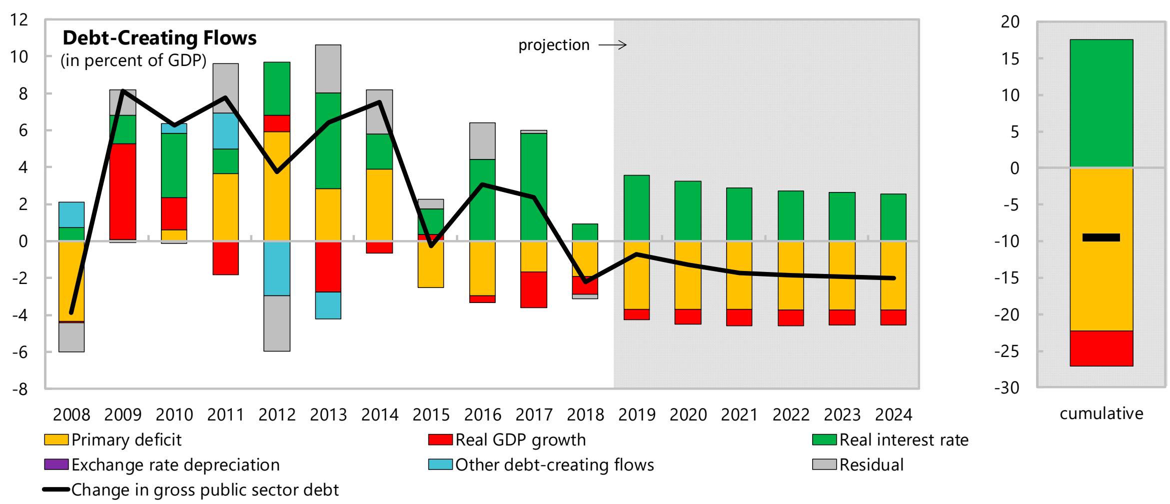
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2008-2016 [2/]	2017	2018	2019	2020	2021	2022	2023	2024
Nominal gross public debt	66.7	86.7	84.5	83.8	82.5	80.8	79.0	77.0	75.0
Public gross financing needs	7.6	10.1	9.1	9.6	11.5	10.9	11.3	10.5	9.9
Real GDP growth (percent)	-0.8	2.3	1.2	0.7	1.0	1.1	1.1	1.1	1.1
Inflation (GDP deflator, percent)	1.1	-1.5	4.1	1.2	1.7	2.2	2.2	2.2	2.2
Nominal GDP growth (percent)	0.3	0.8	5.4	1.9	2.8	3.3	3.3	3.4	3.4
Effective interest rate (percent) [4/]	5.6	5.6	5.0	5.5	5.9	5.8	5.7	5.7	5.7

As of March 30, 2019		
Sovereign Spreads		
EMBIG (bp) 3/		300
5Y CDS (bp)		n.a.
Ratings	Foreign	Local
Moody's	n.a.	n.a.
S&Ps	BBB+	BBB+
Fitch	BBB-	BBB-

Contribution to Changes in Public Debt

	Actual			Projections							
	2008-2016	2017	2018	2019	2020	2021	2022	2023	2024	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	4.3	2.4	-2.2	-0.7	-1.3	-1.7	-1.9	-1.9	-2.0	-9.5	
Identified debt-creating flows	3.5	2.2	-2.0	-0.7	-1.3	-1.7	-1.9	-1.9	-2.0	-9.5	
Primary deficit	0.8	-1.7	-1.9	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-22.3	1.7
Primary (noninterest) revenue and grants	25.0	25.4	25.7	27.0	27.0	27.0	27.0	27.0	27.0	162.2	
Primary (noninterest) expenditure	25.8	23.7	23.8	23.3	23.3	23.3	23.3	23.3	23.3	139.9	
Automatic debt dynamics [5/]	2.8	3.9	-0.1	3.0	2.4	2.0	1.9	1.8	1.7	12.8	
Interest rate/growth differential [6/]	2.8	3.9	-0.1	3.0	2.4	2.0	1.9	1.8	1.7	12.8	
Of which: real interest rate	2.5	5.8	0.9	3.6	3.3	2.9	2.7	2.6	2.5	17.6	
Of which: real GDP growth	0.3	-2.0	-1.0	-0.6	-0.8	-0.9	-0.9	-0.8	-0.8	-4.8	
Exchange rate depreciation [7/]	0.0	0.0	0.0	…	…	…	…	…	…	…	
Other identified debt-creating flows	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Privatization/Drawdown of deposits (+fina	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., ESM and Euroarea l	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8/]	0.8	0.1	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	



Source: IMF staff.

1/ Public sector is defined as central government.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi (1+g)$ and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

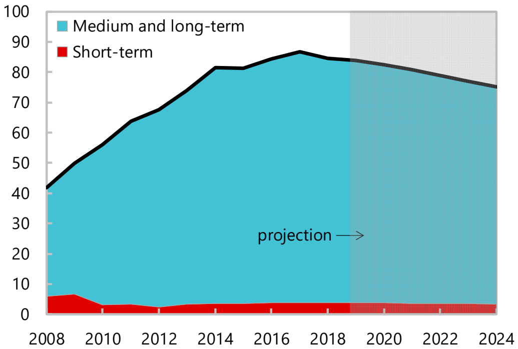
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure 2. Aruba: Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

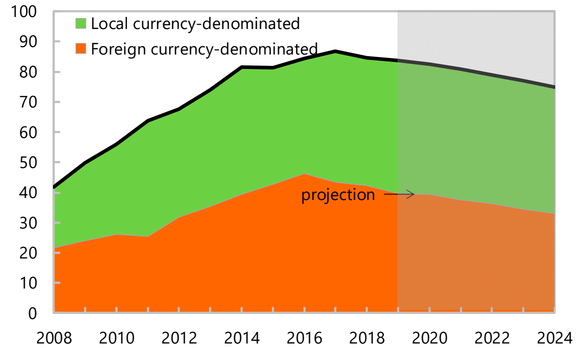
By Maturity

(percent of GDP)



By Currency

(percent of GDP)

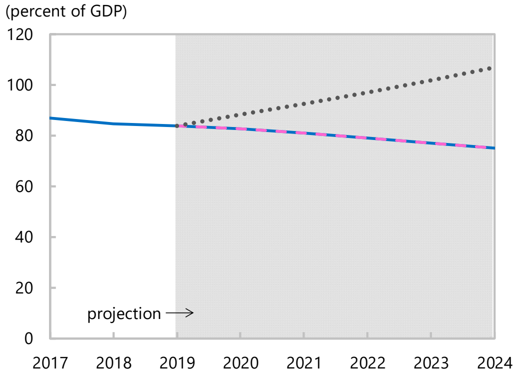


Alternative Scenarios

Baseline Historical Constant Primary Balance

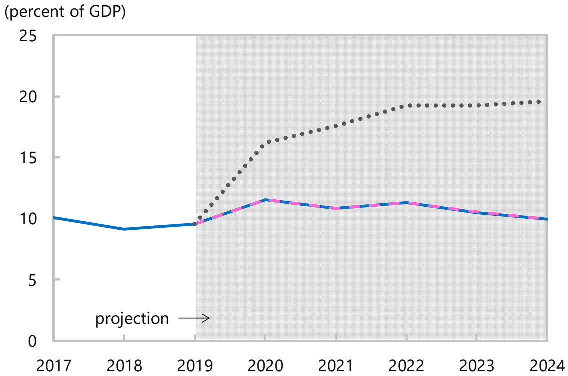
Gross Nominal Public Debt

(percent of GDP)



Public Gross Financing Needs

(percent of GDP)



Underlying Assumptions

(in percent)

Baseline Scenario	2019	2020	2021	2022	2023	2024
Real GDP growth	0.7	1.0	1.1	1.1	1.1	1.1
Inflation	1.2	1.7	2.2	2.2	2.2	2.2
Primary Balance	3.7	3.7	3.7	3.7	3.7	3.7
Effective interest rate	5.5	5.7	5.8	5.7	5.7	5.7
Constant Primary Balance Scenario						
Real GDP growth	0.7	1.0	1.1	1.1	1.1	1.1
Inflation	1.2	1.7	2.2	2.2	2.2	2.2
Primary Balance	3.7	3.7	3.7	3.7	3.7	3.7
Effective interest rate	5.5	5.7	5.8	5.7	5.7	5.7

Historical Scenario	2019	2020	2021	2022	2023	2024
Real GDP growth	0.7	-0.4	-0.4	-0.4	-0.4	-0.4
Inflation	1.2	1.7	2.2	2.2	2.2	2.2
Primary Balance	3.7	-0.8	-0.8	-0.8	-0.8	-0.8
Effective interest rate	5.5	5.7	5.8	5.9	6.0	6.0

Source: IMF staff.

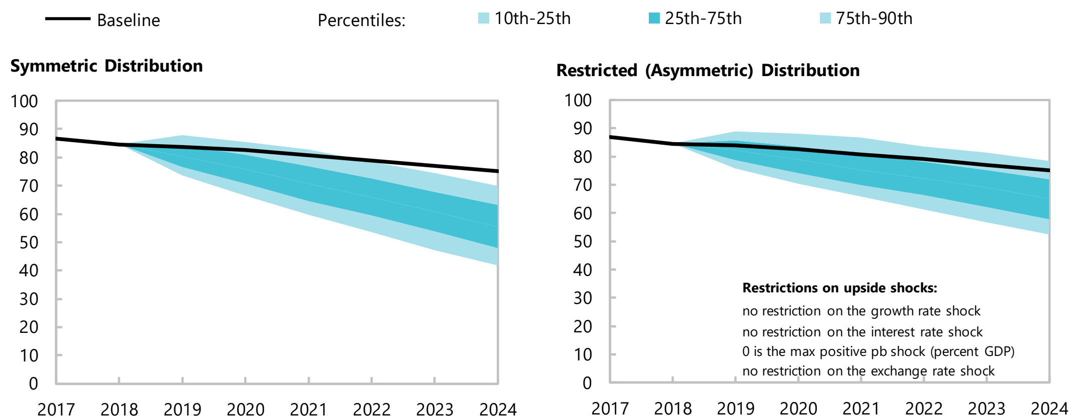
Figure 3. Aruba: Public DSA Risk Assessment 2019-2024

Heat Map

Debt level 1/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs 2/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile 3/	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

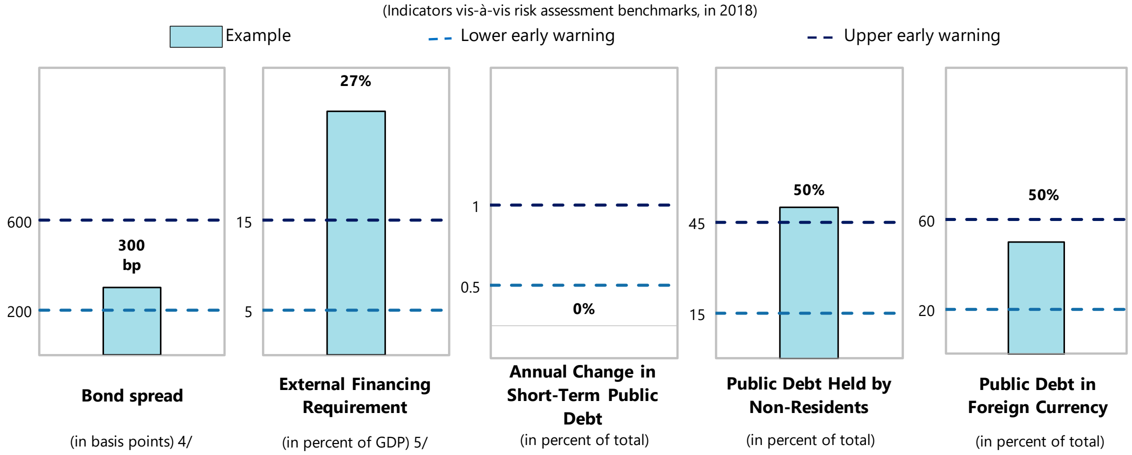
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2018)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

Lower and upper risk-assessment benchmarks are:

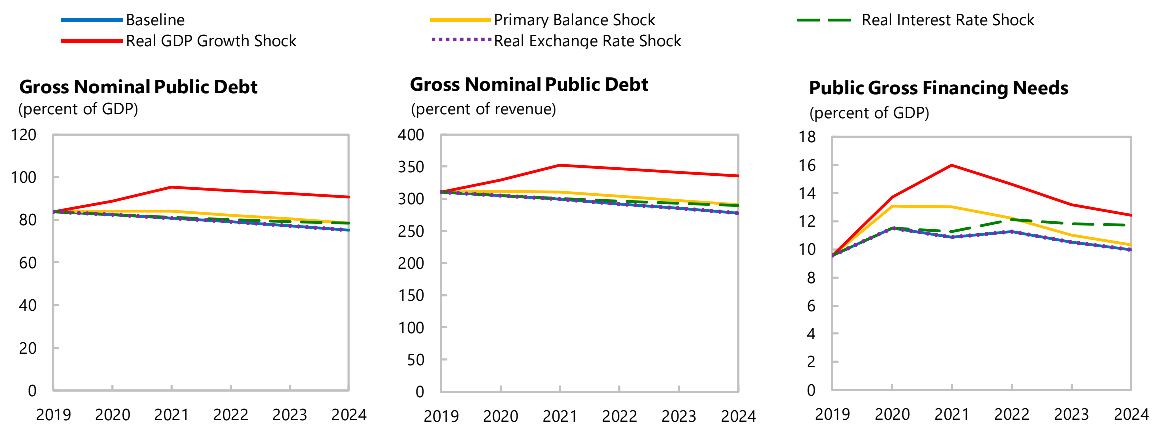
200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 30-Dec-18 through 30-Mar-19.

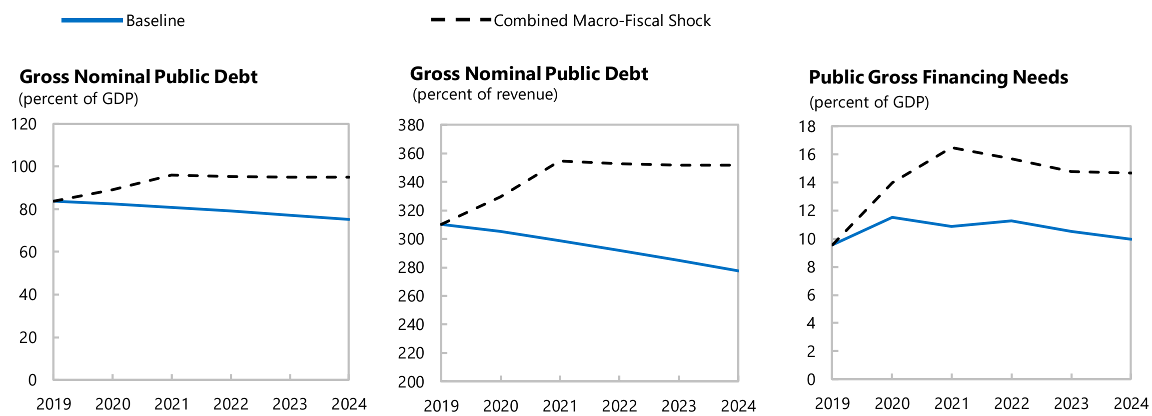
5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Figure 4. Aruba: Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

Primary Balance Shock	2019	2020	2021	2022	2023	2024
Real GDP growth	0.7	1.0	1.1	1.1	1.1	1.1
Inflation	1.2	1.7	2.2	2.2	2.2	2.2
Primary balance	3.7	2.1	2.2	3.7	3.7	3.7
Effective interest rate	5.5	5.7	5.8	5.8	5.8	5.7
Real Interest Rate Shock						
Real GDP growth	0.7	1.0	1.1	1.1	1.1	1.1
Inflation	1.2	1.7	2.2	2.2	2.2	2.2
Primary balance	3.7	3.7	3.7	3.7	3.7	3.7
Effective interest rate	5.5	5.7	6.3	6.6	7.0	7.3
Combined Shock						
Real GDP growth	0.7	-3.4	-3.3	1.1	1.1	1.1
Inflation	1.2	0.6	1.1	2.2	2.2	2.2
Primary balance	3.7	2.1	0.9	3.7	3.7	3.7
Effective interest rate	5.5	5.7	6.3	6.7	7.1	7.5

Real GDP Growth Shock	2019	2020	2021	2022	2023	2024
Real GDP growth	0.7	-3.4	-3.3	1.1	1.1	1.1
Inflation	1.2	0.6	1.1	2.2	2.2	2.2
Primary balance	3.7	2.4	0.9	3.7	3.7	3.7
Effective interest rate	5.5	5.7	5.8	5.8	5.8	5.8
Real Exchange Rate Shock						
Real GDP growth	0.7	1.0	1.1	1.1	1.1	1.1
Inflation	1.2	1.7	2.2	2.2	2.2	2.2
Primary balance	3.7	3.7	3.7	3.7	3.7	3.7
Effective interest rate	5.5	5.7	5.8	5.7	5.7	5.7

Annex V. External Debt Sustainability Analysis

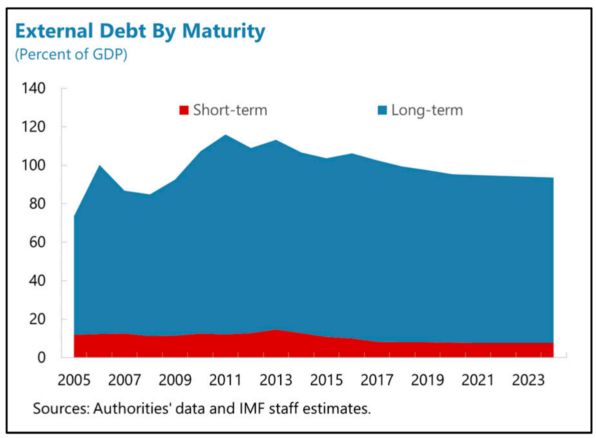
After rising during the first decade of the 2000s, Aruba's external debt position has started to stabilize. The debt level is expected to remain high and Aruba's gross external financing needs are substantial. Over the medium term, the authority's fiscal consolidation efforts and the projected non-interest current account surpluses and FDI inflows will be the primary driver of decreasing external debt.

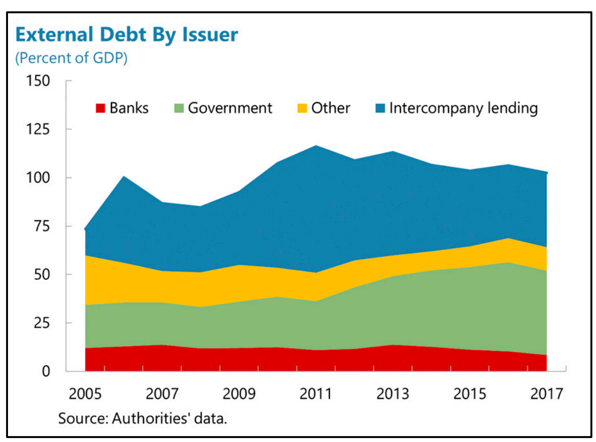
A. Baseline Scenario

1. **External debt in Aruba is high at around 99 percent of GDP in 2018.** By 2024, staff expects a decline of around 6 percentage points of GDP. This will be driven by a combination of: a positive non-interest current account surplus, which averages 1 percent of GDP over the forecast horizon, equity foreign direct investment, and a decrease in the government's external debt. By 2020, external debt is expected to reach 93.6 percent of GDP, its lowest level since 2009. However, external debt is still expected to exceed exports for the duration of the forecast horizon.

B. Risk Assessment

2. **While Aruba's external debt levels are quite high, they present modest risks under the baseline scenario.** External debts are primarily made up of long-term debts (92 percent in 2017). In addition, the debts of the banking sector make up a small share of net outstanding external debt. This combined maturity distribution and sectoral composition make the debt burden less risky than what its headline level might suggest.





3. **Under most of the shock scenarios in the external DSA, external debt levels would increase to levels seen in the immediate aftermath of the 2008-09 global financial crisis (GFC) and its associated stimulus efforts.** The level of the non-interest current balance that will stabilize Aruba's external debt is a deficit of 3.6 percent of GDP. The forecasted non-interest current account averages near zero, driving down external debt under the baseline scenario and in the event small shocks materialize. However, the analysis suggests that in the event of a large current account shock Aruba's external debt position could revert to the higher levels of the post-GFC period.

Table 1. Aruba: External Debt Sustainability Framework, 2014-2024
(In percent of GDP, unless otherwise indicated)

	Actual							Projections							
	2014	2015	2016	2017	2018 (p)	10-Year Historical Average	10-Year Standard Deviation	2019	2020	2021	2022	2023	2024	For debt stabilization	**Debt-stabilizing non-interest current account 6/**
Baseline: External debt	106.5	103.6	106.3	102.5	99.3			**97.5**	**95.4**	**94.9**	**94.5**	**94.0**	**93.6**		**-3.6**
Change in external debt	-6.7	-2.9	2.7	-3.7	-3.2			-1.8	-2.1	-0.5	-0.4	-0.4	-0.4	0.0	
Identified external debt-creating flows (4+8+9)	-14.7	-9.3	-6.5	-3.6	-8.1			-39.3	-3.9	-3.7	-2.6	-3.2	-3.4	0.0	
Current account deficit, excluding interest payments	3.7	-5.6	-6.4	-2.8	-1.2			-0.1	-0.5	-0.8	-1.1	-1.7	-1.8	3.6	
Deficit in balance of goods and services	-1.4	-11.4	-12.5	-9.9	-10.3			-8.4	-8.9	-9.4	-9.7	-10.2	-10.6		
Exports	86.6	90.6	88.2	86.0	89.9			90.0	90.1	89.7	89.2	88.7	88.3		
Imports	85.2	79.3	75.7	76.1	79.5			81.6	81.2	80.3	79.5	78.6	77.8		
Net non-debt creating capital inflows (negative)	-16.9	-3.4	-2.8	-1.7	-3.4			-40.4	-4.1	-3.6	-2.1	-2.1	-2.1	-2.1	
Net foreign direct investment, equity	16.9	3.4	2.8	1.7	3.4			40.4	4.1	3.6	2.1	2.1	2.1		
Net portfolio investment,equity	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		
Automatic debt dynamics 1/	-1.5	-0.3	2.7	0.9	-3.5			1.1	0.8	0.7	0.6	0.6	0.6	-1.5	
Contribution from nominal interest rate	1.5	1.4	1.4	1.7	1.7			1.8	1.7	1.7	1.7	1.6	1.6	1.6	
Contribution from real GDP growth	-1.0	0.5	-0.5	-2.5	-1.2			-0.7	-0.9	-1.0	-1.0	-1.0	-1.0	-1.0	
Contribution from price and exchange rate changes 2/	-2.0	-2.1	1.9	1.6	-4.1			...	...	...	...	...	...	-2.1	
Residual, incl. change in gross foreign assets (2-3) 3/	8.0	6.4	9.2	-0.2	4.8			37.5	1.8	3.2	2.2	2.7	2.9	0.0	
External debt-to-exports ratio (in percent)	123.0	114.3	120.6	119.2	110.5			108.3	105.9	105.8	105.9	105.9	105.9		
Gross external financing need (in billions of US dollars) 4/	1.0	0.7	0.7	0.7	0.8			0.8	0.8	0.8	0.8	0.8	0.8		
in percent of GDP	38.2	26.9	25.1	27.8	26.7			27.6	26.5	25.9	25.4	24.7	24.4		
Scenario with key variables at their historical averages 5/								**97.5**	**99.9**	**104.3**	**107.9**	**112.3**	**117.1**		**-2.2**
Key Macroeconomic Assumptions Underlying Baseline															
Real GDP growth (in percent)	0.9	-0.4	0.5	2.3	1.2	-0.4	4.4	0.7	1.0	1.1	1.1	1.1	1.1	1.1	
GDP deflator in US dollars (change in percent)	1.8	2.0	-1.8	-1.5	4.1	0.8	2.3	1.2	1.7	2.2	2.2	2.2	2.2	2.2	
Nominal external interest rate (in percent)	1.3	1.3	1.3	1.7	1.7	1.4	0.2	1.9	1.8	1.8	1.8	1.8	1.7	1.7	
Growth of exports (US dollar terms, in percent)	6.2	6.3	-4.0	-1.6	10.1	11.0	96.7	2.1	2.9	2.8	2.8	2.8	2.9		
Growth of imports (US dollar terms, in percent)	-0.5	-5.5	-5.8	1.4	10.1	5.9	80.8	4.5	2.3	2.1	2.4	2.1	2.3		
Current account balance, excluding interest payments	-3.7	5.6	6.4	2.8	1.2	-1.3	8.9	0.1	0.5	0.8	1.1	1.7	1.8		
Net non-debt creating capital inflows	16.9	3.4	2.8	1.7	3.4	3.4	5.7	40.4	4.1	3.6	2.1	2.1	2.1		

1/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

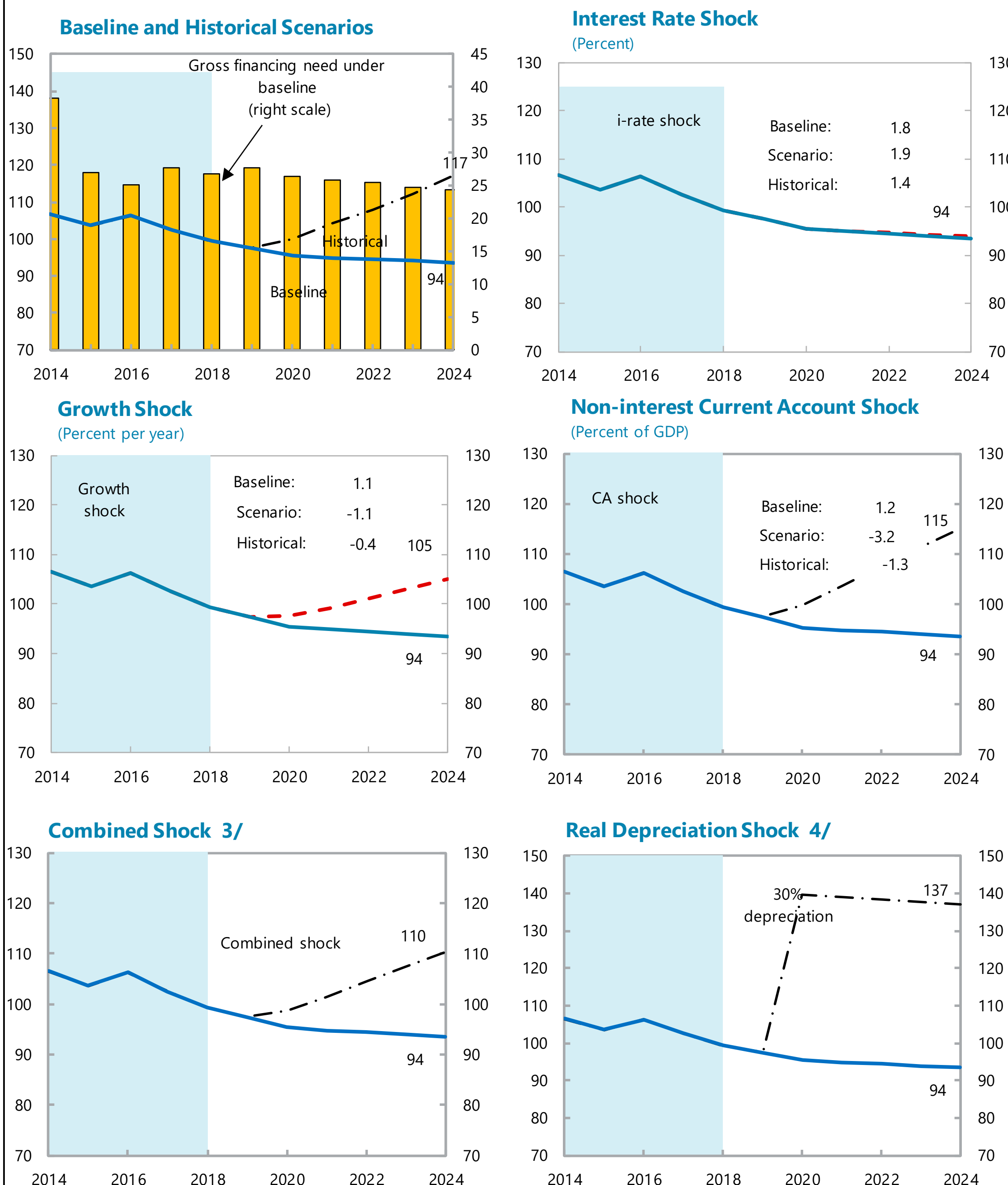
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Figure 1. Aruba: External Debt Sustainability: Bound Tests 1/ 2/

(External debt in percent of GDP)



Sources: IMF country desk data; and staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.

3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.

4/ One-time real depreciation of 30 percent occurs in 2020.

Annex VI. Authorities' Fiscal Measures

The authorities implemented a series of fiscal measures in 2018–19, as a first step towards addressing Aruba's fiscal challenges and putting high debt on a sustainable path.

A. Taxes

- **Temporary crisis package.** In mid-2018, the authorities implemented what the Prime Minister called a "crisis" levy, mainly by increasing the turnover tax rate from 3.5 percent to 6 percent. The 2.5 percentage points increase are allocated for the payment of PPP projects (1.5 percentage points) and the payment of the medical costs of the health care system (1 percentage point).

- **Phase 1 measures (reforms).** These became effective on January 1, 2019, and include the following:

    1. *Withholding and income tax rate.* Aruba had a progressive income tax rate, divided between two groups and including 14 tax brackets (with rates from 7 percent to 58.95 percent). Under the implemented reform, the income tax rates are reduced to five brackets in one group with rates from 0 to 52 percent.
    2. *Property tax rate.* The rate prior to the reform was 0.4 percent of the registered value minus a tax-free amount. This rate applied to everyone. Under the reform, a proportional rate was introduced, which depends on the value of the property and whether the taxpayer is a resident of Aruba or not. The tax rate for both commercial properties and non-residents is now 0.6 percent of the property value.
    3. *Excise, import duty*. Excises on distilled alcohol were increased by 44 to 50 percent (depending on volume), import taxes on wine were raised by around 8.25 percent, and excises on cider (pear, apple, pineapple, honey) rose by 333 percent and other ciders by 188 percent. The tariff on tobacco products has changed from 57 percent ad valorem to Afl. 211 per kg. Also, as per July 1st, a new excise on sugary drinks will be introduced.

- **Phase 2-4 reforms.** These reforms will be implemented over this year and next in a sequential manner. They include: indirect taxes, BBO and import duties (phase 2; July 2019); corporate income tax, dividend withholding tax, and the personal income tax (phase 3; January 2020); and tourist industry taxes (phase 4; July 2020).

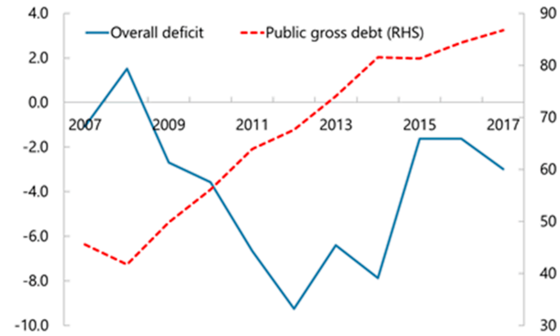
B. Wage Bill

The authorities plan to use several instruments to contain the wage bill. These include: restricting hiring; limiting contract renewal; eliminating the automatic system for periodic raises; reducing overtime costs; and instituting early retirement. The authorities estimate that the expected yield of these measures would be a nominal reduction of the wage bill by an average of Afl. 3.0 million per year.

Annex VII. Aruba's Fiscal Framework

1. **Aruba's fiscal and debt position had deteriorated significantly in the aftermath of the global financial crisis**. The economy was hit by two recessions in 2009-10, followed by another recession in 2012, as oil refining activity came to a complete halt, following repeated interruptions. Weak activity and the governments' policy response to it had resulted in rising fiscal deficits—the overall balance moved from a surplus of 1.5 percent of GDP in 2008 to a deficit of 9.2 percent in 2012. Despite subsequent fiscal consolidation, including the implementation of significant entitlement reforms, fiscal deficits remained elevated and public debt continued to rise. By end-2014 public debt had reached over 80 percent of GDP, up from 42 percent in 2008.

Fiscal and Debt Positions, 2007-2017
(Percent of GDP)



Sources: Authorities' data and IMF staff calculations.

2. **To reduce deficits and put debt on a sustainable trajectory, the Aruban authorities made an agreement with the Netherlands, in 2015, on a fiscal consolidation program.** The agreement was designed to progressively improve Aruba's fiscal position over the period 2015-2018. It set fiscal targets on the financial balance of the general government sector, defined as the overall fiscal balance plus net acquisition of financial assets—the latter comprising mostly student loans. The financial deficit was capped at 3.7 percent of GDP in 2015, 2.0 percent of GDP in 2016, and 0.5 percent of GDP in 2017. A financial surplus of a minimum of 0.5 percent of GDP was targeted for 2018. The Board of Financial Supervision of Aruba (CAFT), appointed jointly by the Netherlands and Aruba, was responsible for independently monitoring compliance with these targets and reporting to the Council of Ministers of the Dutch Kingdom.

3. **Aruba's record with meeting the agreement's fiscal targets had been mixed.** The authorities met the targets in 2015 and 2016 partly due to the structural fiscal reforms carried out in 2014 and to one-off measures. Despite efforts to consolidate, the fiscal targets for 2017 and 2018 were largely missed. The fiscal accounts remained in deficit and public debt continued to increase, albeit more slowly, reaching 86.7 percent by end-2017.

4. **To rein in fiscal deficits and debt, the authorities reached a new agreement with the Netherlands in November 2018.** The agreement established new targets for the financial balance of the general government sector over 2019-2021. The financial balance was set at -0.5 percent in 2019, 0.5 percent in 2020, and 1 percent for 2021 and beyond. The agreement saw these targets as consistent with a reduction of public debt to 70 percent of GDP by 2027, and to 50 percent of GDP by 2039.

Annex VIII. Towards a Sustainable Tax System

1. **A recent Fiscal Affairs Department (FAD) technical assistance mission undertook a general review of Aruba's tax system.**[1] The mission's report provides key recommendations that could help simplify the current tax system, modernize it, and make it more sustainable for the future needs of Aruba, while avoiding potential adverse effects on private investment and growth. These reforms will not only enable the authorities to raise tax revenues, but also to shift the tax burden from income and profits towards consumption. The main recommendations are as follows:

- **Introduction of a Value-Added Tax.** The authorities could consider integrating the various taxes on goods and services—mainly the turnover tax (BBO), general health care contribution (BAZV), additional provisions to Public-Private Partnerships (BAVP), and the tourism levy—into a VAT with a single uniform tax rate of 10 percent, the broadest possible base with only a small number of exempt activities, and a threshold that keeps small businesses off the tax roll.

- **Simplifying the Personal Income Tax.** Aruba could consider adopting a dual income tax (DIT) under which all capital income is taxed entirely separately from labor income and at a proportional rate of 15 percent. Other recommendations include: abolishing the 3-percent fixed deductible for employment-related expenses with a maximum of AWG 1,500; eliminating the deduction of interest on consumer loans and the extra-ordinary expenses (for supporting relatives, health and education); and limiting the deduction of mortgage interest to 15 percent. The additional revenues from these measures could be used to simplify the progressive tax on labor income, to increase the general personal allowance, and slightly reduce the marginal top rate.

- **Simplifying the Corporate Income Tax.** Recommendations include: replacing the current corporate income tax (CIT) of 25 percent (with reduced tax rates for branch-specific activities varying from 2 to 15 percent), with a uniform CIT rate of 20 percent—abolishing all tax incentives. In addition, a stricter base erosion rule in the form of a separate base erosion adjustment tax (BEAT) of 15 percent could be introduced on certain cross-border payments to affiliates by withholding.

- **Harmonizing Excise and Import Duties.** The authorities could consider imposing a more comprehensive tobacco and alcohol excise (including all products containing tobacco and alcohol), substantially increasing the fuel excise—as it is very low compared to world standards—and introducing excises on sugar-sweetened beverages and airtime (telecommunications, internet, etc.). A modification of all excises and tariffs on vehicles is required for Aruba to meet the target in the Paris convention on global warming. The current import duties can be maintained for now but applying only a 6 percent and a 12 percent rate. The foreign exchange commission (de facto an import duty) should not be replaced at this time, as it is a stable source of revenue (collecting around 1 percent of GDP per year over the last decade).

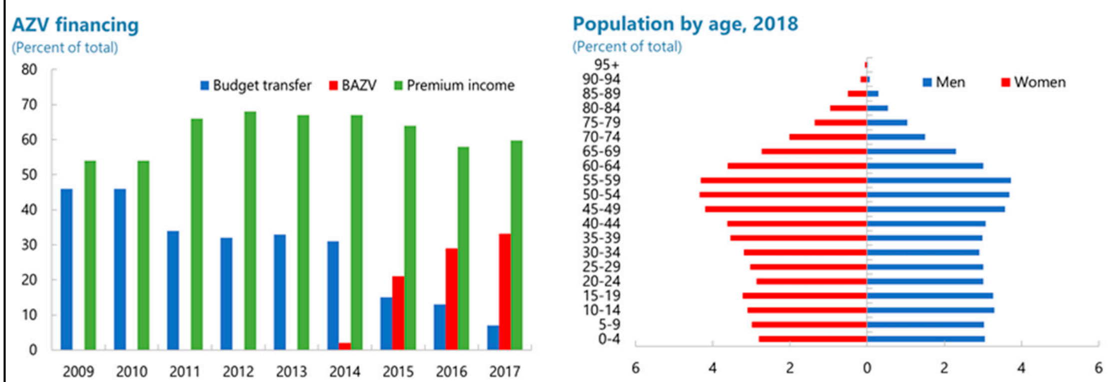
[1] IMF Technical Assistance Report, 2018: "Aruba: Toward a Sustainable Tax System".

Annex IX. Healthcare and Pension Systems in Aruba

1. **Healthcare in Aruba is financed through three different sources.** Since 2001, Aruba has offered all residents universal health coverage through the General Health Insurance—AZV. The AZV is financed through mandatory payroll premiums (paid by both employer and employee), government transfers, and a specific health sales tax (BAZV) that the government started to collect—on behalf of AZV—in December 2014.[1] Compared to neighbor island Curaçao that also offers universal healthcare, the current premiums of 10.5 percent in Aruba are relatively low.[2] However, Curaçao does not have an additional health sales tax, and while payroll contributions depend on the development of the formal labor market, general taxation like the BAZV should ensure a broader tax base, including the tourism sector.[3]

2. **The healthcare system in Aruba has become less budget dependent over time.** The introduction of the BAZV has decreased the budget dependency substantially. In 2017, government transfers constituted only around 7 percent of total AZV financing compared to 33 percent in 2013. In July 2018, the BAZV was temporary increased from 2 to 3 percent as part of a fiscal package to curb rising public debt and achieve sound public finances. Simultaneously, the premiums for pensioners were lowered from 10.5 percent to 6.5 percent. All in all, this has further reduced the budget dependence of the AZV in 2018.

Healthcare and Demographics



Source: Authorities' data.

3. **The population structure poses challenges for healthcare in the coming years.** Due to both lower fertility and emigration, Aruba's population structure has a pyramid shape for age groups older than 50 years and almost an inverted pyramid for younger age groups. Given this

---

[1] Upon introduction the BAZV was 1 percent. The tax is not recorded as budget revenue.

[2] Payroll premiums in Curaçao amount to 13.6 percent and 6.5 percent for pensioners. Antigua and Barbuda offer residents free health services, but only for a specified list of common diseases. The healthcare in Antigua and Barbuda is currently funded through payroll contributions of 7 percent.

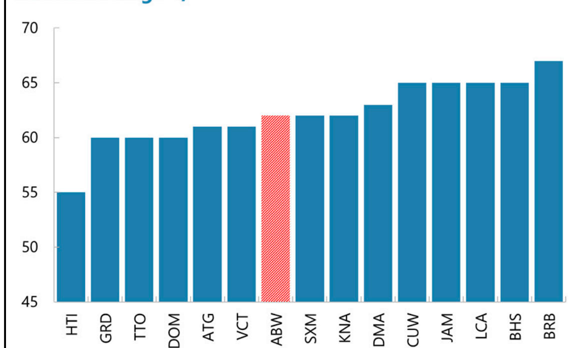
[3] Even though there could be underreporting of business sales as well, it is assumed that it is easier to underreport labor and hence forgo salary-based premiums than to avoid general sales taxation.

structure, the old-age dependency ratio (65 or older as a percentage of 15-64 years) is expected to increase from around 18 percent in 2015 to 26 percent in 2025.[4] Given that healthcare costs for people aged 65 years or above are, on average, more than three times higher than of younger cohorts, population aging would highly likely lead to higher healthcare costs going forward.[5] At the same time, with a greater share of the population belonging to the 65+ age cohort, total premium income is expected to grow more slowly. This is because people in this group are pensioners who not only face lowered premiums, but also tend to have lower income, on average, relative to other age groups.[6]

4. **On net, the new hospital will not likely make a dent in health care costs.** In 2017, more than 12 percent of total healthcare costs emerged due to the need of sending patients abroad for treatment (mainly to Colombia), which is expensive. With the extensive renovation and expansion of Dr. Horacie E. Oduber Hospital—expected to be finished over the medium term—more advanced services would be offered, thereby reducing the need for sending patients abroad. However, the savings from doing so are expected to only partially offset the increase in the hospital's operating cost brought about by the expansion and renovation.

5. **Pension system reforms have been successful.** For many years, premiums of the general old age pension system (AOV) have not covered the costs, hence depleting the fund's reserves. Given population aging and to make the pension system financially viable, major reforms were implemented in the beginning of 2014. They included both an increase in the retirement age from 60 to 65 years over a 10-year period (starting 2015) and increases in premiums—these reforms were also applied to the public administration's pension system (APFA). The reforms, combined with economic growth, have successfully increased the contributions and lowered the costs increases in the AOV, and in 2017 the premium income was slightly higher than the costs.

Retirement Age 1/



Sources: IMF FAD Expenditure Assessment Tool and IMF staff calculation
1/Latest data available.

[4] According to the 2017 Revision of World Population Prospects (no changes to mortality or fertility), United Nations, 2017.

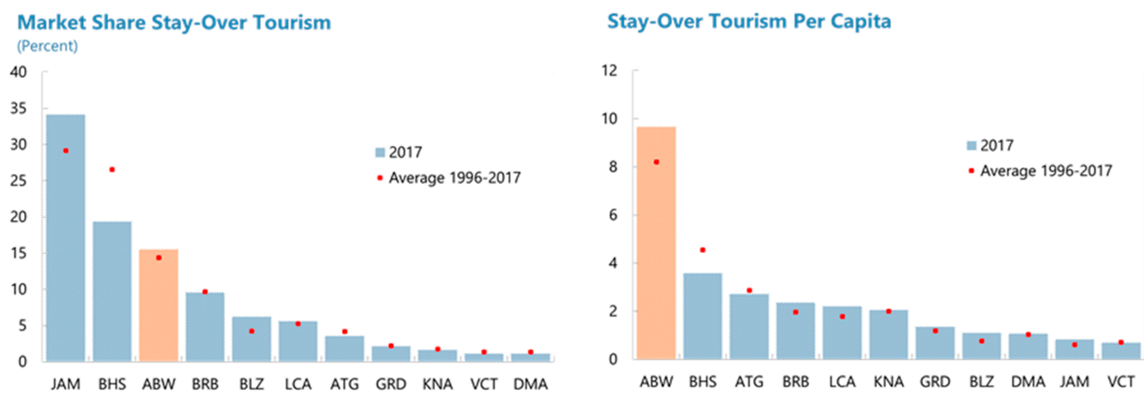
[5] Average healthcare cost for different age groups in 2017 according to the authorities.

[6] According to the authorities, the revenue generated from the BAZV increase in 2018 would have been twice as much had the premium rate for pensioners remained the same.

Annex X. Tourism, Growth, and the Balance of Payments

1. **Tourism density is very high in Aruba.** According to the World Travel & Tourism Council (WTTC), Aruba is one of the most tourism-dependent countries in the world, with tourism direct and indirect contribution to both GDP and employment estimated at around 87 percent. Aruba has the third largest market share for the number of stay-over tourists in the tourism-dependent Caribbean.[1] But relative to its population, Aruba's number of stay-over-visitors is the highest among its peers—more than twice as large as the second highest in 2017, the Bahamas. In addition, Aruba has the smallest land area in the comparison, making tourism arrivals per square meter the highest.

Comparative Tourism Data for the Tourism-Dependent Caribbean



Sources: Caribbean Tourism Organization and IMF staff estimates.

A. Tourism Impact on Growth

2. **There are negative externalities from too many tourists.** Tourism is an important driver of economic growth in the Caribbean, but too many tourists—"over-tourism"—can also create negative spillovers. The WTCC identified five main challenges associated with over-tourism: pressures on infrastructure (roads, electricity); damage to the environment (pollution, poor waste and trash management); alienation of the local population (noise, local retail displacement, rising rents); threats to culture and heritage (wear and tear of historical places, e.g., the Machu Picchu in Peru); and the degradation of the tourist experience itself (long queues, congestion).[2] Some popular tourism destinations have tried to mitigate such effects—for example, the Balearic island, Mallorca, which has a similar tourism density to Aruba, has taken measures to limit the number of tourists in the island.[3]

[1] Definition of the Tourism-dependent Caribbean according to the World Economic Outlook.

[2] See "Coping with success – Managing overcrowding in tourism destinations", WTTC, 2017.

[3] Among other things, Mallorca has doubled the tourism tax and introduced a rental ban to prevent home owners from renting out to tourists.

3. **The empirical evidence does not seem to support the hypothesis of negative growth effects of tourism in the tourism-dependent Caribbean as a whole.** Following previous analyses that aim to capture tourism effects on growth, staff estimated an empirical model using a panel for the tourism-dependent Caribbean countries covering the period 1995-2017.[4] The dependent variable is the five-year average GDP growth, and aside from tourist arrivals per capita and other standard controls, the model includes a quadratic representation of tourist arrivals per capita to capture the effects of over-tourism on growth.[5] The results suggest that tourist arrivals per capita have a positive effect on economic growth, and that a 10 percent increase in the former raises growth by about 0.3 percent. The coefficient for the quadratic representation of tourist arrivals per capita is negative but not significant, suggesting that the tourism-dependent Caribbean has not reached a point where the number of tourists has a negative growth impact.

Y = 5 year average GDP growth	(1)	(2)	(3)
Initial GDP	-3.90*	-4.88*	-4.90*
	(0.60)	(1.09)	(1.33)
Population growth	0.54***	0.52**	0.51**
	(0.27)	(0.22)	(0.23)
Investment/GDP	2.82**	2.70**	2.69**
	(1.19)	(1.23)	(1.32)
Government spending/GDP	-2.27	-2.38	-2.83
	(1.85)	(1.65)	(1.65)
Inflation	-0.28*	-0.22**	-0.22**
	(0.08)	(0.09)	(0.10)
Tourist arrivals/capita		3.30*	3.34**
		(1.04)	(1.39)
Tourist arrivals/capita^2			-0.05
			(0.64)
Adjt. R^2	0.56	0.6	0.59

Note: * denotes significant at 1 percent level, ** 5 percent level and *** significant at 10 percent level.
Standard errors in parentheses.

4. **There is, however, evidence that there could be limited gains from more tourists in Aruba.** The previous analysis provided some insights on the tourism-dependent Caribbean as a whole. For a more in-depth analysis of Aruba, which is the most tourism dependent country in the sample, staff estimated a second model with time-series data for Aruba for the period 1990-2017. In this model, while tourist arrivals per capita has a positive effect on growth, the coefficient of its quadratic representation is both negative and significant. These results suggest that Aruba may have reached a saturation point where there are diminishing returns to the marginal

y = GDP growth in Aruba	(1)	(2)
Tourist arrivals/capita	21.26**	22.32***
	(8.63)	(11.06)
Tourist arrivals/capita^2	-1.08**	-1.10***
	(0.48)	(0.60)
Dummy 2009-	-7.04*	-9.37*
	(0.88)	(2.53)
Adjt. R^2	0.77	0.31

Note: In model (1), y = 5 year moving average.
In model (2), y = annual growth rate.
* denotes significant at 1 percent level, ** 5 percent level and *** significant at 10 percent level. Standard errors in parentheses.

[4] See Thacker, N., Acevedo, S. and Perrelli, R., "Caribbean Growth in an International Perspective: The role of Tourism and Size", WP/12/235, IMF, 2012. All explanatory variables are in logs (except inflation and population growth) and measured as five-year averages. Initial GDP is measured as the logarithm of initial GDP in each 5-year interval. The model is estimated with fixed effects, allowing for individual intercepts for each country and with White period coefficient covariance to compute standard errors robust to serial correlation.

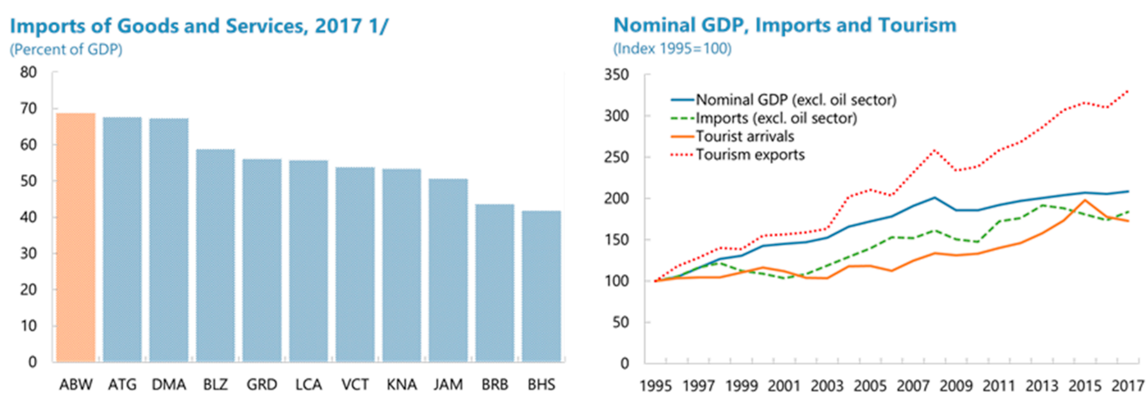
[5] The quadratic representation is an approximative way of measuring negative externalities from too many tourists on growth. However, it cannot be expected to capture the full effect of all the spill-overs from overtourism mentioned in the text.

tourist.[6] Despite these indications there can still be more to gain from tourism through increased spending per visitor. Previous empirical studies show that price increases lead to a decline in tourist arrivals, except for in high-end tourism destinations.[7] Although Aruba was not part of the study it has a reputation as a high-end destination, which would imply that Aruba visitors also are less sensitive to price increases.[8] Aruba could hence focus on maintaining their high-end brand, through offering high quality services and physical tourism infrastructure to increase the gains from current levels of tourism.

B. Tourism Impact on the Balance of Payments

5. **Leakages diminish the benefits from tourism.** Increasing foreign exchange earnings and retaining tourism-generated revenue within the local economy is essential for Aruba. However, due to the difficulty for small islands to expand the production of goods to the needs of the tourism industry (building supplies, food, souvenirs etc.), some of the tourism-generated revenues leak out of the economy. The economic impacts of tourism can be grouped into three categories: direct (e.g. money spent on hotels), indirect (e.g. hotel inputs bought from other businesses) and induced (e.g. spending by hotel employees). Leakages can occur if any of these categories increases imports. While this is a primary channel, leakages could also take the form of outflows of investment income for international chains, overseas promotional expenditures and outward remittances if foreign labor is used in the production of tourism services.

Imports and Tourism



Sources: Authorities' data, IMF WEO database and IMF staff estimates.
1/ Aruba excluding the oil sector.

[6] These results are in line with previous estimations—see IMF country report No. 13/259—and are broadly robust to the inclusion of the control variables in the panel regressions.

[7] For a summary of drivers of tourism in the Caribbean, see chapter 3 "Caribbean Tourism in the Global Marketplace: trends, Drivers, and Challenges" in *Unleashing Growth and Strengthening Resilience in the Caribbean*, IMF, 2017.

[8] Higher-end destinations were defined as countries with more than 30 percent 4-5-star hotels and GDP per capita above 15,000 U.S. dollars, and included Anguilla, The Bahamas, Barbados and St. Kitts and Nevis.