Economic Outlook: GDP forecast

June 2022
Abstract

In 2021, the Aruban economy is estimated to have grown by 17.2 percent in real terms and 19.8 percent in nominal terms. The economic recovery in 2021 was spurred by the strong rebound in tourism and the continued availability of the Government of Aruba’s (GoA) wage subsidy and FASE programs, which supported private consumption. To a lesser extent, heightened private investment activities also contributed to the positive development in GDP in 2021.

In 2022, the outcome of GDP growth -- a projected baseline growth of 2.1 percent in real terms – will again largely depend on a sustained positive performance of the tourism sector. The growth in the number of stay-over visitors in 2022 is expected to vary between 12.4 percent and 40.1 percent, with baseline growth of 30.4 percent in comparison to the previous year. However, due to an anticipated gradual normalization of daily tourist spending back to 2019-levels, nominal tourism credits are expected to record smaller growth in 2022, i.e., 14.3 percent. Depending on which scenario plays out in 2022, investment activities may further push up economic output. At the same time, real private consumption is anticipated to remain relatively flat in 2022, as a result of the elevated level of predicted inflation, i.e., 7.1 percent.

Centrale Bank van Aruba
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1. Introduction

The Centrale Bank van Aruba (CBA) recently adjusted its nominal and real Gross Domestic Product (GDP) estimates for 2021 based upon available data up to and including May 2022. Moreover, the RD revised its initial GDP growth projections for the year 2022. The current forecast involves several updates: new information on public consumption, public and private investment, revised expectations for the recovery of the tourism sector, and an actualized outlook on inflation.

The 2022 baseline scenario presented in this forecast is based on the assumptions that is considered most likely with regard to the development of the different components of GDP. Due to the uncertainty surrounding the 2022 projection, a pessimistic scenario and an optimistic scenario complement the baseline scenario. These alternative scenarios deviate from the baseline based on the pace of tourism recovery, the rebound in employment, and the pace of planned investment projects.

Looking back to 2021, real GDP is estimated to have expanded by 17.2 percent (Chart 1). This growth was mainly the result of a steep rise in tourism exports and to a lesser extent of increased private consumption and other exports. The expansion in private consumption was due to the GoA’s wage subsidy and FASE programs in 2021 sustaining private consumption, paired with the strong recovery of the tourism sector, which positively influenced the labor market. Meanwhile, the current projections for 2022 show that the Aruban economy will most likely continue on its upward path, albeit subject to several downside risks. In 2022, real GDP is anticipated to expand by 2.1 percent under the baseline scenario and 5.3 percent in the optimistic scenario, and to contract by 3.0 percent in the pessimistic scenario. Economic growth will again be largely driven by a sustained positive performance of the tourism sector in 2022.

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth in percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 e</td>
<td>-18.6</td>
</tr>
<tr>
<td>2021 e</td>
<td>17.2</td>
</tr>
<tr>
<td>2022 p</td>
<td>-3.0</td>
</tr>
<tr>
<td>2022 b</td>
<td>2.1</td>
</tr>
<tr>
<td>2022 o</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Source: CBA

e = estimate, f = forecast,
p = pessimistic, b= baseline, o = optimistic

1 These were discontinued as of November 2021.
2. Economic forecast

2.1 Gross domestic product and its components

For 2021, the following estimate is presented:

1. **Estimate 2021: The tourism sector was the primary driver of economic growth in 2021, as it continued its robust recovery during the year.** The number of stay-over visitors reached 72.1 percent of the 2019-level, representing a 119.0 percent growth compared to 2020, while the average daily spending by tourists is anticipated to have decreased to US$535.8 in 2021 compared to US$629.7 in 2019, when an average of US$452.3 was registered. The level of tourism exports is estimated at 82.8 percent of the 2019-level in real terms. Meanwhile, the availability of the FASE and the wage subsidy program by GoA, combined with the strong rebound in the tourism sector drove up real private consumption in 2021. The tourism sector’s upswing paired with the government’s assistance programs also positively impacted employment in 2021, leading to an estimated drop in the unemployment rate to 7.5 percent. Private investment is estimated to have expanded in 2021, pushed up by the execution of a large number of construction projects in 2021 vis-à-vis the previous year. Public consumption decreased as a result of a reduction in government employees and lower expenditures on goods and services, while public investment declined during the year. In 2021, imports rose on account of higher demand from the tourism sector, increased private consumption, and expanded private investment.
**Box A: Inflation**

Explanatory notes about the inflation expectations inherent in the current GDP forecast.

**Inflation:** A rise in the general level of prices of goods and services that households acquire for the purpose of consumption in an economy over a period of time.

**End of period (EOP) inflation:** The percentage change in the general level of prices of goods and services in a period, compared to the same period in the previous year.

**12-month average inflation:** The average percentage change in the general level of prices of goods and services in the last 12 months, compared to the preceding 12 months.

In the current GDP forecast, the projected 12-month average inflation rate for 2022 is 7.1 percent. It follows from Consumer Price Index (CPI) data for Aruba up to and including February 2022, as well as global oil forecast data up to and including March 2022. With regard to local price developments, the assumption is that there will be increases in electricity prices during 2022, given that the utility company was unable to extend the hedge in place for fuel oil purchases during 2021. Consequently, the production costs for electricity are expected to rise in line with the expected higher international oil prices, with the assumption that these higher costs will be passed on to consumers.

In addition to the volatility in oil prices, other major developments present risks to the inflation forecast, many of which are tilted upward. These include potential fiscal measures needed to cope with the COVID-19 crisis prior to the planned fiscal reform of January 2023, and supply chain distortions due to pandemic, weather disturbances, and geopolitical tensions. As a result, GDP outcomes may differ from those presented in the current outlook.

**Several scenarios were produced for the year 2022:**

1. **Baseline Scenario 2022: The tourism sector is anticipated to continue on its recovery path in 2022.** The number of stay-over visitors in the baseline scenario is expected to reach 94.0 percent of the 2019-level. Moreover, the level of tourism credits per night in 2022 is assumed to fall to a point just above pre-pandemic levels, which reflects the declining trend since the third quarter of 2020. Specifically, average daily spending by tourists is anticipated to be US$455.1 in 2022, compared to US$452.3 in 2019. Minding the expected number of stay-over visitors and their spending per night, tourism credits are forecasted to reach 96.8 percent of the 2019 level, which represents a growth of 8.3 percent compared to 2021. The continued rebound foreseen in stay-over visitors is expected to lead to an increased number of people working and, therefore, a lower level of unemployment (i.e., 6.3 percent) compared to 2021. The 12-month average rate of inflation for 2022 is forecasted to jump to 7.1 percent, mainly driven by higher energy prices. Therefore, despite the decline in unemployment, price increases are anticipated to partially erode purchasing power and exert downward pressure on
real private consumption. A higher level of inflation is presumed also to mitigate the positive developments in private and public investment, decreasing real private investment and dampening real public investment in 2022. Meanwhile, public consumption is expected to contract in 2022 as a result of reduced expenditures on goods and services and reduced employment of civil servants. Imports are anticipated to rise in 2022, following the uptick in tourism exports.

2. **Pessimistic Scenario 2022:** The number of stay-over visitors is likely to recover in 2022. However, the pace of recovery is not anticipated to fully mitigate the declining trend in daily spending by tourists. As a result, tourism exports may contract in 2022 under the pessimistic scenario. In particular, the number of stay-over visitors is assumed to reach 81.0 percent of the 2019-level, while tourism credits reach 83.6 percent. Since tourism arrivals in 2022 are projected to increase versus 2021, the unemployment rate declines to 6.9 percent, compared to 7.5 percent in 2021. In line with the baseline scenario, higher prices will suppress consumption, causing a decrease in private consumption in real terms. Public consumption also will shrink, because of declining expenditures on goods and services, and a smaller number of government employees. More delays and cancellations of private investment projects are expected in this scenario, resulting in a further contraction of total investment. Subsequently, imports are assumed to fall off, following the previously described developments in the GDP components. The projected rate of inflation in the pessimistic scenario is equal to that in the baseline, i.e., 7.1 percent.

3. **Optimistic Scenario 2022:** Under the optimistic scenario, a stronger rebound is foreseen in the tourism sector as the number of stay-over visitors reaches 101.0 percent of the 2019-level, while tourism credits reach 104.0 percent. Given the strong(er) recovery in the tourism sector, relatively more people will be working, leading to a larger drop in the unemployment rate to 6.3 percent in 2022. This development is anticipated to have a positive effect on private consumption in 2022, mitigated by the elevated level of inflation, i.e., 7.1 percent. In line with the previously presented scenarios, declining expenditures on goods and services, and fewer people employed by the government will likely produce a contraction in public consumption in real terms. The optimistic scenario assumes a faster rate of implementation of private investment projects. Consequently, both private and public investments are assumed to expand in 2022.

In all scenarios for 2022, the expected rate of inflation remains a major source of uncertainty. Globally, various factors are producing upward pressures on price levels. These include supply chain disruptions due to pandemic and weather disturbances, and the effects of the Ukraine-Russia war.

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2 The projected development in daily tourism spending is equal to that in the baseline scenario.
3 The projected development in daily tourism spending is equal to that in the baseline scenario.
turn, these are anticipated to push up the prices of imported goods to Aruba. In addition, the hike in oil prices also may result in higher domestic utility prices. The extent to which these price hikes are passed through to domestic businesses and consumers will have a significant impact on consumer prices and, subsequently, on the outcomes presented in this economic outlook.

Based on the aforementioned assumptions and scenarios, the following estimate and forecast results are presented for the respective GDP components (Table 1).

1. **Estimate 2021**

   A real GDP growth of 17.2 percent is estimated for 2021, mainly associated with the recovery in real tourism exports (+53.0 percent) when compared to 2020. The rise in tourism services exports, paired with the GoA’s financial support to individuals and businesses, drove up real private consumption (+8.8 percent). The latter offset the decrease in real public consumption (-3.7 percent), produces an expansion of 4.9 percent in real total consumption. Similarly, real total investment is estimated to have expanded in 2021 (+0.4 percent), following increased investment appetite in the private sector (+2.3 percent). Meanwhile, the GoA had limited fiscal space for public investment (-56.1 percent). Real imports had likely risen by 21.2 percent, consistent with increased consumption, investment, and exports.

2. **Baseline scenario 2022**

   In the 2022 baseline scenario, real GDP is projected to grow by 2.1 percent. This expansion is mainly propelled by the continued recovery in tourism service exports, which is anticipated to increase by 8.3 percent. Real private consumption is expected to remain unchanged (0.0 percent) compared to 2021, largely due to higher prices in 2022 lowering total disposable income. Meanwhile, public consumption is projected to decrease in real terms (-9.2 percent). These developments negatively affect real total consumption (-2.6 percent). Rising inflationary pressures are anticipated to prompt a decline in real private investment (-1.5 percent). Real public investment is expected to record an increase (+45.3 percent), but its share in overall investment is relatively minute. On balance, real total investment is foreseen to contract in 2022 (-0.8 percent). Real imports are anticipated to inch up by 2.1 percent, mainly because of forecasted growth in real exports.

3. **Pessimistic scenario 2022**

   A real GDP contraction of 3.0 percent is projected under the pessimistic scenario. The negative rate of growth is largely due to contraction in real tourism exports (-6.4 percent). A downturn in real private consumption (-0.3 percent) also is forecasted. As a result of the expected decline in real public consumption and a drop in real private consumption, real total consumption is forecasted at 2.7 percent. A slower pace in investment activities will push down real private investment (-3.7 percent). Given the
share of private investment in total investment, real total investment is expected to
dwindle by 3.0 percent. Following the aforementioned developments in the GDP
components, imports are likely to contract by 4.8 percent.

4. Optimistic scenario 2022

Real GDP is forecasted to expand by 5.3 percent under the optimistic scenario,
following a strong(er) rebound in real tourism exports (+16.3 percent) and real total
investment (+1.4 percent). In this scenario, increased disposable income and higher
consumer prices on real private consumption growth virtually cancel each other out
(+0.1 percent). However, real total consumption (-2.6 percent) is still expected to
decline, as it is negatively affected by a contraction in real public consumption (-9.5
percent). Increased investment activity of the private (+0.7 percent) and public sectors
(+45.3 percent) result in a 1.4 percent growth in overall real investment in 2022.
Anticipated real imports follow the development in the aforementioned components,
and are estimated to increase by 6.2 percent under the optimistic scenario.
### Table 1: Growth of real GDP and its components 2020-2022 (in percent)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 e</th>
<th>2021 e</th>
<th>2022 p f</th>
<th>2022 b f</th>
<th>2022 o f</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Outlook</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>-18.6</td>
<td>17.2</td>
<td>-3.0</td>
<td>2.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Consumption</td>
<td>-7.8</td>
<td>4.9</td>
<td>-2.7</td>
<td>-2.6</td>
<td>-2.6</td>
</tr>
<tr>
<td>Private consumption</td>
<td>-10.9</td>
<td>8.8</td>
<td>-0.3</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Public consumption</td>
<td>0.0</td>
<td>-3.7</td>
<td>-9.0</td>
<td>-9.2</td>
<td>-9.5</td>
</tr>
<tr>
<td>Investment</td>
<td>-15.7</td>
<td>0.4</td>
<td>-3.0</td>
<td>-0.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Private investment</td>
<td>-16.1</td>
<td>2.3</td>
<td>-3.7</td>
<td>-1.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Public investment</td>
<td>-0.7</td>
<td>-56.1</td>
<td>45.3</td>
<td>45.3</td>
<td>45.3</td>
</tr>
<tr>
<td>Exports</td>
<td>-42.8</td>
<td>50.5</td>
<td>-5.0</td>
<td>8.7</td>
<td>17.0</td>
</tr>
<tr>
<td>Tourism exports</td>
<td>-45.9</td>
<td>53.0</td>
<td>-6.4</td>
<td>8.3</td>
<td>16.3</td>
</tr>
<tr>
<td>Imports</td>
<td>-30.7</td>
<td>21.2</td>
<td>-4.8</td>
<td>2.1</td>
<td>6.2</td>
</tr>
</tbody>
</table>

Source: CBA

e = estimate, f = forecast, o = optimistic, b = baseline, p = pessimistic

#### 2.2 Nominal growth rates

For 2021, the Aruban economy is estimated to have expanded by 19.8 percent in nominal terms (Table 2). For 2022, a baseline nominal GDP growth rate of 8.3 percent is anticipated. This nominal output projection ranges between 2.8 percent and 11.7 percent, with the outcome depending on which scenario plays out.
Table 2: Growth of nominal GDP and its components 2020-2022 (in percent)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 e</th>
<th>2021 e</th>
<th>2022 p f</th>
<th>2022 b f</th>
<th>2022 o f</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GDP</strong></td>
<td>-22.5</td>
<td>19.8</td>
<td>2.8</td>
<td>8.3</td>
<td>11.7</td>
</tr>
<tr>
<td>Consumption</td>
<td>-10.1</td>
<td>5.6</td>
<td>6.2</td>
<td>6.4</td>
<td>6.4</td>
</tr>
<tr>
<td>Private consumption</td>
<td>-12.0</td>
<td>9.6</td>
<td>6.8</td>
<td>7.1</td>
<td>7.2</td>
</tr>
<tr>
<td>Public consumption</td>
<td>-5.1</td>
<td>-3.8</td>
<td>4.4</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Investment</td>
<td>-15.8</td>
<td>2.8</td>
<td>2.8</td>
<td>5.1</td>
<td>7.4</td>
</tr>
<tr>
<td>Private investment</td>
<td>-16.2</td>
<td>4.7</td>
<td>2.1</td>
<td>4.4</td>
<td>6.8</td>
</tr>
<tr>
<td>Public investment</td>
<td>-0.9</td>
<td>-55.0</td>
<td>54.0</td>
<td>54.0</td>
<td>54.0</td>
</tr>
<tr>
<td>Exports</td>
<td>-45.2</td>
<td>59.8</td>
<td>-0.9</td>
<td>13.5</td>
<td>22.2</td>
</tr>
<tr>
<td>Tourism exports</td>
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<td>65.5</td>
<td>-1.3</td>
<td>14.3</td>
<td>22.7</td>
</tr>
<tr>
<td>Imports</td>
<td>-30.1</td>
<td>25.9</td>
<td>3.0</td>
<td>10.4</td>
<td>14.8</td>
</tr>
</tbody>
</table>

Source: CBA  
**e** = estimate, **f** = forecast, **o** = optimistic, **b** = baseline, **p** = pessimistic
2.3 Outlook assumptions and risks

In the 2022 scenarios, the main assumptions and risks are as follows:

- **Inflation.** Internationally, there is rising uncertainty about future inflation developments and the associated downside risks. For the year 2022, there is a substantial level of uncertainty about the general level of prices in Aruba. The sources of this uncertainty are fuel oil prices and supply chain disruptions. The per-barrel price for the fuel oil (HFO) used in the production of water and electricity is quite uncertain at the moment. Price increases could cause local utility prices to experience upward pressures if these barrels are bought at expected market prices in 2022. The other source of uncertainty, i.e., supply chain disruptions, is bound to negatively impact the prices of imported goods, with possible further hikes in construction materials and food prices. In addition to the volatility in oil prices, potential fiscal measures needed to cope with the COVID-19 crisis prior to the planned fiscal reform of January 2023 also are a source of risk to the inflation forecast.

- **Duration and depth of the pandemic.** In all scenarios, the duration and depth of the pandemic are important factors underlying the outcomes. The impact of new COVID-19 variants and subsequent waves of contagion may exert significant downside risks on the results.

- **Speed of recovery.** Specific assumptions regarding the recovery in the numbers of stay-over visitors and tourism credits are instrumental to each scenario's outcomes. If tourists are more reluctant to travel and/or spend less during their stay-over than is outlined in these assumptions, the result could be lower receipts from tourism activities and stagnation in consumption recovery, causing a weaker rebound in economic output. Conversely, if the propensity to travel and/or visitor spending is larger than assumed in the scenarios, GDP growth could be higher than anticipated.

- **Investment projects.** The timely execution of relatively large investment projects is always a source of downside risk for GDP projections.

- **Additional government measures.** The government may introduce additional measures to reduce its deficit, such as further lowering personnel expenses and/or introducing tax and other income-generating measures for the general public prior to the tax reform scheduled for January 1, 2023. Such measures could dampen private and public consumption. The effect would be even greater if the government is unable to obtain full financing of its deficit or short-term liquidity support. In that case, more stringent measures could be necessary.
5. Concluding remarks

Forecasts for the Aruban economy point to continued recovery in 2022, with exception of the pessimistic scenario. The outcome for economic growth in 2022 depends largely on developments within the tourism sector. The latter, in turn, is contingent on international developments, especially those in the United States. As described in this outlook, real GDP could range between -3.0 percent and 5.3 percent in 2022, with a baseline growth of 2.1 percent. In nominal terms, this reflects an expansion of between 2.8 percent and 11.7 percent, with baseline growth of 8.3 percent.