STATE OF THE ECONOMY

2022 – Q1

CENTRALE BANK VAN ARUBA

STATE OF THE ECONOMY

First Quarter of 2022

ABSTRACT

During the first quarter of 2022, the economy of Aruba grew by an estimated 16.2 percent, when compared to the corresponding quarter of 2021, spurred by a strong rebound in the tourism sector. This growth is a continuation of the year-on-year GDP (Gross Domestic Product) expansion observed since the second quarter of 2021. The surge in tourism activities is reflected in a 108.0 percent jump in total stay-over visitors and a 94.1 percent increase in total visitor nights, leading to buoyant developments in the tourism services sector and total tourism revenue. Consumption also contributed to the continued economic recovery, as is mirrored in the various consumption-related indicators, displaying improvements during the first quarter of 2022. International reserves climbed to Afl.3.287.8 million during the first quarter of 2022, brought about by inflows to the financial account due to loans received from the Netherlands to the Government of Aruba, and inflows on the current account attributed to the recovery in the tourism sector. The aforementioned loans received, amounting to Afl. 347.9 million, have a transient impact on the reserves, as these will be fully used to pay off the foreign loans that will become due during 2022. In all, international reserves remained well above adequate levels. Inflation, when measured as the percentage change in the 12-month average of the CPI (Consumer Price Index), has been increasing since the beginning of 2021, and persisted in the first quarter of 2022 to reach 2.1 percent. The economic recovery also led to an expansion in government revenue and reduced government spending, narrowing Afl. 110.7 million in the fiscal deficit to Afl. 52.0 million. At the end of the first quarter of 2022, the government debt rose by 6.4 percent, reaching Afl. 6,015.8 million, and resulted in a debt-to-GDP ratio of 103.3 percent, up from 101.0 percent at the end of 2021.

Centrale Bank van Aruba

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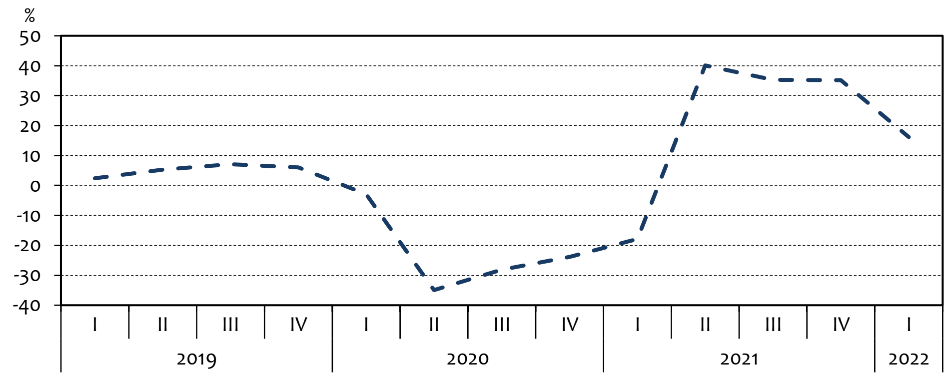
I. Domestic developments

Economic growth

During the first quarter of 2022, the Aruban economy continued its path to recovery, spurred by the continued solid rebound in tourism. The positive performance in the tourism sector in terms of stay-over visitors and tourist spending, notwithstanding the impact of the Omicron wave in the first months of the year, contributed to year-on-year growth in real GDP of 16.2 percent (Chart 1). This growth is a continuation of the increase in year-on-year real GDP observed since the second quarter of 2021, albeit with diminishing growth rates. Consumption, another growth driver, was buoyed by increased employment (+4.4 percent), which was partially offset by an elevated inflation level (end of period: 4.0 percent). The latter resulted mainly from the impact of higher international oil prices on domestic gasoline prices and, to a lesser extent, an increase in food prices. Meanwhile, for the most part, investment indicators pointed to higher investment activities. As a result, imports expanded (merchandise import: +40.3 percent), reflecting consistent hikes in both domestic and tourism demand for goods.

Chart 1: Quarterly real GDP growth year-over-year



Calculations: CBA

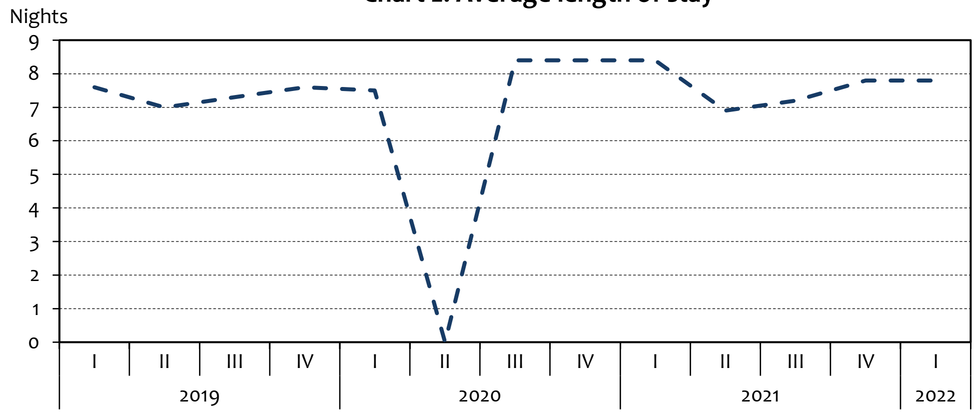
Tourism

During the first quarter of 2022, tourism demand for local services surged compared to the corresponding period of 2021 (Table 1). Indicators included a steep increase in total visitor nights, nearly doubled from a year earlier, despite a COVID-19 resurgence at the beginning of 2022. This spike in total visitor nights[1] was brought about by a growth in the number of stay-over visitors, which outpaced a decline in the (intended) average length of stay (ALOS) from 8.4 to 7.8 nights (Chart 2). The number of stay-over visitors soared by 108.0 percent, driven primarily by the U.S. market. The recovery in stay-over visitors in 2019 numbers amounted to

[1] Total visitor nights can be derived by multiplying the number of stay-over visitors by the average length of stay.

79.4 percent in the period under review. Total visitors' nights, meanwhile, recovered at a rate of 81.3 percent compared to 2019 levels as the ALOS moved closer to pre-pandemic levels.

Chart 2: Average length of stay



Source: ATA

Data from the Aruba Hotel and Tourism Association (AHATA) also pointed to optimistic developments in the hotel sector (Table 1).

Table 1: Tourism indicators for Aruba

YTD March 2022 vs. YTD March 2021

	2021	2022
Stay-over visitors	112,334	233,666
Average length of stay (in days)	8.4	7.8
Total visitor nights	941,881	1,828,141
Cruise visitors	0.0	155,236
Hotel occupancy rate (%)	29.6	62.2
Average daily rate (in USD)	285.5	355.3
Revenue per available room (in USD)	84.4	220.9
Tourism revenue per night (in Afl.)	483.6	478.5
Tourism revenue* (in Afl. million)	455.5	874.8

Sources: CBA, ATA, AHATA, APA, CTO, STR
*Only those registered at local commercial banks.

Revenue per available room (RevPAR[2]) rose by 161.7 percent in the first quarter of 2022 compared to 2021. This boost in RevPAR stemmed from the higher hotel occupancy rate in the first quarter of 2022 (62.2 percent) relative to the first quarter of 2021 (29.6 percent), as well as a jump in the Average Daily Rate (ADR) from US$ 285.5 in the first quarter of 2021 to US$ 355.3 in the period under review.

In the first quarter of 2022, income from tourism revenue[3], registered at local commercial banks soared by 92.0 percent compared to the first quarter of 2021, mirroring the developments in total visitor nights. This rise in tourism revenue[4] was due to the upsurge in total visitor nights, which offset the drop in tourism revenue per night. Tourism revenue per night contracted by 1.1 percent during the first quarter of 2022 compared to 2021,

[2] RevPAR is the product of the average daily rate and the hotel occupancy rate.
3 Tourism revenue corresponds to the tourism credits definition as defined by the IMF BPM 6 manual.
[4] Tourism credits equals tourism credits per night multiplied by total visitor nights.

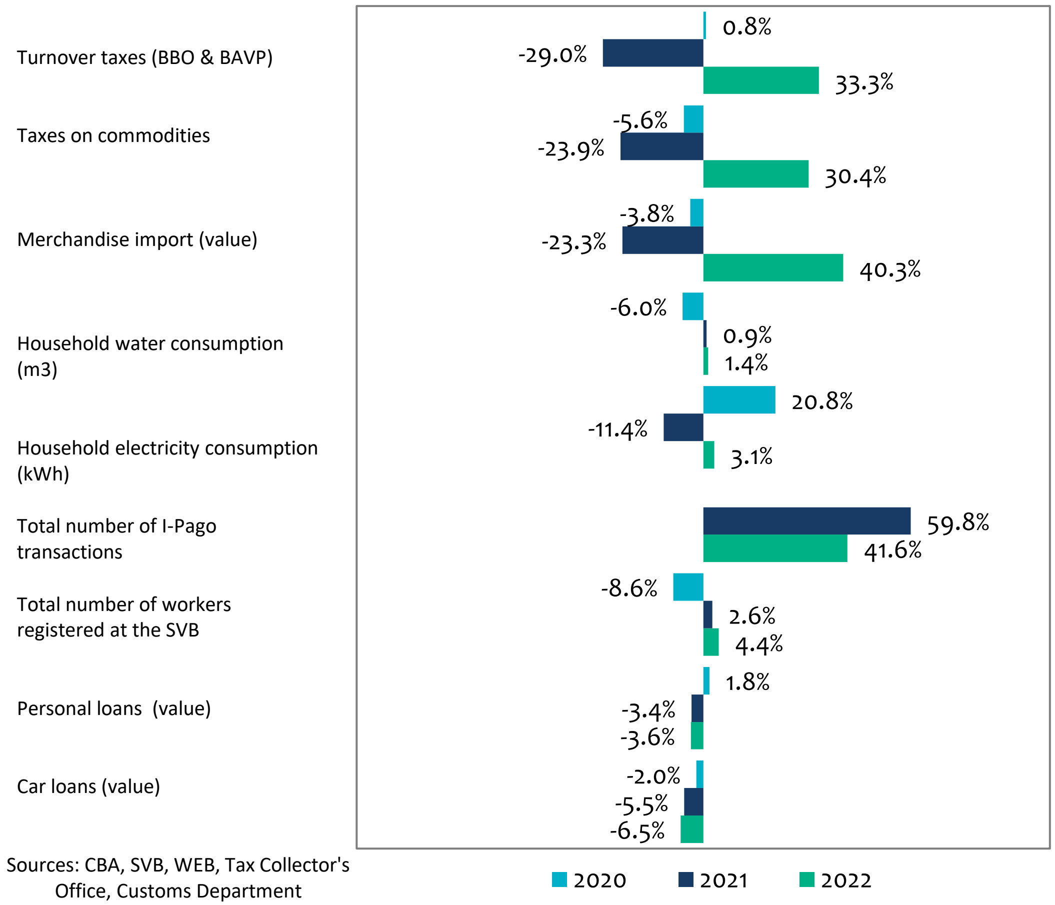
while total visitor nights surged by 94.1 percent. Compared to 2019 levels, the opposite can be seen, as the gains in tourism revenue per night (25.7 percent) outweighed the smaller number of total visitor nights (-18.7 percent). Consequently, total reported tourism revenue reached 102.2 percent of 2019-levels during the first quarter of 2022.

Cruise tourism continued its recovery path since the resumption of cruise arrivals on June 9, 2021. The Aruba Ports Authority (APA) reported 155,236 cruise visitors and 121 ship calls in the first quarter of 2022 (Table 1). For both cruise visitors and ship calls, this number is already higher than the total for 2021, when there were no cruise calls in the first five months. However, compared to the first quarter of 2019, the number of cruise visitors represented only a 53.0 percent recovery. Moreover, the average number of passengers per ship was 48.3 percent lower in the first quarter of 2022 compared to the corresponding quarter of 2019.

Consumption

During the first quarter of 2022, almost all consumption-related indicators showed improvement compared to the same period of 2021, signifying a continued economic recovery (Chart 3). Turnover taxes (33.3 percent), taxes on commodities (30.4 percent), merchandise imports (40.3 percent), and the number of I-Pago transactions (41.6 percent) surged in response to the increased demand brought on by the buoyant tourism performance. Furthermore, household water consumption and employment showed increased growth, while household electricity consumption rebounded. On the other hand, credit market developments pointed to weakness, as witnessed in the respective drop of 3.6 percent and 6.5 percent in personal loans and car loans. The decline in these two credit components has been ongoing since 2018 – in the case of personal loans as far back as 2010 --, and is perhaps more indicative of structural factors rather than the business cycle.

Chart 3: Consumption-related indicators (YTD March 2022 vs. YTD March 2021)



Sources: CBA, SVB, WEB, Tax Collector's Office, Customs Department

The merchandise trade deficit widened to Afl. 507.3 million (+37.8 percent), as imports expanded across all categories. The latter was primarily due to a rise in imports of *other goods* (+56.3 percent), *machinery and electrotechnical equipment* (+37.3 percent), and *food products* (+26.7 percent). Besides improved domestic and tourism demand, the higher outlays for imports likely also reflected higher import prices.

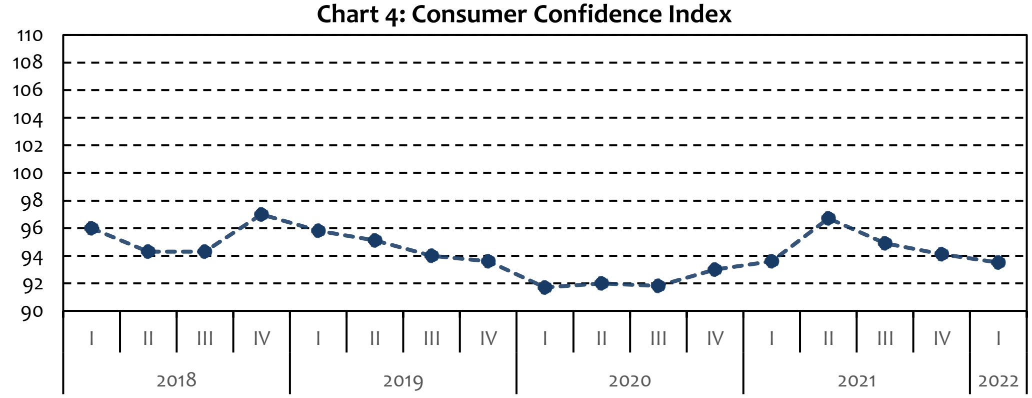
Data on utilities for the first quarter of 2022 indicated increased household electricity and water consumption. Electricity usage by households rebounded by 3.1 percent compared to the first quarter of 2021 (Chart 3), whereas household electricity consumption expanded partly due to an increase in household connections (+2.0 percent). Household water usage rose by 1.4 percent, while household water connections expanded by 1.6 percent. In the first quarter of 2022, water usage by households remained below that of the corresponding quarter of 2019, the pre-pandemic level. On the other hand, electricity usage has been above the 2019 first quarter level since 2020 for the corresponding period.

The amount of outstanding total consumer credit by commercial banks declined by 4.0 percent at the end of March 2022 compared to the end of 2021 (2021 Q1: -4.2 percent). This drop was consistent with the declining consumer credit trend over the last ten years. Almost all consumer credit components registered contractions, with car loans, personal loans, and credit cards falling by 6.5 percent, 3.6 percent, and 3.0 percent. The component 'other consumer credit' was the only component showing a gain (+1.2 percent). On the other hand, outstanding consumer credit from nonmonetary institutions registered a slight increase of 1.2 percent at the end of the first quarter compared to December 2021.

In contrast to outstanding consumer credit, the total amount of new consumer credit loans rose by 66.3 percent (+Afl. 10.1 million) in the first quarter of 2022 compared to the first quarter of 2021, after decreasing for two consecutive years during the first quarter (2020 Q1: -27.3 percent, 2021 Q1: -43.4 percent). The latter possibly indicates improved consumer interest in applying for new loans spurred by improved economic conditions. However, following the same pattern as total consumer credit, it has been falling consistently from 2015 through 2021.

The Consumer Confidence Index echoed the contractions witnessed in total outstanding consumer credit, as consumers were slightly more pessimistic in the first quarter of 2022 compared to the same period of 2021. At the end of the first quarter, the index stood at 93.5, a drop of 0.1 index point compared to the first three months of 2021 (chart 4). Nonetheless, the consumption and borrowing index became slightly less pessimistic, registering a favorable increase of 0.3 index point to 93.9, reiterating the gain in new consumer credit occurring during the same period.

Chart 4: Consumer Confidence Index



90-100: pessimistic
100-110: optimistic

Special feature: Structural factors affecting consumer credit in Aruba

Consumer credit has consistently been declining since 2014, leading analysts to ask whether this may be due to structural factors. To investigate this, newly issued consumer credit was regressed against demand and supply factors, including bank-specific characteristics that may influence credit decisions (see, for example, Ivanovic, 2016[5]; Awdeh, 2017[6]). These regressions take as input panel data on four commercial banks between 2012Q1-2022Q1

The dependent variable in this regression framework is newly issued consumer credit. As for the explanatory variable(s), this special feature sets forward a novel credit demand index to proxy credit demand in Aruba. This index is a weighted average[7] of four indices[8] for the following Consumer Confidence Survey (CCS) questions: 1) Is buying a car suitable right now? 2) Is buying a major appliance suitable right now? 3) Is going on vacation suitable right now? 4) Is taking out a loan suitable right now?

Another explanatory variable is excess liquidity (mutations), which acts as a proxy for credit supply. Furthermore, (the change in) nonperforming loans (NPLs) capture loan quality; higher NPLs may entice banks to contract their lending. The explanatory variable real GDP (growth)

[5] Ivanović, M. (2016). Determinants of credit growth: The case of Montenegro. Journal of Central Banking Theory and Practice, 5(2), 101-118.
[6] Awdeh, A. (2016). The determinants of credit growth in Lebanon. International Business Research, 10(2), 9.
[7] The average weights are captured through principal component analysis, in the spirit of Sahay (2020) et al., who construct an index for digital financial inclusion using several indicators.

reflects both supply and demand factors related to credit. Specifically, real GDP captures the demand for credit that is not reflected in the CCS and systematic risks that may affect lending supply decisions.

Interest rates (changes) on new consumer credit capture both supply and demand factors. Higher interest rates may increase revenue and profitability, and, hence, encourage banks to lend. However, it may also make credit more expensive and depress the demand for credit. Interest rates on consumer credit are weighted in a new way, as the related empirical literature has not (yet) applied this method. To aggregate each interest rate bracket into a single interest rate for consumer credit, the method weights each interest rate bracket according to the number of loans extended at each bracket, not the value of all loans extended at each bracket, as is usually done. Doing otherwise would introduce simultaneity bias in a regression framework.

End-of-period (EOP) inflation is also added as an explanatory variable, considering that when inflation picks up, borrowers end up paying back banks with money worth less than originally was borrowed. The latter possibly discourages banks from lending or induces them to increase interest rates, making borrowing more expensive for consumers. At the same time, inflation makes borrowing cheaper and thus more attractive if nominal interest rates remain unchanged. In addition, inflation reduces purchasing power, and to maintain consumption, it may entice people to seek lines of credit. It may also be the case that there is a substitution going on from commercial bank lending to lending by nonmonetary financial institutions (NMFIs). To capture this, newly issued consumer credit at NMFIs could be added as an explanatory variable. However, due to data availability, the change in consumer credit outstanding at NMFIs is used instead.

The fixed effects regression – a regression model in which the intercept is allowed to vary across groups or individuals[9] – indicates a (statistically significant) positive relationship between the (one-period lag) credit demand index and newly issued consumer credit (Table 2). Moreover, this index has been declining in 2014Q1-2022Q1 (Chart 5), which coincides with the fallback in consumer credit.

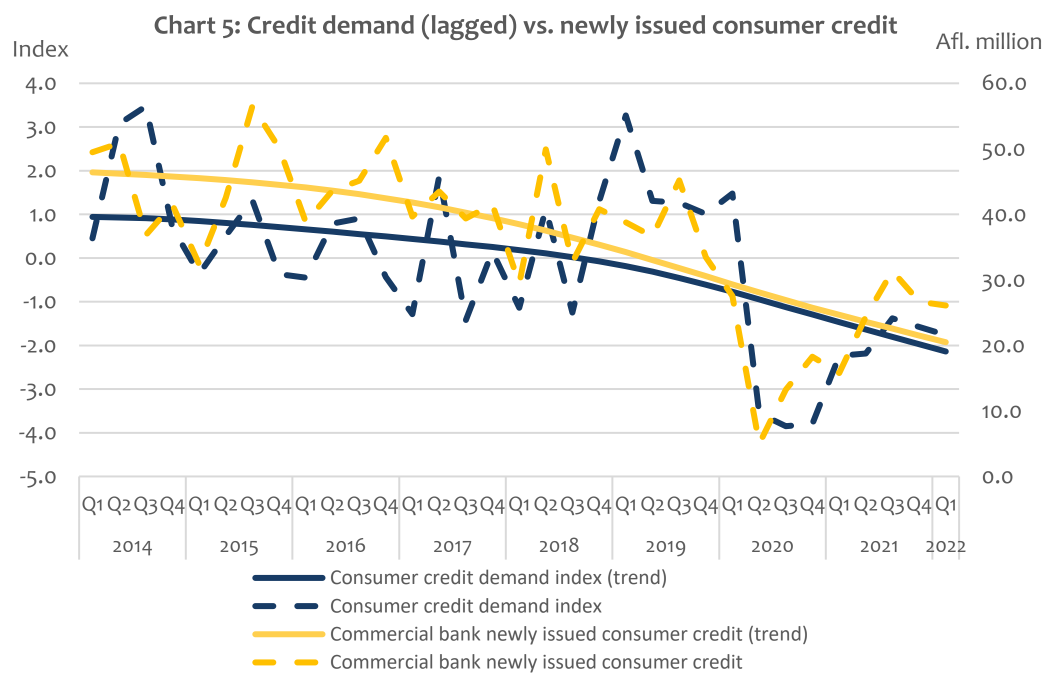
Table 2: Fixed effects regression between newly issued consumer credit and its determinants

	(1)	(2)
Intercept	9573.69*(301.63)	9541.53*(297.26)
Credit demand index (-1)	1048.62*(188.22)	1093.57*(182.88)
Inflation (EOP)	-298.00*(135.64)	-299.15*(133.16)
D (interest rates on new consumer credit)	-425.86*(213.77)	-440.98*(211.99)
D (Consumer credit outstanding at NMFIs)	95.94(65.98)	121.05*(60.99)
D (GDP real)	3.26(3.55)	
D (NPL ratio of consumer credit (-2))	-274.27 (342.25)	
D (Excess liquidity) ~	-0.01(0.01)	

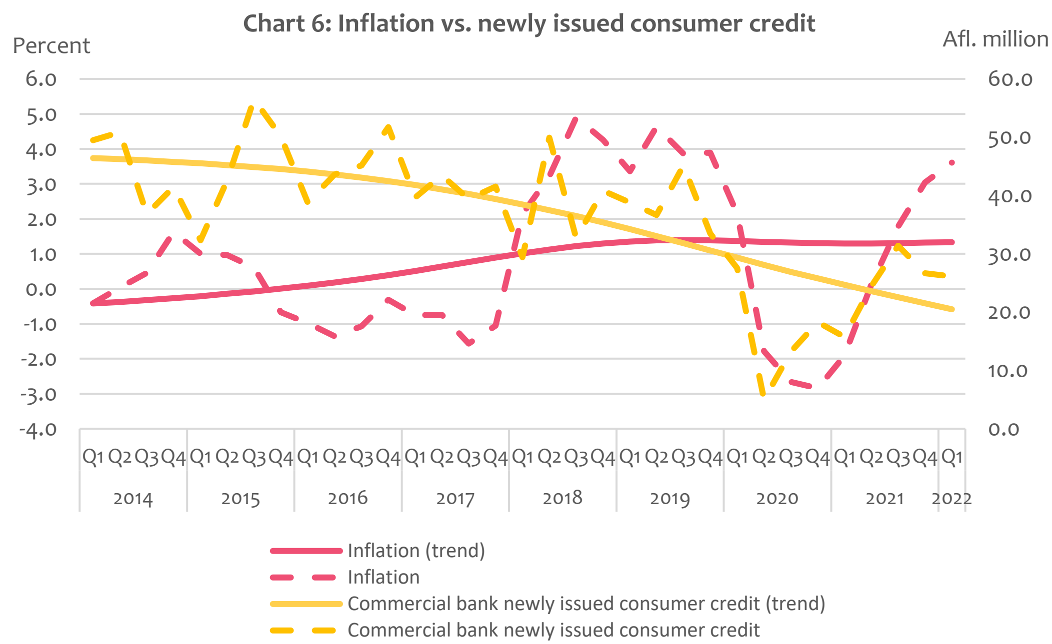
[9] For legibility, the average intercept of the four banks is displayed in Table 2.

Adjusted R-squared	0.672	0.672
Number of observations	160	160
Period	2012Q2-2022Q1	2012Q2-2022Q2

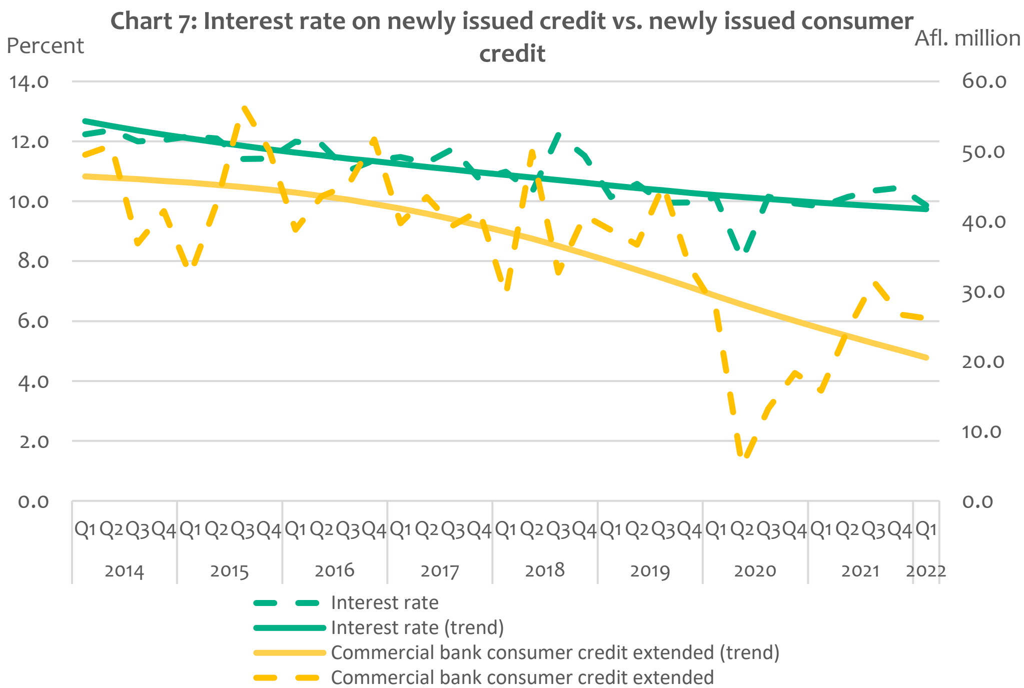
Estimated partial effects are reported along with standard errors in parenthesis.
*p-value<0.05, **p-value<0.10
~To reduce simultaneity bias, current excess liquidity was instrumented by its previous level.



In terms of inflation, Table 2 shows a negative and statistically significant relationship between inflation and new consumer credit extended. One interpretation may be that the negative effect of loan depreciation – through inflation – on credit supply dominates the positive impact of induced credit demand – due to reduced purchasing power. Given the negative relationship between inflation and newly issued consumer credit, it seems that before the COVID-19 pandemic, (slow) consistent pick-up in inflation reduced consumer credit (Chart 6). Throughout the COVID-19 pandemic, however, this relationship was less clear-cut. Thus, the pre-pandemic relationship (2012Q2-2019Q4) might be stronger than the full-sample (2012Q2-2022Q1) relationship (refer to the paragraph about robustness tests).



A significant negative relationship was discerned between consumer credit interest rate and newly issued consumer credit (Chart 7). The reason might be that higher interest rates discourage potential borrowers. This demand effect is perhaps stronger than the supply effect of commercial banks being enticed to extend more credit with higher interest rates and potential profitability.



In the first and second regression specifications, Table 2 points to an insignificant relationship between real GDP and consumer credit newly extended. Consumer credit may be insensitive to the state of the economy as consumer-lending applications are judged on a case-by-case basis, and the lending criteria have always been risk-averse throughout the period observed. Similarly, Table 2 illustrates an insignificant relationship between NPLs and newly issued consumer credit. Hence if NPLs indeed capture loan quality, then it is likely that newly issued consumer credit is invariant to loan quality. As for excess liquidity, no statistically significant relationship was found with newly issued consumer credit. An explanation might be that commercial banks have been so liquid throughout 2012Q2-2022Q1 that liquidity generally has never been a binding constraint for lending. Note also that liquidity is reflective of consumer deposits. If consumers save – instead of borrowing -- to finance large purchases, then one would expect a negative relationship. However, liquidity proxies credit supply as well, implying a positive relationship. These competing forces can explain too why an insignificant nexus was found between newly issued consumer credit and excess liquidity.

Finally, Table 2 offers mixed evidence for a positive causal effect from NMFI consumer credit to commercial bank consumer credit. In particular, specification (1) displays an insignificant effect, while the opposite holds for specification (2). In any case, a statistically significant and negative relationship was not found, indicating the absence of a substitution effect. Yet the substitution from commercial banks to NMFs is only one possible substitution channel. Substitution lending can also occur from commercial banks to informal lending and large retail stores, which are not captured by NMFI lending.

Robustness tests were conducted with the sample shortened from 2012Q1-2019Q4 to filter out the effects of the COVID-19 pandemic (Table 3). All insignificant variables in specification 1, Table 2, remained insignificant in specification 3, Table 3. This may mean that the COVID-19 pandemic did not drive the results in Table 2. Variables that were significant in specification 1, Table 2, generally kept their statistical significance in specification 3, Table 3, with the notable exception of the consumer credit demand index. Moreover, the size of the effect for inflation became smaller, consistent with the expectations in previous paragraphs. As for the partial effect of consumer credit demand being significant in specification 1, Table 2, but not in specification 3, Table 3, a possible interpretation is that consumer credit extension is measurably sensitive to credit demand only after a certain tipping point. In particular, this point could not have been reached if it were not for an extreme event such as the COVID-19 pandemic. The results remained qualitatively the same when comparing specification 3 with specification 4 in Table 3.

In conclusion, the long-term faltering of consumer credit from 2012Q2-2022Q1 has been largely due to supply factors. In particular, inflation may have caused lower willingness to lend because inflation tends to depreciate loan value. In terms of demand factors, interest rates on consumer credit were on a declining trend in that same period, which makes lending more attractive from the borrowers' perspective. Hence, despite supportive demand factors, consumer credit withered. Furthermore, only in the more recent COVID-19 period did new lows for the consumer credit demand index (captured by the CCS) partly explain the contraction in consumer credit.

A few policy implications stand out, given that consumer credit could be happening more so through informal lending and large retail stores. The latter can be associated with risks of overleveraging and higher interest rates. A supply-side policy implication would involve lowering the barriers to opening a bank account and loan application requirements at commercial banks. Another supply-side policy implication is the introduction of a credit registration bureau to protect the overleveraged. On the other hand, demand-side policy implications are to establish a consumer protection agency and foment financial literacy.

Table 3: Fixed effects regression between newly issued consumer credit and its determinants

	(3)	(4)
Intercept	10836.97*(391.92)	10812.50*(379.11)
Credit demand index(-1)	272.19(260.38)	272.13(257.00)
Inflation (EOP)	-299.62*(148.69)	-256.17*(139.61)
D(interest rates on new consumer credit)	-487.48*(213.68)	-524.46*(206.18)
D(Consumer credit outstanding at NMFIs)	-44.79(84.96)	-69.21(77.85)
D(GDP real)	-8.51 (11.19)	
D(NPL ratio of consumer credit(-2))	-263.14 (394.13)	
D(Excess liquidity)~	-0.01(0.01)	
Adjusted R-squared	0.728	0.732
Number of observations	124	124
Period	2012Q2-2019Q4	2012Q2-2019Q4

Estimated partial effects are reported along with standard errors in parenthesis.

*p-value<0.05, **p-value<0.10

~To reduce simultaneity bias, current excess liquidity was instrumented by its previous level

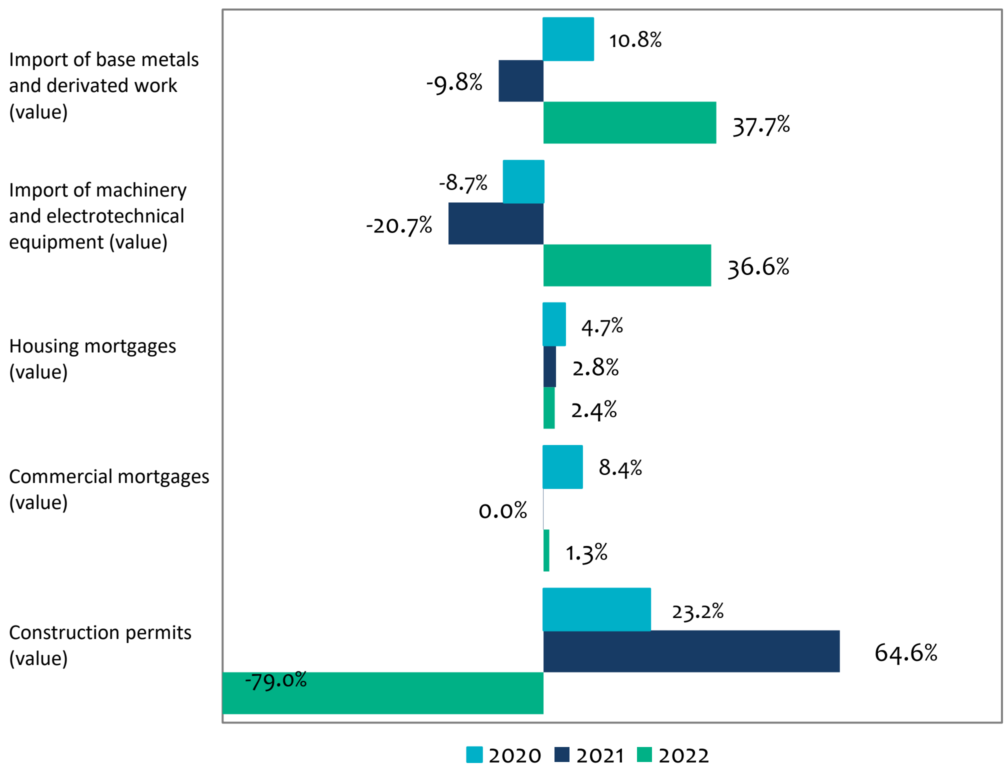
Investment

The investment-related indicators mostly showed improvement during the first quarter of 2022 (Charter 8). Both the value of imported base metals and derivated works (i.e., +37.7 percent) and the value of imported machinery and electrotechnical equipment (i.e., +36.6 percent) rose during the period under review after experiencing contractions in the corresponding period of the previous year (i.e., a decline of 9.8 percent in 2021 Q1 vs. 2020 Q1 for the value of imported base metals and derivated works, and a decrease of 20.7 percent in 2021 Q1 vs. 2020 Q1 for the value of imported machinery and electrotechnical equipment). The value of granted construction permits is the only investment-related indicator experiencing a decline during the first three months of 2022. Specifically, the value of total construction permits dropped by 79.0 percent, mostly due to a sharp decline in the 'other' (i.e., -91.8 percent) and 'apartments' (i.e., -84.2 percent) components. Still, a contraction in total construction permits' value does not necessarily indicate a decreased cash flow of investment during the period under review and might not be in line with the previously reviewed indicators. To illustrate, the component other, which includes condominiums, hotels, and restaurant buildings, pointed to an elevated level of construction value due to a particular construction permit granted to a hotel project in the first quarter of 2021. Nonetheless, it seems as though more new investment projects were initiated during the first three months of 2022. This might be the result of reduced uncertainties related to the COVID-19 pandemic and its effects on the Aruban economy. The pick-up in investments contributed positively to economic growth during the first quarter of 2022.

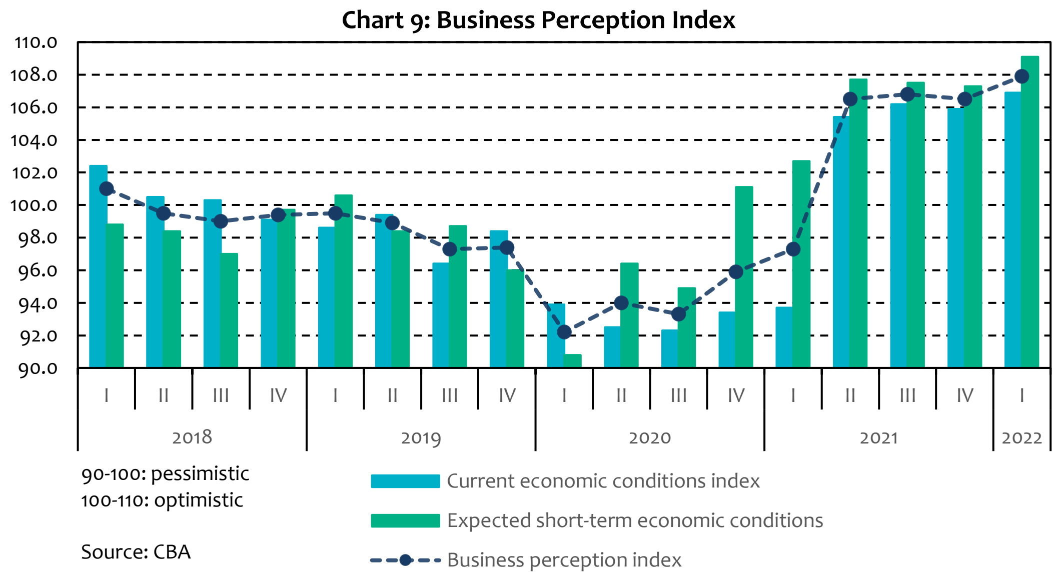
Positive developments also were noted at local commercial banks as the value of outstanding commercial mortgages (i.e., +2.8 percent) and outstanding housing mortgages (i.e., +0.6 percent) inched up during the first quarter of 2022 vis-à-vis December 2021. Commercial and housing mortgages rebounded compared to the first quarter of 2021 (respectively, 2021 Q1: -0.9 percent, -0.1 percent). Moreover, data on housing mortgages indicated a jump of 95.7 percent in the number of new housing mortgages and 163.9 percent in their value (2022 Q1 vs. 2021 Q1). Meanwhile, the expansion in commercial mortgages is higher than the noted development in 2021 (i.e., the registered percentage change in 2021 was -0.9 percent when comparing the first quarter of 2021 to December 2020). Improved business confidence was clear in the Business Perception Survey (BPS) conducted in 2022 Q1, which resulted in a Business Perception Index of 107.9 index points compared to 97.3 index points observed during the first quarter of 2021.

The Business Perception Index recorded in the first quarter of 2022 stood at the highest level during the past ten years and is most likely the result of the strong recovery in tourism (Chart 9). In general, the improvement in the business perception index (2022 Q1: 107.9 index points, 2021 Q1: 97.3 index points) was attributed to boosts in the current economic condition index (2022 Q1: 106.9 index points, 2021 Q1: 93.7 index points), as well as in the short-term future economic condition index (2022 Q1: 109.1 index points, 2021 Q1: 102.7 index points). The upticks relate to the smaller percentage of respondents indicating less positive business sentiments. The Business Perception Index also reflected an optimistic development on a quarterly basis, where it rose to 107.9 index points after reaching 106.5 index points during the last quarter of 2021. The growth during the first quarter of 2022 is attributed to the current and the short-term economic condition indices. The positive business sentiments are likely related to abating uncertainty about the COVID-19 pandemic and continued robust tourism performance.

Chart 8: Investment-related indicators
(Percentage change 2022 Q1 vs 2021 Q1)



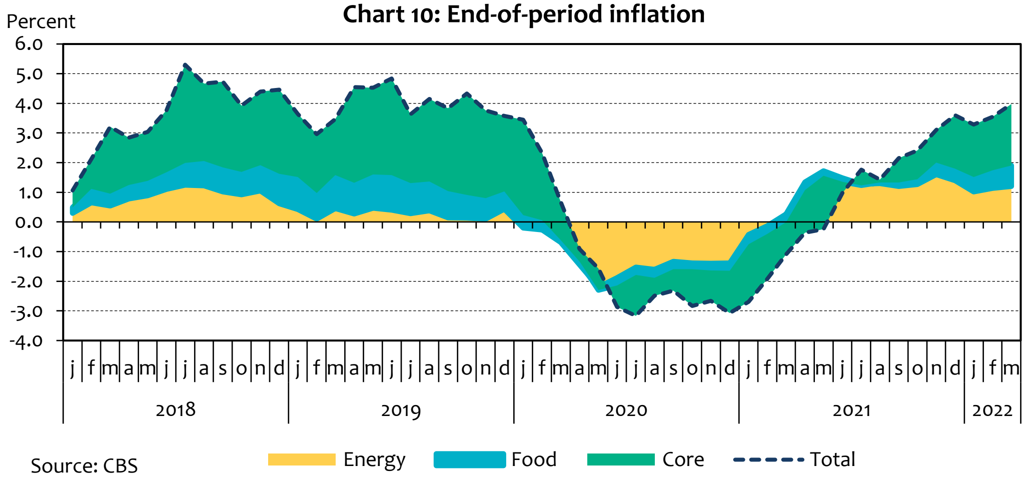
Sources: CBA, CBS, DOW



Consumer Price Index (CPI)

The upward trend in the consumer price index (CPI) that started at the beginning of 2021 persisted in March 2022, reaching 101.5. Compared to the corresponding period of 2021, inflation stood at 4.0 percent at the end of March 2022 (Chart 10). The jump in the CPI compared to a year earlier was caused mainly by higher gasoline prices, which affected the transport component (1.8 percentage points contribution to inflation). This CPI hike was amplified by higher prices for the components of food (0.7 percentage point contribution), clothing and footwear (0.4 percentage point contribution), recreation and culture (0.3 percentage point contribution), and housing (0.3 percentage point contribution). The increases in food and transport prices largely stemmed from rising oil prices and the ongoing logistical problems hampering production and the supply chain.

Chart 10: End-of-period inflation

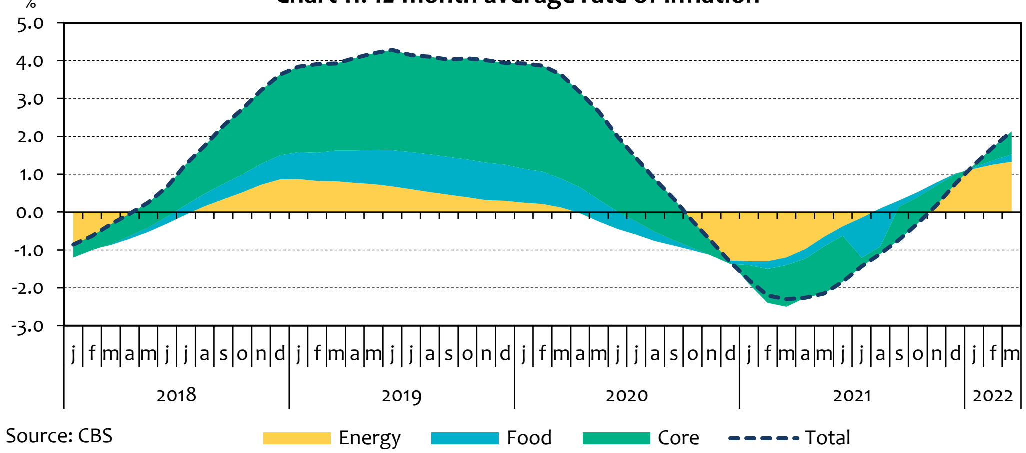


Source: CBS

Inflation, when measured as the percentage change in the 12-month average of the CPI, reached 2.1 percent at the end of March 2022 (Chart 11). This was due to higher prices for gasoline, which pushed up transportation costs (1.6 percentage points contribution to inflation). In addition, price increases in food (0.2 percentage point contribution) – which began in early 2021 -- as well as housing (0.2 percentage point contribution) contributed to the 12-month average inflation. This is in contrast to March 2019, when core inflation drove total inflation. In that month, the components communication (0.5 percentage point), miscellaneous goods and services (0.3 percentage point), purchase of vehicles (0.3

percentage point), and household operations (0.3 percentage point) mostly moved core inflation.

Chart 11: 12-month average rate of inflation

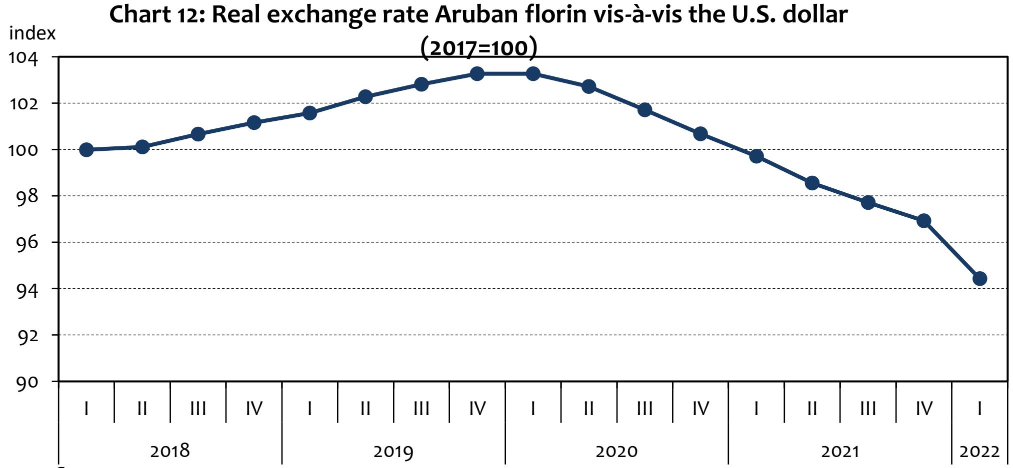


Source: CBS

International competitiveness

The real exchange rate of the Aruban florin vis-à-vis the U.S. dollar remained on its downward trajectory in the first quarter of 2022 (Chart 12). This descending trend, which began in the second quarter of 2020, points to an improved competitive position for Aruba compared to the United States. The improvement in the first quarter of 2022 was the result of consumer prices in the United States rising faster than those in Aruba (Chart 13). The 12-month average U.S. inflation for March 2022 amounted to 6.2 percent. The increase in U.S. consumer prices was primarily driven by higher food and energy prices[10]. Additionally, *shelter* and *household furnishings and operations* were key drivers of price increases for *all items less food and energy*, showing a strong demand-pull. Meanwhile, Aruba's 12-month average inflation rate reached 2.1 percent in March 2022, driven mainly by higher prices for gasoline. The inflation differential between the United States and Aruba was largely the result of Aruban utility prices being insulated from price hikes in the international oil market during 2021 due to favorable hedging contracts.

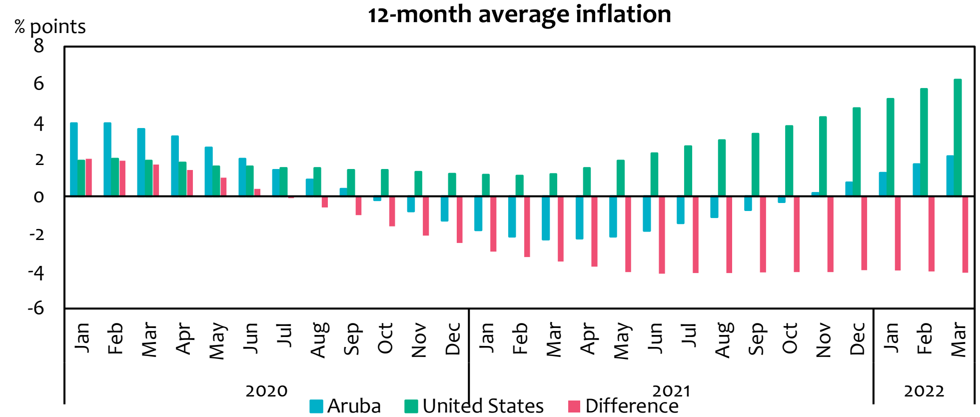
Chart 12: Real exchange rate Aruban florin vis-à-vis the U.S. dollar (2017=100)



Source:

[10] Consumer Price Index, March 2022, Bureau of Labor Statistics

Chart 13: Inflation differential Aruba - USA:
12-month average inflation



Calculations: CBA

Foreign trade

At the end of the first quarter of 2022, Aruba's trade deficit reached Afl. 507.3 million, a widening of 37.8 percent compared to the same quarter in 2021 (Chart 14). This larger trade deficit was primarily the result of significant growth in imports.

During the first quarter of 2022, the value of the imports to Aruba advanced by Afl. 154.4 million, an increase of 40.5 percent compared to the corresponding period of the previous year. All categories of imports increased more than 25 percent, except for chemical products, which widened by 7.7 percent. The volume of imports expanded by 59.2 million kg during the period under review. This represents an augmentation of 60.9 percent and follows the trend of the value of imports. Moreover, both the value and volume of imports are higher than the level of the first quarter of 2019.

During the first quarter of 2022, the spike in imports was likely related to the significant rise in the number of visitors to Aruba, which more than doubled compared to the first quarter of 2021, for a total of 233.666 visitors.

Chart 14: Foreign trade

Source: CBS

The increase in imports was attributed mainly to growth in the categories other goods (+56.3 percent), machinery and electrotechnical equipment (+37.3 percent), food products (+26.7 percent), and live animals and other animal products (+40.5 percent). The categories within other goods that showed the greatest growth were petrochemical products (+ Afl. 16.1 million), pearls, precious stones, imitation jewelry and coins (+Afl. 11.7 million), furniture, mattresses, articles for lighting and prefabricated buildings (+Afl. 8.8 million), clothing of not knitted and crocheted fabrics (+Afl. 4.5 million), clocks and watches (+Afl. 3.4 million), and clothing of knitted and crocheted fabrics (+Afl. 3.4 million). Total imports to Aruba have shown continued and robust growth year-on-year since the second quarter of 2021, compared to the same period in the year before. In the first quarter of 2022, total value of imports reached a level Afl. 535.8 million, surpassing the pre-pandemic level of Afl. 517.4 million in the corresponding period of 2019.

The export of merchandise expanded by Afl. 15.4 million (+117.5 percent) during the first quarter of 2022. The growth in export during the first quarter of 2022 was driven mainly by other goods (+Afl. 14.0 million) and transport equipment (+Afl. 1.6 million). All other categories of exports remained practically unchanged.

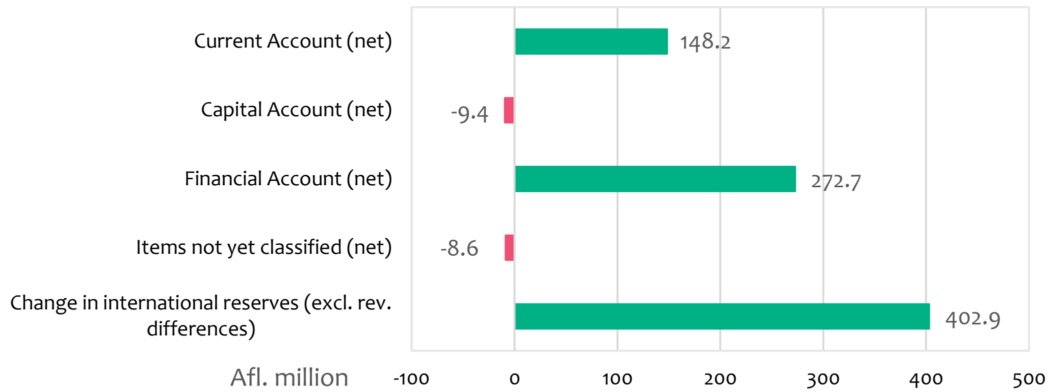
Balance of payments

International transactions settled through the banking sector gave rise to a large net inflow of foreign exchange of Afl. 402.9 million in international reserves in the first three months of 2022 (Chart 15). This outcome was driven by both the current and the financial accounts, as it incurred a net inflow of Afl. 272.7 million of foreign exchange (2021 Q1: Afl. 92.3 million surplus). The inflows on the financial account during the first quarter of 2022 stemmed mainly from a loan received from the Netherlands (registered as 'other investment' in the Balance of Payments) to the Government of Aruba (GoA) in order to cover its maturing external debt in 2022. Specifically, the component 'other investment' resulted in a net inflow of Afl. 292.6 million in the period under review. All other components of the financial account, except for portfolio investment (i.e., a net outflow of Afl. 40.9 million associated with outgoing payments in connection with government bond repayments) and foreign accounts (i.e., a net outflow of Afl. 38.6 million), registered upturns during the period under review. Direct investment resulted in a net inflow of Afl. 54.8 million due to real estate transactions, while financial derivatives recorded a net inflow of Afl. 4.7 million.

Current account transactions also contributed to the uptick in international reserves, exhibiting a net inflow of Afl. 148.2 million of foreign exchange. This net inflow during the first quarter of 2022 was attributed to the recovery in the tourism sector — net tourism credits amounted to Afl. 709.6 million (a surge of Afl. 374.3 million vis-à-vis the same quarter a year prior) during the first quarter of 2022. The incoming tourism credits were primarily mitigated by the outflows of foreign exchange related to the import of goods (i.e., a net outflow of Afl. 441.6 million during the first quarter of 2022). The net foreign exchange outflows due to the import of goods increased by Afl. 136.3 million compared to the first quarter of 2021. These were likely due to the ongoing tourism recovery, which increased demand for imported products. Meanwhile, net outflows related to primary income amounted to Afl 31.5 million due to outflows related to investment income payments. The net inflow of secondary income reached Afl. 0.2 million in the first quarter of 2022. Primary income net outflow inched up by Afl. 1.2 million compared to the first three months a year prior, while the net inflow of secondary income rose by Afl. 2.9 million.

On the other hand, the capital account registered a net outflow of foreign exchange during the first quarter of 2022. The capital account showed a net outflow of Afl. 9.4 million, resulting from transfers to abroad related to large gifts and inheritances. Meanwhile, the items not yet classified reached a net outflow of Afl. 8.6 million.

Chart 15: International transactions through the banking system (2022 Q1)

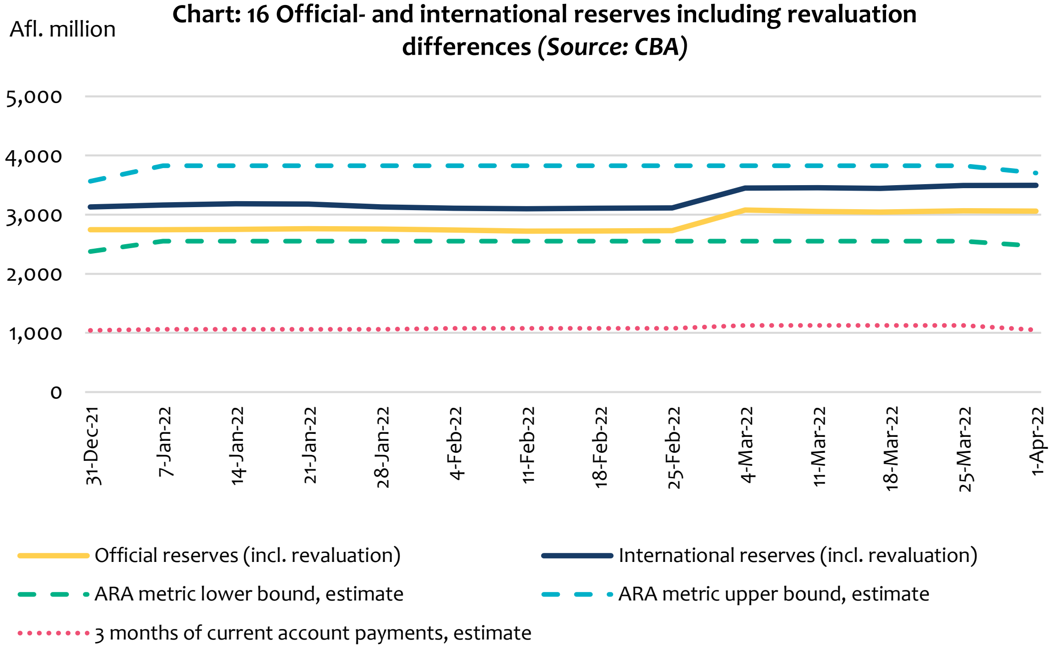


Monetary survey

Broad money expanded from Afl. 5,368.1 million at the end of December 2021 to Afl. 5,404.8 million at the end of the first quarter of 2022. The widening of broad money — the amount of money circulating in the Aruban economy — was due to an increase in net foreign assets (NFA) of Afl. 403.5 million, partially offset by a contraction in net domestic assets of Afl. 366.7 million. The main drivers of growth in international reserves during the first quarter of 2022 were revenues stemming from tourism activities and the proceeds of a loan received by the Government of Aruba (GoA) for external refinancing purposes from the Dutch government. Consequently, the level of international reserves covered 9.3 months of current account payments, significantly above the 3-month critical threshold monitored by the CBA (Chart 16).

Official reserves also remained within the optimal bandwidth[11] of the IMF's Assessing Reserve Adequacy (ARA) metric, registering 122.6 percent at the end of the first quarter of 2022.

Chart: 16 Official- and international reserves including revaluation differences *(Source: CBA)*

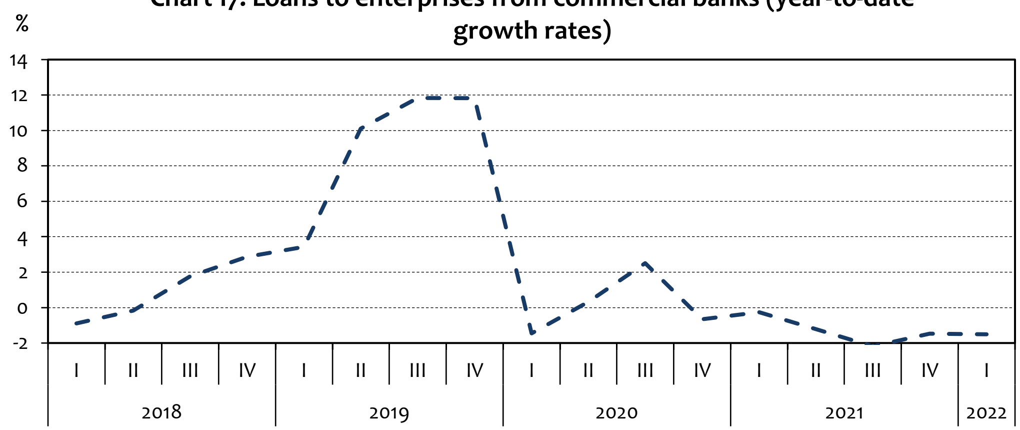


[11] The optimal bandwidth is a level of official reserves that lies between 100 and 150 percent of the IMF ARA metric.

The decrease in net domestic assets was due mainly to an Afl. 366.7 million contraction in domestic credit. The drop was primarily due to lower net claims on the public sector (Afl. 312.6 million), which reflected mainly an increase in government deposits (Afl. 300.1 million). The latter was associated with the receipt by the GOA of a loan from the Dutch government for refinancing existing loans, part of which are not due until later this year. In addition, claims on the private sector fell by Afl. 31.4 million due to declines in both loans to enterprises and consumer credit of Afl. 22.7 million and Afl. 16.8 million, respectively (Chart 17). The latter is consistent with the downward trajectory recorded for multiple quarters by both loans to enterprises and consumer credit. It should be noted, though, that the declining trend of consumer credit has been longer and more persistent. On the other hand, housing mortgages grew by Afl. 8 million (Chart 18). While the growth rate for housing mortgages has diminished in recent years, the growth registered in the first quarter of 2022 was an improvement compared to the slight contraction observed a year earlier. Meanwhile, non-credit related balance sheet items expanded by Afl. 22.7 million.

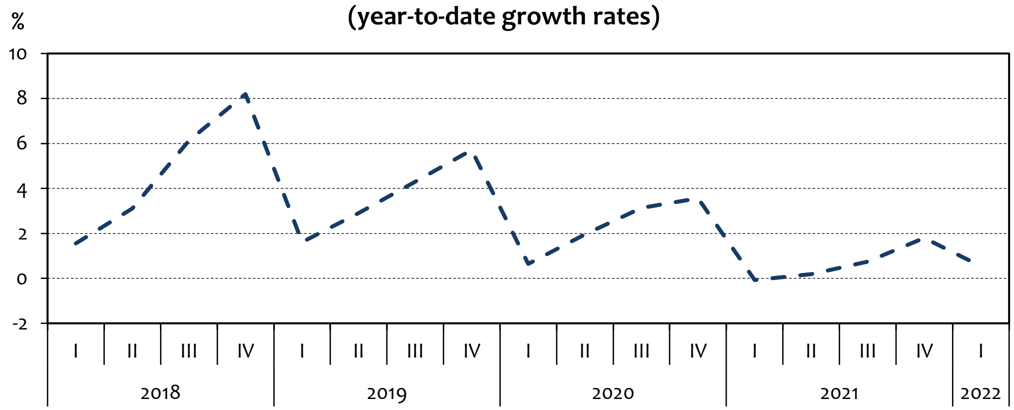
The aggregated balance sheet for nonmonetary financial institutions (NMFIs) expanded to Afl. 7,123.7 million at the end of March 2022 – an increase of Afl. 98.0 million compared to the end of December 2021. This result was mainly related to an Afl. 60.2 million increase in other domestic claims, and an upturn in claims on the government (+Afl. 26.0 million), non-financial public enterprises (+Afl. 8.3 million), and foreign assets (+Afl. 13.4 million). In contrast, there were contractions in loans to enterprises (-Afl. 9.4 million) and loans to individuals (-Afl. 0.4 million).

Chart 17: Loans to enterprises from commercial banks (year-to-date growth rates)



Source: CBA

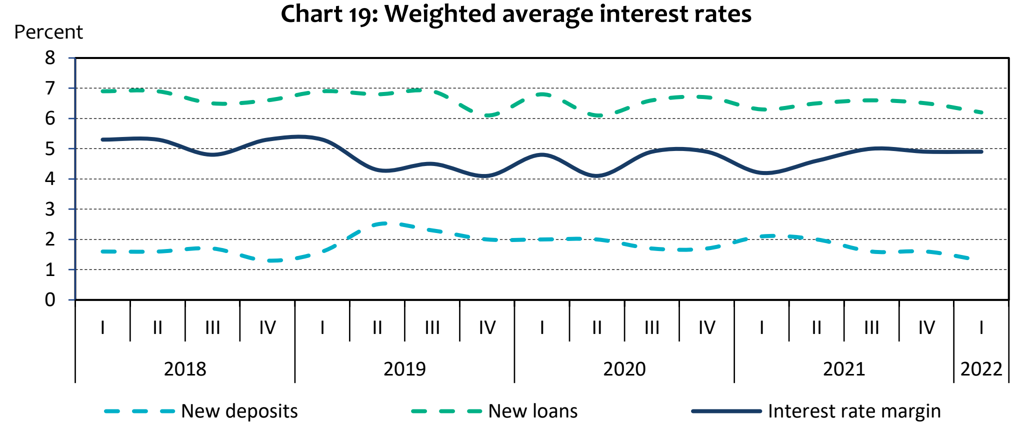
Chart 18: Housing mortgages from commercial banks (year-to-date growth rates)



Source: CBA

The interest rate margin of commercial banks remained at 4.9 percent in the first quarter of 2022, unchanged from end-2021 (Chart 19). This outcome was linked to the weighted average rate of interest on new loans and on new deposits, both edging down during the first three months of 2022. The weighted average rate of interest on new loans fell from 6.5 percent to 6.2 percent, while the rate on deposits slipped from 1.6 percent to 1.3 percent. The lower rate on new loans was driven by consumer credit and commercial mortgages. Meanwhile, the change in the rate on new deposits was caused by lower rates on new time deposits.

Chart 19: Weighted average interest rates

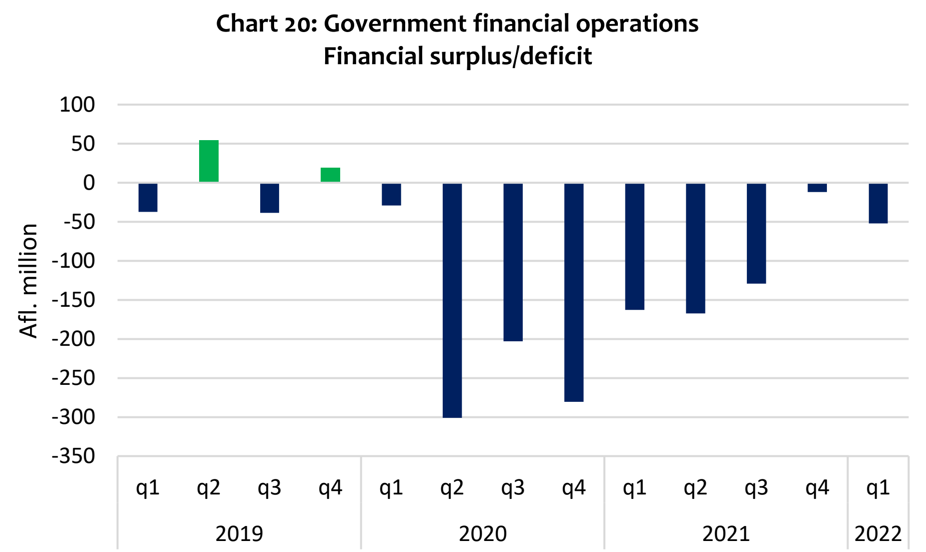


Source: CBA

Available financial soundness indicators show that Aruban commercial banks were sound during the first quarter of 2022. The capital adequacy ratio rose by 1.0 percentage point to 38.0 percent at the end of March 2022. The observed ratio comfortably surpassed the required minimum of 16.0 percent. Concurrently, commercial banks' aggregated prudential liquidity ratio (PLR) contracted by 1.9 percentage points to 36.1 percent, down from 38 percent at the end of December 2021. It remained substantially higher than the minimum required PLR, which currently stands at 18.0 percent. Nonperforming loans (NPLs) inched down by 0.2 percentage point to 4.5 percent at the end of March 2022. However, bank profitability was lower than end-2021, as return on assets (before taxes) (-0.1 percentage point) and return on equity (before taxes) (-1.2 percentage points) decreased.

Government

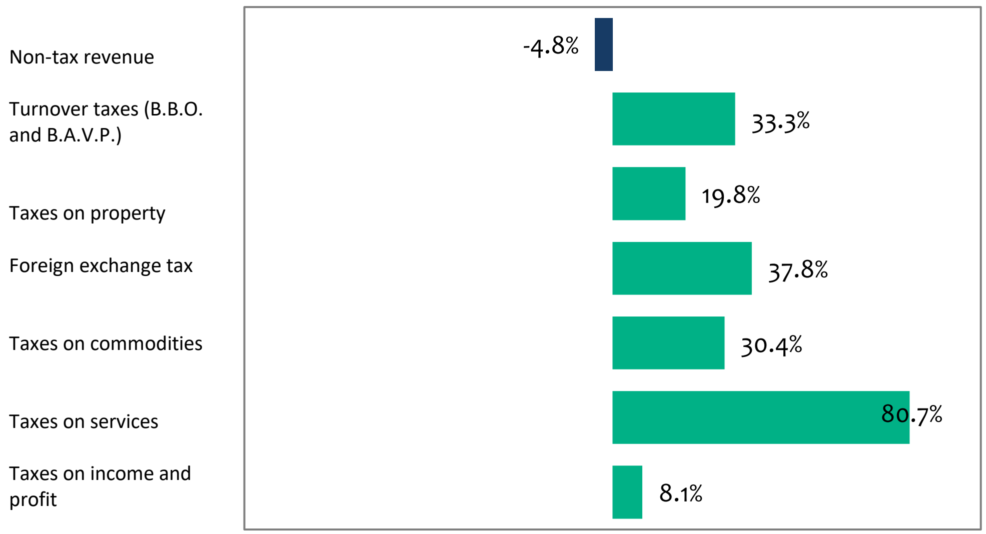
In the first quarter of 2022, government finance data indicate that the financial deficit narrowed to Afl. 52.0 million, down from Afl. 162.7 million in the same period of 2021. This outturn resulted primarily from a decline in government expenditures of Afl. 63.5 million, as government expenses in almost all categories decreased. Government revenues, on the other hand, increased by Afl. 48.2 million in the period under review, sparked by the ongoing economic recovery and contributed to the reduction in the government financial deficit.



During the first quarter of 2022, government revenues strengthened compared to the same period in 2021. Tax revenue expanded by Afl. 49.2 million (+24.5 percent), while non-tax revenue shrank by Afl. 1.1 million (-5.0 percent). This led to an increase in total government revenue of Afl. 48.2 million (+21.6 percent), reaching Afl. 271.2 million at the end of the first quarter of 2022, compared to the large drop during the same period of 2021 (2021 Q1: -Afl. 92.6 million, -29.3 percent). Nonetheless, the level of total revenue at the end of the first quarter of 2022 was still below the level recorded for the first quarter of 2019 (2019 Q1: Afl. 302.8 million).

All tax categories exhibited growth during the period under review (Chart 20). Receipts collected from taxes on commodities (+Afl. 18.1 million; +30.5 percent) and turnover tax (+Afl. 13 million; +33.2 percent) showed a spike compared to the first quarter of 2021. The revenue increase in taxes on commodities was mainly due to growth in income from import duties, an expansion of Afl. 11.1 million (+38.5 percent), which is in line with the growth of imports displayed in Aruba's foreign trade for the period under review (+Afl. 154.4 million; +40.5 percent). Income from excises on beer and liquor expanded, respectively, by Afl. 2.2 million (+44.9 percent) and Afl. 2.0 million (+41.7 percent). Receipts from taxes on income and profit grew from Afl. 61.7 million in the first quarter of 2021 to Afl. 66.7 (+8.1 percent) in the same period of 2022. The expansion here was mainly associated with an increase of Afl. 4.0 million (+7.6 percent) in wage tax receipts, reflecting improved employment.

Chart 21: Government revenue
(Percentage change YTD March 2022 vs. YTD March 2021)



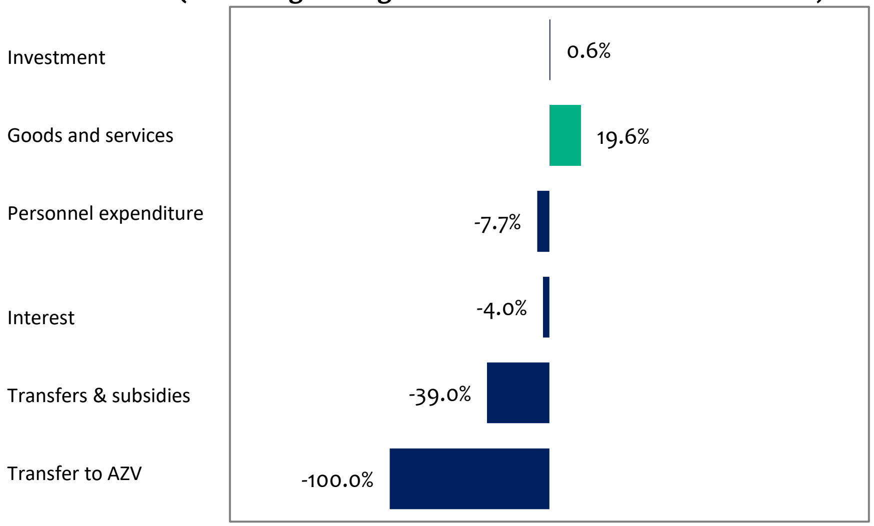
Source: Tax Collector's Office

Total government expenses for the first quarter of 2022 were Afl. 319.7 million. Compared to the same period in 2021, total government expenditures contracted by Afl. 63.5 million (-16.6 percent) at the end of the first quarter of 2022. Except for the categories g*oods and services* and *investment*, all government expenditure categories showed a decline.

During the first quarter of 2022, the decrease in government expenses was mainly attributed to the categories transfers and subsidies (-Afl. 40.3 million; -39.0 percent), transfer to the AZV (-Afl. 21.1 million; -100.0 percent), and personnel expenditures (-Afl 10.7 million; -7.7 percent) (Chart 21). The drop in personnel expenditure was attributed to a decrease in wage subsidies (-Afl. 10.9 million), while employer's contributions and wages remained flat. During the first quarter of 2022, government transfers and subsidies waned, as government programs for financial assistance to buffer the effects of COVID-19 on businesses and households were terminated at the end of 2021, and were no longer in place during the first quarter of 2022. On the other hand, government expenses related to "goods and services" increased by Afl. 11.0 million (+19.5 percent) compared to the same period of 2021, while investment outlays stayed the same level. The expansion in "goods and services" was driven by costs largely associated with the consumption of electricity, telephone, fax and internet, and expert advice.

At the end of the first quarter of 2022, the government financial operations resulted in a financial deficit of Afl. 52.0 million (-68.0 percent), down from an Afl. 162.7 deficit at the end of the first quarter of 2021. When including expenditure arrears, the government financial deficit narrowed to Afl. 55.6 million (-71.2 percent) at the end of the first quarter of 2022, compared to the financial deficit of Afl. 192.8 million at the end of the first quarter of 2021.

Chart 22: Government expenditure
(Percentage change YTD March 2022 vs. YTD March 2021)



Source: Tax Collector's Office

In the first quarter of 2022, government debt rose by Afl. 360.2 million compared to December 2021, reaching Afl. 6,015.8 million. This represented a growth of 6.4 percent. The increase in debt was caused by an expansion of Afl. 336.9 million in foreign debt. This was due mainly to an Afl. 360.7 million in soft loans from The Netherlands, primarily to help finance repayment of maturing external debt in 2022 (Afl. 348.1 million). The share of foreign government debt continued its ascent to 64.5 percent at the end of the first quarter of 2022, up from 62.6 percent at the end of 2021.

At the end of the first quarter of 2022, the Aruban debt to the Dutch government expanded by Afl. 360.7 million, reaching a total of Afl. 1,451.4 million. This level is much higher than the level of the Aruban debt to US holders of domestic debt (Afl. 1,011.2 million). It also surpassed the level registered under the category "Other" (Afl. 1,411.7 million). The share of Aruban debt to the Netherlands as a portion of total debt grew from 0.4 percent in the first quarter of 2020 to 9.6 percent in the first quarter of 2021, before reaching 24.1 percent at the end of the first quarter of 2022. In comparison, at the end of the first quarter of 2022, the share of government debt to US holders of domestic debt was 16.8 percent, while the share of the category "Other" was 23.5 percent[12].**Domestic debt grew by Afl. 23.3 million (+1.1 percent) in the period under review, caused mainly by a rise of Afl. 37.3 million in short-term government debt.** At the end of the first quarter of 2022, non-negotiable debt increased by Afl. 35.9 million, while negotiable debt diminished by Afl. 12.6 million. On balance, government debt resulted in an estimated debt-to-GDP ratio of 103.3 percent at the end of the first quarter of 2022, up from 101.0[13] percent at the end of 2021. Thus, although the liquidity support from the Netherlands facilitated short-term government financial operations and obligations, these additional loans further exacerbated the government's limited fiscal space.

[12] The category "Other" includes non-residents holding bonds issued by the Government of Aruba, private placements issued in Aruban florins, and of supplier's credit.

[13]In the publication State of the Economy Fourth Quarter 2021, the debt-to-GDP ratio was estimated at 108.7 percent, based on available data. The quarterly GDP used for estimating the debt-to-GDP is updated each quarter. Realized tourism figures for the last quarter of 2021, led to a higher GDP estimate for 2021. As such, the debt-to-GDP ratio for the fourth quarter of 2021 was recalculated to 101.0 percent. This difference in debt-to-GDP ratio is attributed to the much better performance of tourism than expected during the last quarter of 2021.

II. International Developments

The International Monetary Fund (IMF) recently revised its projection for 2022 real GDP growth of the global economy to 3.6 percent[14] (Table 4). This growth is 0.8 percentage point lower than previously projected[15]. The downward revision reflected the economic repercussions of the war in Ukraine for global growth in 2022. A sharp double-digit drop in GDP for Ukraine, a slowdown of the Russian economy, and war-induced spillovers are causing a drag on global growth. The spillover effect of the war is mainly felt through the commodity markets, trade, and financial linkages. Since (1) Russia is a major supplier of oil, gas, and metals, and (2) Ukraine is a large exporter of wheat and corn, supply disruptions in these commodities have added to already soaring inflation. Furthermore, the Covid-19-related lockdowns in China stalled growth and created more supply bottlenecks. Also, persistent price pressures have led central banks to tighten their monetary policy, possibly slowing down growth.

The impact of war in Ukraine is expected to have a heterogeneous impact across regions. For example, economic links between the United States and Russia are limited; therefore, spillovers are less evident when compared to those experienced in Europe. The U.S. growth forecast downgrade from 4.0 percent to 3.7 percent reflects the speedier exit from an accommodative stance by the Fed against the backdrop of surging inflation (8.5 percent in March 2022, on an EOP basis[16]). The effect of the non-passage of the Build Back Better Bill and the continued supply disruptions were already incorporated in the previous forecast[17].

[14] See IMF World Economic Outlook, April 2022
[15] See IMF World Economic Outlook, January 2022
[16] Source: U.S. Bureau of Labor Statistics, April 2022
[17] This forecast is based on the previous World Economic Outlook of January 2022.

Meanwhile, in the Euro Area, economic linkages with Russia are tighter, and the war has pushed up energy prices.

Specifically, Euro Area energy prices increased by 44.4 percent in March 2022 and contributed to total inflation by 4.4 percentage points[18]. Supply chain disruptions also have led to a scarcity of key inputs for the automobile sector. Overall, the Euro Area growth was downgraded from 3.9 percent to 2.8 percent.

Table 4: Projections for the world economy and selected economies (Real GDP growth, in percent)

Indicator	2022f
World	3.6
United States	3.7
Euro Area	2.8
Latin America and the Caribbean	2.5

Source: IMF

f = forecast

With less direct connections to Europe, the Latin American and Caribbean (LAC) region is projected to attain 2.5 percent growth, a slight upwards revision of 0.1 percentage point. The growth in this region is spurred by robust price-driven growth in the exports of wheat and oil by Latin American countries and strong remittance inflows to Central American and Caribbean countries[19]. For the Caribbean, tourism's continued but incomplete recovery toward pre-pandemic levels is an important driver of growth, supporting exports, employment, and investment.

[18] Source: Eurostat, May 2022
[19] Source: World Bank Global Economic Prospects, June 2022

III. Conclusion

The Aruban economy continued on a solid path to recovery during the first quarter of 2022, growing by an estimated 16.2 percent compared to the first quarter of 2021. This growth is a continuation of the increase in year-on-year GDP since the second quarter of 2021. The persistent pace of economic revival has been spurred by the strong rebound in tourism, which on its turn has boosted consumption.

Tourism demand surged on a quarter-on-quarter basis, reflected in the significant increase in total stay-over visitors and total visitor nights, leading to optimistic developments in the tourism services sector and in tourism revenue. Total stay-over visitors jumped by 108.0 percent compared to the first quarter of 2021, reaching 233,666 visitors in the first quarter of 2022. Total visitor nights were equal to 1,828,141, almost double the number of visitor nights. Furthermore, revenue per available room rose by 161.7 percent when compared to the same period in 2021. This resulted from the higher hotel occupancy rate of 62.2 percent, as well as a spike in the Average Daily Rate (ADR) in the period under review. During the first quarter of 2022, income generated from tourism soared by an estimated 92.0 percent to Afl. 874.8 million compared to the first quarter of 2021.

During the first quarter of 2022, consumption-related indicators showed improvement compared to the same period in 2021, reflecting continued economic recovery. Imports to Aruba expanded in all categories, widening the trade deficit. The greater outlays for imports are likely also reflected in increased import prices. On the other hand, the amount of outstanding total consumer credit by commercial banks fell by 4.0 percent, in line with the declining trend in consumer credit over the last ten years. The Consumer Confidence Index reiterated the contractions witnessed in total outstanding consumer credit, as consumers were slightly more pessimistic compared to the first quarter of 2021.

Inflation in Aruba has been trending upwards since the beginning of 2021, with the CPI reaching 101.5 index points in March 2022. Nevertheless, inflation is running at a slower pace compared to that of the United States and Europe. This is because the local (state-owned) utility company absorbed the higher fuel cost and did not pass it on to the consumers (during the first quarter of 2022). Compared to March 2021, inflation in Aruba stood at 4.0 percent at the end of March 2022. When measuring inflation as the percentage change in the 12-month average of the CPI, inflation in Aruba reached 2.1 percent at the end of March 2022.

Ever since the second quarter of 2020, the real exchange rate for the Aruban florin vis-à-vis the U.S. dollar has been trending downwards. This continued in the first quarter of 2022. The descending trend points to an improved competitive position of Aruba compared to the United States. This improvement in the first quarter of 2022 was the result of consumer prices in the United States rising faster than those in Aruba. In March 2022, the 12-month average inflation in the United States amounted to 6.2 percent, while the 12-month average inflation in Aruba stood at 2.1 percent.

In the first three months of 2022, international transactions settled through the commercial banks resulted in a large net inflow of foreign exchange of Afl. 402.9 million, driven primarily by the financial account. The inflows on the financial account were the consequence of a loan received from the Netherlands to the Government of Aruba to cover maturing external debt in 2022. Consequently, the net effect hereof on the international reserves will be neutral at the end of 2022. The current account also contributed to the uptick in international reserves, as net tourism revenue increased due to the recovery in the tourism sector. During the first quarter of 2022, the capital account, on the other hand, registered a net outflow, attributed to transfers to abroad related to large gifts and inheritances.

For the first quarter of 2022, the financial deficit narrowed to Afl. 52.0 million from Afl. 162.7 million in the first quarter of 2021. At the end of the first quarter of 2022, total government revenue widened by Afl. 48.2 million, reaching Afl. 271.2 million but remained below the 2019 first-quarter level. All tax categories exhibited revenue growth during the period under review, while non-tax revenues declined. Total government expenditure contracted by Afl. 63.5 million at the end of the first quarter of 2022. Except for *goods and services* and *investments*, most government expenditure categories displayed a decline in expenses.

At the end of the first quarter of 2022, the government debt rose by Afl. 360.2 million compared to December 2021, reaching Afl. 6,015.8 million, representing a growth of 6.4 percent. The increase in debt was caused by an expansion of Afl. 336.9 million in foreign debt and an enlargement of Afl. 23.3 million in domestic debt. The developments in government debt resulted in an estimated debt-to-GDP ratio of 103.3 percent at the end of the first quarter of 2022.

On the international front, the IMF revised its projection for 2022 real GDP growth of the global economy to 3.6 percent. The latter resulted from the economic repercussions of the war in Ukraine on global growth in 2022. In particular, a sharp double-digit drop in GDP for Ukraine, a slowdown of the Russian economy, and war-induced spillovers drag on global growth.

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