

ECONOMIC OUTLOOK 2023- 2024

MAY 2023



Disclaimer

The Department of Economic Affairs, Commerce and Industry is prudent with the projection for 2023 and 2024 due to increasing uncertainties in time. Therefore, these estimations have to be considered preliminary and used with care.

Contents

Disclaimer	1
Contents	2
List of Abbreviations	3
Executive Summary	5
Chapter 1: Introduction	8
Chapter 2: Economic Outlook 2023 - 2024	11
Chapter 3: Scenario A and scenario B	19
Chapter 4: Real GDP 2023	23
Chapter 5: Risk factors for Outlook 2023– 2024	26
Chapter 6: Global Economy	29
Global Inflation	29
Oil Prices	32
The U.S. Economy and the European Area and its impact on the Caribbean Region	32
Annexes	I
Annex A: CARTAC and the MARUBA Model	I
Annex B: Economic Outlook 2022-2023	II
Annex C: Assumptions Outlook 2023-2024	III
Annex D: Assumptions Scenario A and scenario B for the year 2024	IV

List of Abbreviations

Abbreviation	Explanation
ADR	Average Daily Rate
ATA	Aruba Tourism Authority
CARTAC	The Caribbean Regional Technical Assistance Centre
DEACI	Department of Economic Affairs, Commerce and Industry
EGS	Exports Goods and Services
EIA	U.S. Energy Information Administration
ET	Exports Tourism
GDP	Gross Domestic Product at market prices
IGS	Imports Goods and Services
PC	Private Consumption
PUBC	Public Consumption
TC	Total Consumption
TCV	Total Cruise Visitor
TI	Total Investments
TSV	Total Stayover Visitor
PI	Private Investments
PUBI	Public Investments

EXECUTIVE SUMMARY



Executive Summary

The sharp rise in energy prices as a result of the war in Ukraine, the struggling energy intensive companies with rising production costs and households seeing their disposable income fall as a result of high inflation have a major impact on the world economies, including Aruba. A global slowdown in growth is seen in the second half of last year.

The Department of Economic Affairs, Commerce and Industry is prudent with the projection for 2023 and 2024. Therefore, these estimations have to be considered preliminary and used with care.

Compared to 2021 the estimation for the year 2022 shows an increase of 11.4 percent of the Gross Domestic Product in nominal terms (nominal GDP). When compared to the estimation in October 2022, this signifies a nominal GDP change of 1.4 percentage points higher (from 10.0 percent to 11.4 percent) after updating for realized data. See graph 1. The nominal GDP in 2022 (Afl. 5,927m) was approximately at 97.5 percent compared to the level of 2019 (Afl. 6,080m).

For the years, 2023 and 2024 the nominal GDP is projected to increase by 10.1 percent and 4.6 percent compared to 2022 and 2023. It is expected that the nominal GDP for 2023 (Afl. 6,526m) will be at 107.3 percent of the level of 2019 (Afl. 6,080m), while the nominal GDP in 2024 (Afl. 6,828m) will be at 112.3

percent of the level of 2019. This indicates that the local economy has reached its pre-pandemic level. Compared to the forecast of October 2022, the year 2023 shows an increase of 5.6 percentage points (from 4.5 percent to 10.1 (percent), which is mainly influenced by Total Investments (private and public), Total Consumption (private and public) and the projected tourism growth.

For the year 2024, the nominal GDP also shows an increase of 4.6 percent. This increase is driven by Private Investments Public Consumption, and the projected tourism growth. The increase in Public Consumption is related to the inflation growth that impacts the goods and services expenses for the upcoming year(s).

In the baseline, the inflation rate is forecasted to be at 4.4 percent in 2023 and 3.2 percent in 2024. The calculation for 2023 is based on the latest data from the CBS, the foreign prices developments, the decrease of 7.1 percent in the prices of electricity as per May 2023, the introduction of the extra 1 percent BBO as per January 2023, and the slightly effect of the 7 percent BBO upon import as per June 2023.

According to the IMF, the inflation for Aruba is projected at 3.8 percent in 2023 and 2.4 percent in 2024. (WEO, April 2023).

The tourism sector is still the main driver of the continuous growth since the COVID-19 pandemic in 2020. The growth in the Export Tourism is forecasted in 2023 at 10.2 percent which is 29.8 percent higher compared to 2019. Compared to the previous forecast in October 2022, Export Tourism in 2023 is estimated higher (+6 percentage points), due to a higher projected Average Daily Rate and non- accommodation expenditures. For 2024, an Export Tourism growth is forecasted at 4.4 percent, which is 35.5 percent higher compared to 2019.

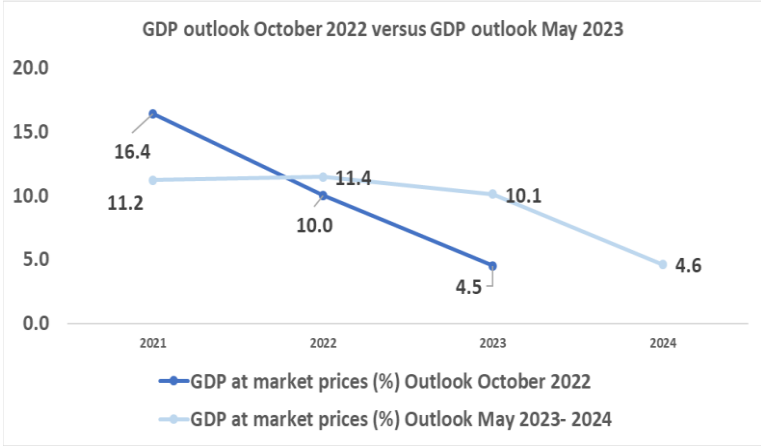
Furthermore, compared to the forecast in October 2022, Total Investments are expected to increase by 28.8 percent in 2023 that is mainly driven by the big hotel projects that are being constructed in upcoming years, which impacts the Private Investments. Additionally, the increase in the budget for Public Investments in 2023 is due to the adjustment of the 2022 realized data for Public Investments, which resulted lower than initially budgeted. For 2024, the forecast is driven by the projected tourism performance and the ongoing construction developments in the tourism sector.

In addition to having a baseline, two other scenarios have also been added for the year

2024. A positive scenario A and a conservative scenario B that are based on the performance of the tourism industry, taking into account the geopolitical developments and its expected effects on the global economy, in particular global inflation. In scenario A the nominal GDP will grow by 5.9 percent and in scenario B the nominal GDP is expected to increase by 3.3 percent.

Finally, the real GDP for the baseline in 2023 is expected to increase by 3.3 percent. In the baseline a negative development can be observed for Public Consumption in real terms. For Private Consumption, Public and Private Investments an increase in real terms is expected.

Graph 1: Development nominal GDP estimates from Outlook October 2022 versus Outlook for May the years 2021- 2024



Graph created by DEACI using the MARUBA Model, May 2023

INTRODUCTION



Chapter 1: Introduction

The Economic Outlook is a product of the Department of Economic, Commerce and Industry (DEACI) that provides analysis and forecasts of the economic indicators and growth of Aruba. For compilation of the Economic Outlook different data sources are used from various institutions, like the Central Bank of Aruba, the Central Bureau of Statistics, the Department of Finance, the Tax Department, the Aruba Tourism Authority, the Aruba Hotel and Tourism Association, the Aruba Airport Authority, the Social Insurance Bank Aruba and the Department of Labor and Research.

In addition to these institutions, certain organizations are also interviewed to discuss their perception of the economic situation of Aruba. Not only their perception of the current economic conditions is being requested, but also what the mayor investment plans and risks are for the current and coming years for various projects on the island. At last, the DEACI holds regular meeting with the Commission Macro Model members to present and discuss the assumptions, estimations and forecasts before publishing the Economic Outlook.

According to the International Monetary Fund, IMF (WEO, April 2023), the projected global economy will grow by 2.8 percent in 2023 and rising modestly to 3.0 percent in 2024.

The GDP growth is recovering at a slow pace. For emerging market and developing economies a jump from 2.8 percent in 2022 to 3.9 percent in 2023 is expected and a growth of 4.2 percent in 2024. For advanced economies especially, the euro area and the United Kingdom a growth by 1.3 percent in 2023 and 1.4 percent in 2024 is expected.

For the USA that has a direct impact on the Aruban economy, the real GDP is expected to increase by 1.6 percent in 2023. In 2024 a growth of 1.1 percent is projected. Latin America and the Caribbean is projected to grow by 1.6 percent in 2023 and 2.2 in 2024. Netherlands is projected to grow by 1.0 percent in 2023 and 1.2 percent in 2024.

The real GDP growth according to the IMF for Aruba is 1.6 in 2023 and 1.2 in 2024. According to DEACI's Outlook a 3.3 percent real GDP growth is projected.

Inflation has become one major concerns for the global economy. The reasons for the inflationary pressures stem from increase in energy prices due to the war and the disruption of the supply chains that has persisted since the pandemic.

The war between Ukraine and Russia has contributed greatly to higher prices for food, energy and commodities prices.

According to IMF (WEO, April 2023), the world inflation is estimated at 7.0 percent in

2023 and 4.9 percent in 2024. For the USA, the inflation is expected to be 4.5 percent in 2023 and 2.3 percent in 2024. Inflation in Latin America and the Caribbean is projected to grow by 13.3 percent in 2023 and 9.0 percent in 2024. The inflation in Netherlands is expected to be 3.9 percent in 2023 and 4.2 percent in 2024 and last but not least the inflation for Aruba is expected to be 3.8 percent in 2023 and 2.4 percent in 2024. (WEO, April 2023).

Last October 2022, the DEACI presented the outlook for the years 2022-2023 based on data up to September 2022. After monitoring and reviewing the forecasts based on new national and international developments and more updated data, DEACI presents the final estimates for 2022 and the forecasts for 2023-2024. Please note that DEACI is still cautious about forecasts for 2023 and 2024 due to the uncertainties in the coming period. These estimates should still be considered preliminary and used with care.

The following chapter 2 presents the baseline for the final estimation for the year 2022 and the forecasts for 2023 and the year 2024.

In chapter 3 two different scenarios are presented, a positive scenario A for the year 2024 and a conservative scenario B for the year 2024, based on the changes in the total stayover visitors. Subsequently, in chapter 4, the real GDP figures are presented for 2022-2023. In chapter 5, the global economy is analyzed and finally, the Annexes include all

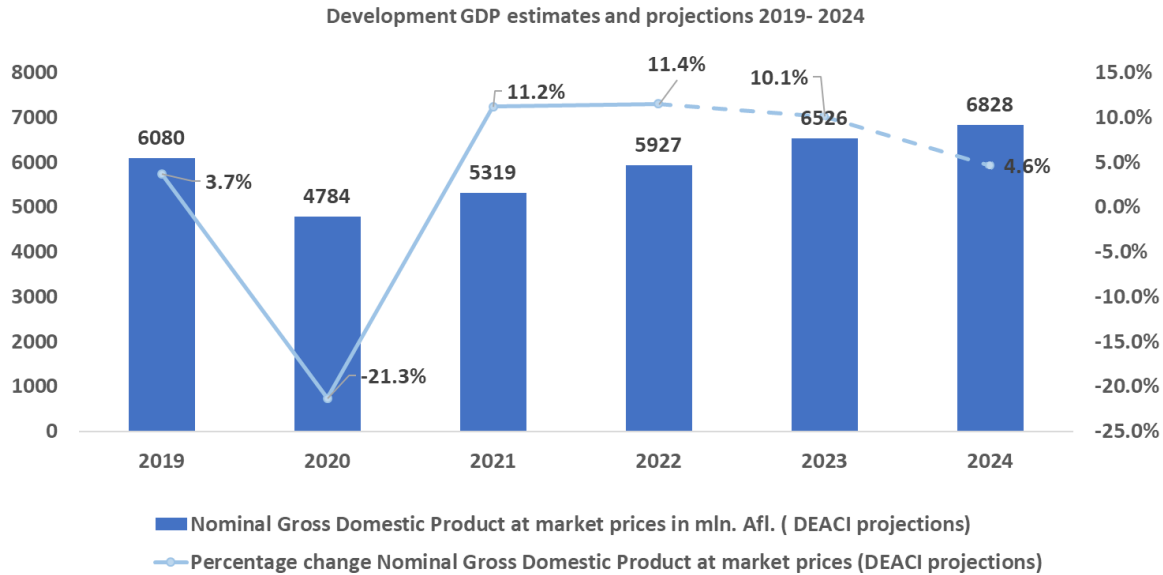
tables, graphs and assumptions of this Economic Outlook 2023-2024, May 2023.

ECONOMIC OUTLOOK 2023- 2024



Chapter 2: Economic Outlook 2023 - 2024

Graph 2: Development nominal GDP estimates and projections 2019- 2024



Graph created by DEACI using the MARUBA Model, May 2023

The economy of Aruba has been steadily recovering since 2021 as a consequence of the excellent performance of the tourism sector.

For the years 2023 and 2024 the tourism industry and private investment projects are expected to have a positive impact on the economic growth in Aruba. In 2022 the total stayover visitors (TSV) has shown an unexpected growth reaching 98.4 percent of the level of 2019. For 2023 and 2024, the tourism sector is also forecasted to be the main driver of the island's economic performance by assuming a level of 105.0 percent in 2023 and a level of 107.1 percent in 2024 compared to 2019.

Baseline 2022

Compared to 2021 the estimation for the year 2022 shows an increase of 11.4 percent of the nominal GDP as shown in Graph 2. This is mainly due to a positive recovery in the tourism sector, private investments and total consumption. It is expected that the investments that were on hold in 2020 and 2021, due to the pandemic, will be gradually picking up in 2022. The nominal Export Tourism (ET) shows a growth of 38.9 percent in 2022 compared to 2021 (see Annex B).

This all resulting in a nominal Private Consumption (PC) growth of 3.2 percent in 2022 compared to previous year. This growth

is based on the assumptions that the average wages in the private sector will recover in 2022 to the level of 2019 and for Public Consumption the estimated growth is related to the partially adjustments of the public sector wages.

As a result, nominal Import of Goods and Services (IGS) are expected to increase by 26.6 percent compared to 2021.

The nominal GDP in 2022 (Afl. 5,927m) will be approximately at 97.5 percent compared to the level of 2019 (Afl. 6,080m). See table 4 in Annex B for the detailed figures for the baseline estimates 2022.

Baseline 2023 and 2024

For the years 2023 and 2024, the nominal GDP is forecasted to increase by 10.1 percent and 4.6 percent respectively compared to 2022 and 2023. It is expected that the nominal GDP for 2023 (Afl. 6,526m) will be at 107.3 percent of the level of 2019 (Afl. 6,080m), while the nominal GDP in 2024 (Afl. 6,828m) will be at 112.3 percent of the level of 2019. See table 4 in Annex B for the detailed figures for the baseline forecast 2023-2024.

Nominal GDP growth could reach 10.1% in 2023, which is 107.3% of the level of 2019. For 2024 a Nominal GDP growth is projected at 4.6%, which is 112.3% of the level of 2019.

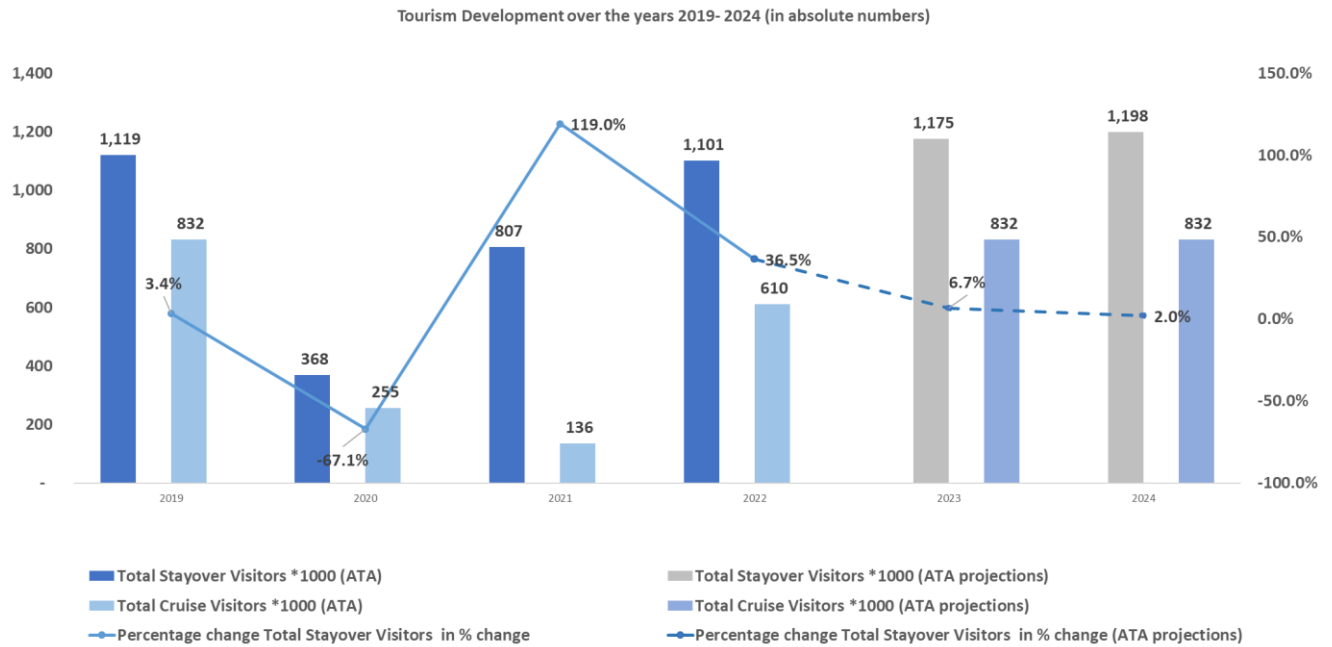
In the baseline, DEACI has adjusted the electricity price as per May 2023, compared to the Outlook dated October 2022. This after the announcement by the government that energy prices will be reduced by 7.1 percent.

Export

It is expected that the tourism industry will continue to develop positively thanks to the promotion of the Aruba Tourism Authority (ATA) and other key stakeholders in the core business of the tourism sector. A continuous increase in the number of tourists is forecasted for the years 2023 and 2024. In this outlook 1,174,891 TSV is forecasted in 2023 and in 2024 TSV is forecasted to achieve 1,198,389 TSV, which is 107.1 percent of the level of 2019 (Commission Macro Model, March, 2023). See graph 3.

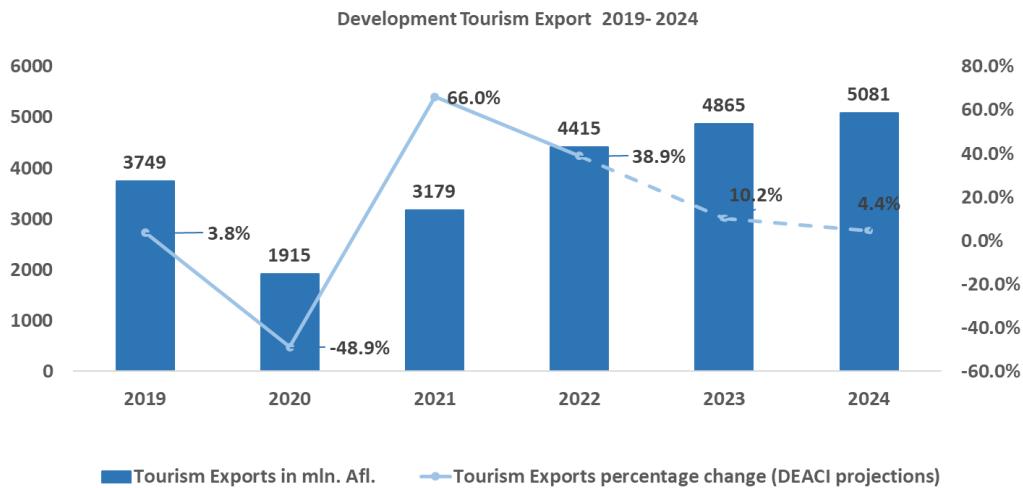
Subsequently an increase in the number of TCV is forecasted for the years 2023 and 2024. TCV is expected to total 832,001 in 2023 and in 2024, which is 100.0 percent of the level of 2019 (The Aruba Tourism Authority, March 2023). See graph 3.

Graph 3: Development Tourism 2019- 2024



Graph created by DEACI using the MARUBA Model, May 2023

Graph 4: Development Tourism Exports 2019- 2024



Graph created by DEACI using the MARUBA Model, May 2023

Not only the quantity of tourism has been gradually increasing since 2019, but the average spending per tourist per night has also shown an increase. The main driver of the expected growth in 2023 compared to 2022 is an increase in ET by 10.2 percent as shown in graph 4. For 2024, an ET growth is expected of 4.4 percent compared to 2023.

The main contributor for the higher expenditure per night is a higher projected ADR and non-accommodation expenditures for 2023 and 2024 compared to 2019.

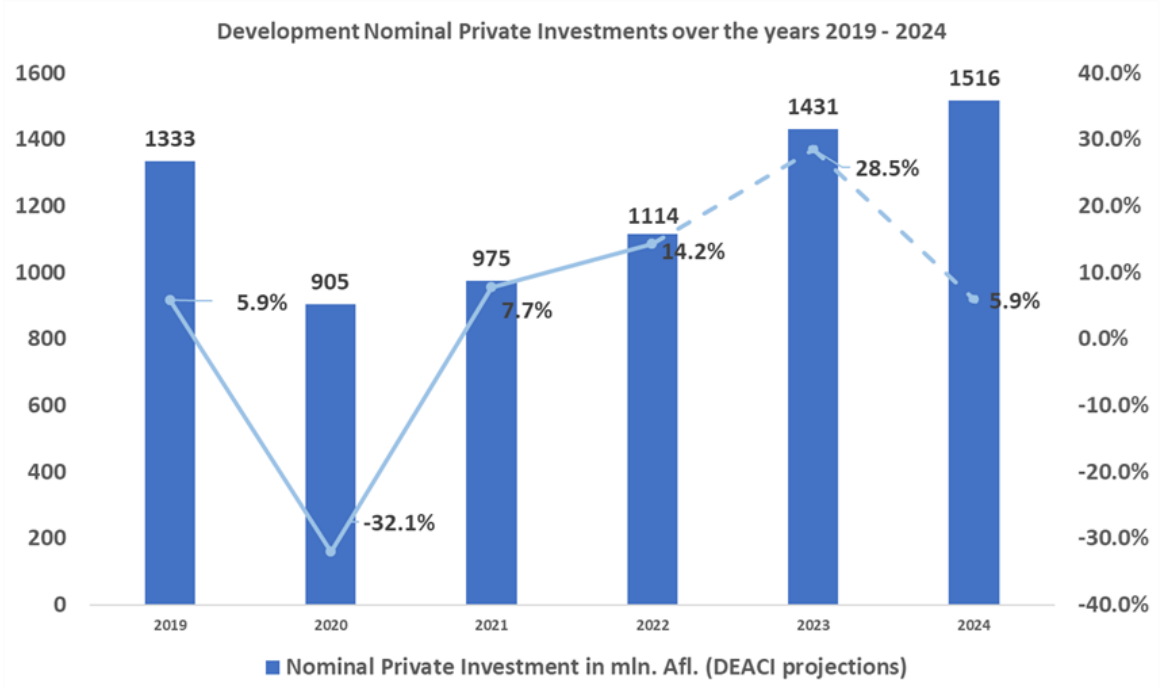
The assumption is that the ADR is projected to grow by approximately 10.0 percent in 2023 compared to 2022 and in 2024, the same level as 2023.

Finally, the total Export of Goods and Service (EGS) is expected to grow in 2023 by 10.0 percent compared to 2022 and for 2024 a

growth of 4.4 percent (see Annex B). Note that in 2022, this growth is due to more tourism, that result in more tourism revenue. In chapter 4 the real components are presented.

Investment

Graph 5: Development Nominal Private Investments over the years 2019- 2024



Graph created by DEACI using the MARUBA Model, May 2023

Another driver is Private Investment (PI) which is expected to rise in 2023 by 28.5 percent, that is 107.4 percent of the level of 2019. It is expected that the investments that were on hold in recent years, due to the pandemic, are expected to pick up in 2023 and in 2024. In addition, some large projects are underway, mainly in the hotel sector, that

will have an impact on private investment for the next two years.

Finally, the pickup in the tourism sector will keep having a spin off effect and will keep resulting in more economic activities. For 2024, a PI is forecasted to grow by 5.9 percent, which is 113.7 percent of the level of 2019. See graph 5.

The assumption regarding PI is that in the years 2023 a 50 percent risk factor for planned projects has been calculated for those projects that does not show any progress as per 2022. The assumption regarding PI for the year 2024 is a risk factor of 50 percent for planned project that as per 2022 and 2023 didn't start constructing yet.

Subsequently Public Investment (PUBI) is projected for 2023 with a growth of 57.5 percent compared to 2022 while a 0.0 percent growth is expected in 2024. For PUBI in 2023 and 2024 an amount of Afl. 20 mln. is budgeted. Additionally, the increase in the budget for Public Investments in 2023 is due to the adjustment of the 2022 realized data for Public Investments, which resulted lower than initially budgeted.

PI is forecasted in 2023 at a 107.4 percent of the level of 2019. For 2024 a PI is forecasted at 113.7 percent of the level of 2019.

Consumption

Total Consumption (TC) shows a growth of 5.2 percent in 2023, which is 102.6 percent of the level of 2019. For 2024, a TC is projected of 1.8 percent, which is 104.5 percent of the level of 2019. See graph 6.

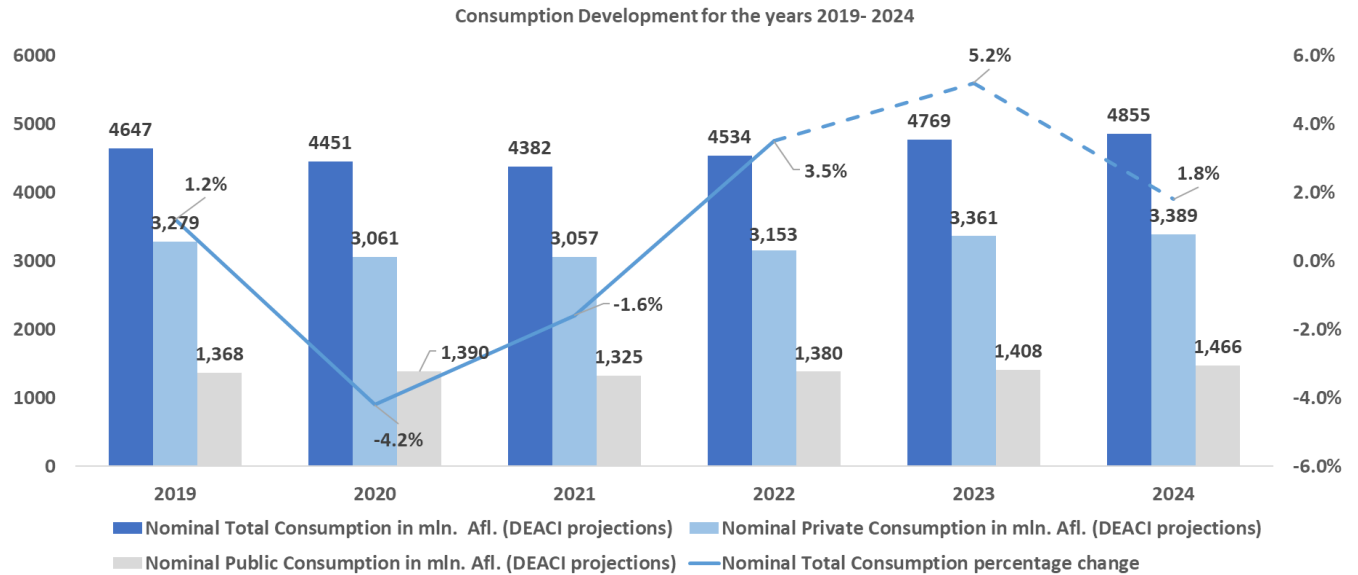
Private Consumption (PC) shows a growth of 6.6 percent in 2023. For 2024, PC is projected to grow by 0.8 percent. In 2023, PC will be at the level of 102.5 percent of 2019 and in 2024 this will be at a level of 103.4 percent.

The influencing factors for 2023 are based on the assumptions that the average wages in the private sector recovered in 2022 to the level of 2019. In 2023 and 2024, the labor market will grow with tourism and investments development and average wages will grow with the wage rate.

Subsequently for Public Consumption (PUBC) for 2023 is projected an increase of 2.0 percent compared to 2022 and a growth of 4.1 percent in 2024. This is related to the public sector's wage adjustment at the pre-pandemic level and the inflation growth that is related to the goods and services expenses for the upcoming year(s).

PC is forecasted in 2023 at 102.5 percent of the level of 2019. For 2024 a PC is forecasted at 103.4 percent of the level of 2019.

Graph 6: Development Consumption over the years 2019- 2024



Graph created by DEACI using the MARUBA Model, May 2023

Import of Goods and Services

Tourism has been the main source of income for Aruba since the nineties. This has created a correlation between an increase in tourism consumption and the increase in imports. The higher the dependency on tourism, the higher the dependency on IGS. The IGS shows a growth of 9.7 percent in 2023, which is 22.5 percent higher compared to the level of 2019. For 2024, an IGS is expected to

increase with 2.2 percent, which is 25.1 percent higher compared to the level of 2019. These growths are mainly driven by the high imported inflation due to international price developments, the increasing demand

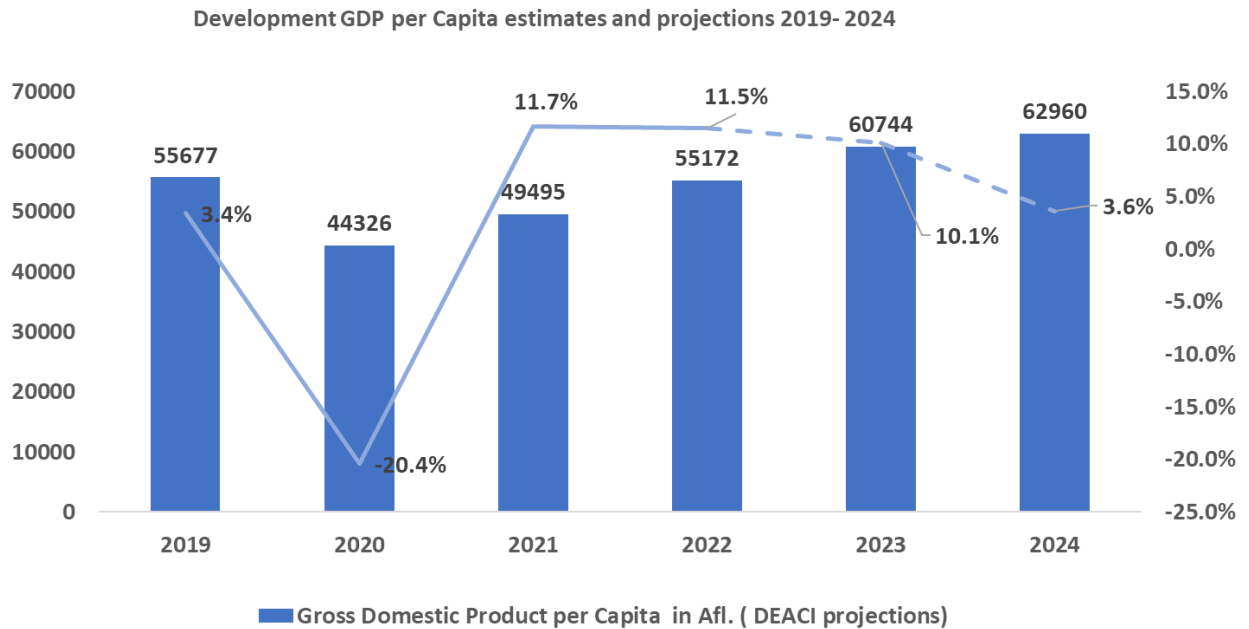
in the tourism industry and the increase in private investments.

For this outlook the inflation for the baseline for the year 2023 is 4.4 percent and in 2024 it is projected at 3.2 percent. This assuming a 1.0 percent increase in 7.0 percent BBO as per January 2023, a decrease of 7.1 percent in electricity prices, a slight increase due to the introduction of the BBO at the border as per June 2023, foreign prices developments and based on updates of the latest data of the CBS (March 2023).

GDP per Capita

Finally, the GDP per Capita in nominal terms shows a growth of 10.1 percent in 2023 and 3.6 percent in 2024. Graph 7 shows the estimated GDP per Capita development since 2019 in nominal terms.

Graph 7: Development GDP per Capita estimates and projections 2019- 2024



Graph created by DEACI using the MARUBA Model, May 2023

SCENARIO'S OUTLOOK 2024



Chapter 3: Scenario A and scenario B

In addition to having a baseline, two other scenarios are presented for the year 2024. Regarding the geopolitical developments and in particular global inflation, it has been decided to present two scenarios in which scenario A represents a positive scenario and scenario B a conservative scenario. See Annex D, for the scenario's assumptions for the year 2024.

The positive scenario:

Scenario A: The assumption is that TSV will have a growth of 5.0 percent compared to the year 2023. This will be 110.3 percent of the level of 2019. The TCV will be equal to the amount of TCV in the year 2019. For this scenario, we forecast a nominal GDP growth of 5.9 percent, which is 13.7 percent higher compared to the level of 2019 (see Table 1).

The conservative scenario:

Scenario B: The assumption is that the global inflation will affect the Aruban prices and this could affect the tourism flow.

The assumption is that TSV will have a decrease of 1.0 percent compared to the year 2023. The TSV in 2024 will be at 104.9 percent of the level of the year 2019 and the TCV at 100.0 percent of the level of 2019. For this scenario, a nominal GDP growth of 3.3 percent is projected. This represents 100.9 percent of the level of 2019.

Table 1: Economic Outlook 2023 – 2024, including scenario A and scenario B.

Economic Outlook May 2023				Scenario A: Optimistic	Scenario B: Conservative
Nominal (in %)	Estimate 2022	Projection 2023	Projection 2024	Projection 2024	Projection 2024
Inflation (%)	5.5	4.4	3.2	3.2	3.2
GDP at market prices (In M. Afis)	5927	6526	6828	6912	6744
GDP at market prices (%)	11.4	10.1	4.6	5.9	3.3
Private consumption (%)	3.2	6.6	0.8	0.9	0.8
Public consumption (%)	4.2	2.0	4.1	4.1	4.1
Total consumption (%)	3.5	5.2	1.8	1.8	1.8
Private investments (%)	14.2	28.5	5.9	5.9	5.9
Public investments (%)	-18.6	57.5	0.0	0.0	0.0
Total investments (%)	13.7	28.8	5.8	5.8	5.8
Exports Goods and Services (%)	35.4	10.0	4.4	6.7	2.0
<i>Export (tourism) (%)</i>	38.9	10.2	4.4	7.2	1.7
Imports Goods and Services (%)	26.6	9.7	2.2	3.1	1.2
Tourism					
Total Stayover Visitors (number *1000)	1101	1175	1198	1234	1163
Total Cruise Passengers (number *1000)	610	832	832	832	832
Export from Tourism(In M. Afis)	4415	4865	5081	5214	4949

Table created by DEACI using the MARUBA Model, May 2023

According to the calculations of the different scenarios, the GDP is expected to be between an increase of 3.3 percent (scenario B) and an increase of 5.9 percent (scenario A).

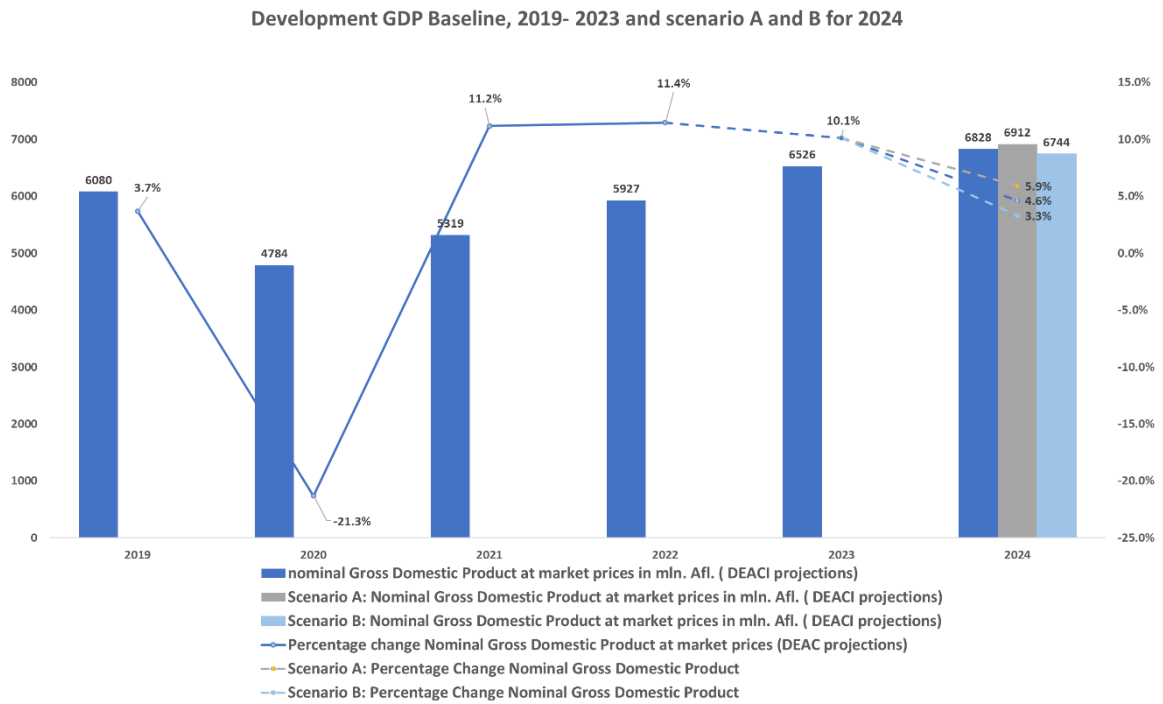
Regarding the inflation, this will be 3.2 percent for the year 2024.

Changes are mainly seen in the ET with an expected increase of 1.7 percent (scenario B) and an increase of 7.2 percent (scenario A), subsequently EGS will fluctuate between an increase of 2.0 (scenario B) percent and an increase of 6.7 percent (scenario A).

The IGS will also fluctuate between an increase of 1.2 percent (scenario B) and an increase of 3.1 percent (scenario A). This growth in scenario A is the consequence of the forecasted performance of the tourism industry.

Graph 8 shows the estimated and forecasted development in the nominal GDP from 2019-2024 and the different scenarios for 2024. Note, once more that we are very prudent with the projections due to the unpredictable medium- and short-term factors related to the international- and national developments.

Graph 8: Development GDP Baseline 2019-2024 and scenario A and B for 2024



Graph created by DEACI using the MARUBA Model, May 2023

REAL GDP 2023



Chapter 4: Real GDP 2023

Since the COVID-19 and Russian invasion of Ukraine, food and energy costs have risen worldwide. This worldwide inflation, especially its impact on Aruba, makes it necessary for the Department of Economic Affairs, Commerce and Industry (DEACI) to publish the Real Gross Domestic Product (real GDP) in addition to the Nominal Gross Domestic Product.

In the last published outlook in October 2022, DEACI has published GDP in real terms, although DEACI is still waiting for the official deflator from the National Accounts.

Table 2 shows that the real GDP and its components are estimated to grow less than in nominal terms, due to the high inflation for the years 2022 and 2023.

The real GDP will increase by 7.7 percent and by 3.3 percent in 2022 and 2023, respectively. This positive growth in 2022 is related to an increase in PI and the performance of the tourism sector. The performance of the tourism sector is measured by ET and EGS, which show positive developments in both years.

In 2022, a negative development can be observed for PC. This indicates that a loss of purchasing power is estimated among consumers in 2022.

Subsequently, the real figures show an estimated increase in the IGS. This increase is attributed to an increase in volume that is related to the demand in the tourism industry.

In 2023, a growth is expected in real terms. The real figures show a GDP growth of 3.3 percent. Real growth is expected in some components of GDP like PC, TI, EGS and IGS. The growth in TI is related to the ongoing big investments especially in the hotel sector. The increases of EGS and IGS is related to the performance of the tourism industry.

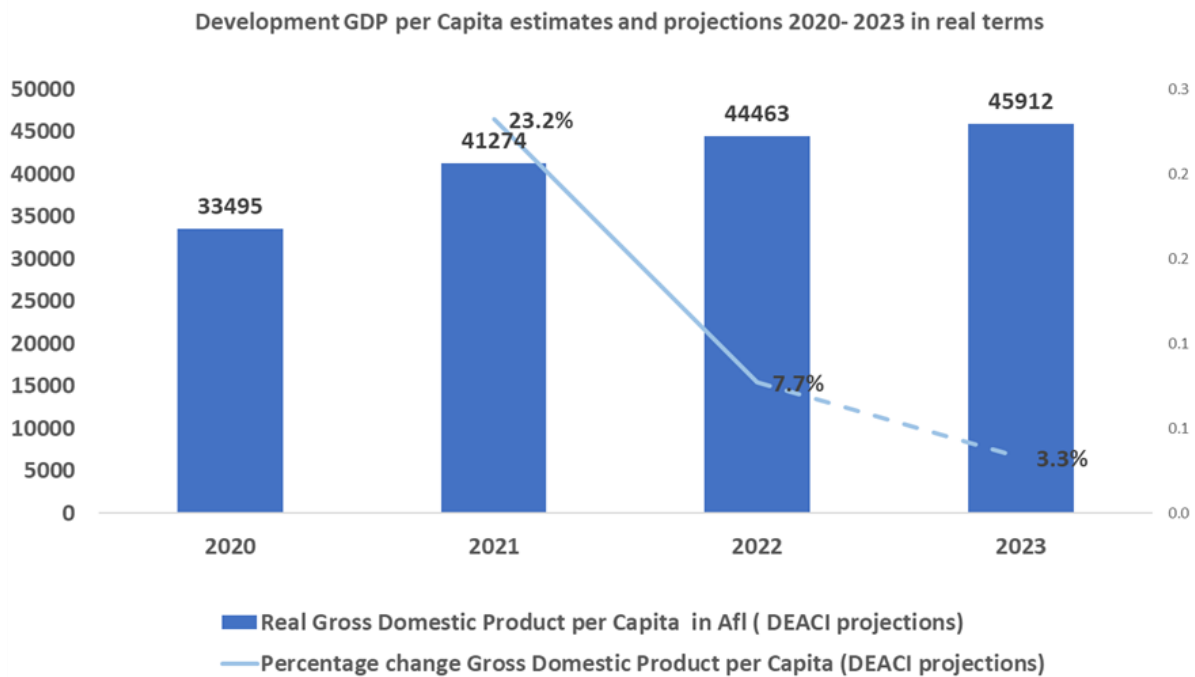
Finally, the GDP per Capita in real terms shows a growth of 7.7 percent in 2022 and 3.3 percent in 2023. Graph 9 shows the estimated real GDP per Capita development since 2020.

Table 2: Real GDP developments vs. Nominal GDP developments

Economic Outlook May 2023				
	Estimate 2022	Projection 2023	Estimate 2022	Projection 2023
	<i>Nominal</i>	<i>Nominal</i>	<i>Real</i>	<i>Real</i>
GDP	11.4	10.1	7.7	3.3
Private consumption (%)	3.2	6.6	-2.2	2.1
Public consumption (%)	4.2	2.0	4.2	-3.2
Total consumption (%)	3.5	5.2	-0.8	0.9
Private investments (%)	14.2	28.5	7.4	23.8
Public investments (%)	-18.6	57.5	-23.4	51.7
Total investments (%)	13.7	28.8	6.9	24.1
Export Goods and Services (%)	35.4	10.0	22.3	4.8
<i>Export (tourism) (%)</i>	38.9	10.2	24.2	4.8
Imports Goods and Services (%)	26.6	9.7	12.6	7.5

Table created by DEACI using the MARUBA Model, May 2023

Graph 9: Development GDP per Capita estimates and projections 2020- 2023 in real terms



RISK FACTORS FOR OUTLOOK 2023- 2024



Chapter 5: Risk factors for Outlook 2023– 2024

The ongoing war in Ukraine between Russia that began in February 2022, resulting in higher global inflation, slowdown in China's supply chain (still an after-effect of the COVID-19 pandemic), increased energy costs, disrupted trade, the exodus of war victims to neighboring countries, and food shortages have a major impact on world economies, including Aruba.

Inflation

Inflation has become one of the main concerns of the world economy. The reasons for the inflationary pressures stem from the increase in energy prices due to the war and disruption of supply chains that has persisted since the pandemic. The war between Ukraine and Russia has greatly contributed to the increase in prices of food, energy and commodities. The uncertainty surrounding this war continues and this is still a risk to our economic developments since we import almost everything.

Cost of living

A threatening decline in purchasing power as a result of more expensive goods and services at a national and international level represents a risk for to local economic development. Last year we saw an increase in the "period average percentage change in CPI" (in 2022 it was 5.5 percent). For 2023, we continue to estimate an increase given

the international price developments, particularly in the US and the Netherlands. In 2022, transport (gas oil and diesel), housing (water and electricity), food and non-alcoholic drinks (food) have affected the CPI.

Fiscal reforms

There is still uncertainty about the different fiscal reforms to be implemented in 2023, so it is still not clear what effect this may have on the private consumption. A clear government communication strategy that provide explanations of the changes and the main objective to be achieved, especially to companies and also the public is important for the smooth implementation of the different components that need to be implemented.

Labor market

In the private sector, it seems to be a challenge to get workers in the different sectors particularly for the hospitality industry, but also all businesses across the board. There are many vacancies, including many hotels under construction, which will provide more employment opportunities and needs. This can result in more immigration or higher wages offered, which can have an effect on the cost of doing business for companies.

Hotel projects and expansions

The construction projects in the hotel sector, where 4 hotels will be added in the coming years (2023-2025), pose a risk for the social - and ecological (environmental) aspect on our island. Pressure is being exerted on the environment that affects our carrying capacity of our island. Hotels will also compete with each other for workers or more workers will have to be recruited from abroad, which will also put pressure on our social sector and expenses. The present Economic Model is no longer sustainable.

Bubali Plas: Sewer Water Treatment plan

Possible delays in the execution of upgrading the RWZI could have a negative impact on the experience of tourists visiting the island

Tax Reforms

Not included in this outlook are the changes in import tariffs that is intended to be introduced in June 2023 simultaneously, with the introduction of the turnover tax at the border. Currently, the government is working on the implementation of the import duty reform. This is why the DEACI has not included the new import tariffs in the calculation of this outlook.

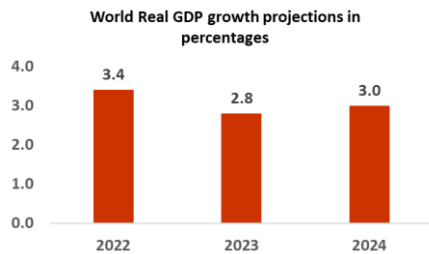
GLOBAL ECONOMY



Chapter 6: Global Economy

According to the International Monetary Fund, IMF (WEO, April 2023), the Global GDP growth is 3.4 percent in 2022, following by a 2.8 percent increase in 2023 and 3.0 percent in 2024 (see graph 8). The projected global economy is growing but below the historical average of 3.8 percent (2000-2019).

Graph 8: IMF World Real GDP projections

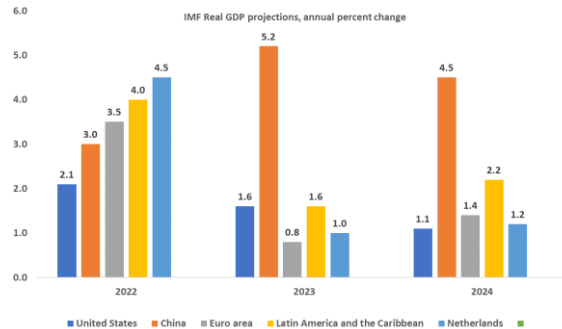


Graph created by DEACI using the IMF WEO April 2023, April 2023

The influences on the world growth in 2022 were, debt levels, commodity prices increase related to the war of Russia and Ukraine, the outbreak of COVID19 in China and geopolitical tensions. These influences will continue to have its impact on the global economy.

In 2023 global growth is mainly weighed down by Russia’s aggression in Ukraine, global financing conditions, the global inflation and the geo-economic fragmentation. The advanced economies are expected to see a growth slowdown from 2.7 percent in 2022 to 1.3 percent in 2023. Which is a dropped of 1.4 percent. For 2024 a growth of 1.4 percent is expected.

Graph 9: IMF Real GDP projections



Graph created by DEACI using the IMF WEO April 2023, April 2023

For the USA that has a direct impact on the Aruban economy, the real GDP is expected to increase by 1.6 percent in 2023. In 2024 a growth of 1.1 percent is projected (see graph 9). China in turn is also growing by 5.2 percent in 2023 and 4.5 percent in 2024.

For the European area, real GDP is expected to grow in 2023 by 0.8 percent and 1.4 percent in 2024.

Latin America and the Caribbean is projected to grow by 1.6 percent in 2023 and 2.2 percent in 2024.

Global Inflation

Inflation has become one major concerns for the global economy. The reasons for the inflationary pressures stem from increase in energy prices due to the war and the disruption of the supply chains.

It is expected that inflation will come down slowly but will not reach its target before 2025 according to the IMF.

The Central banks are tackling inflation by using monetary policy to achieve price stability

Due to the high socio-financial-economic nexus between nations, the impact of the supply chains disruption and the Ukrainian war will be felt by all nations, particular rising costs are driving low-income communities deeper into poverty.



According to the IMF, the world inflation is projected at 7.0 percent in 2023, and 4.9 percent in 2023 (WEO, April 2023).

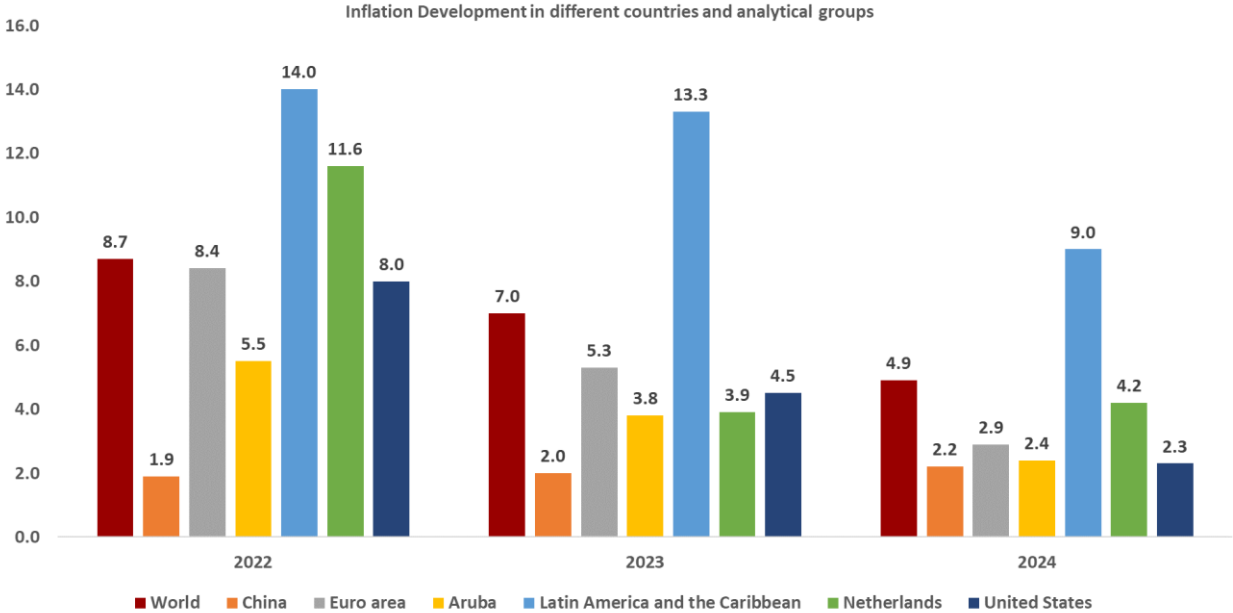
The U.S. inflation is expected to be 4.5 percent in 2023 and for 2024 the inflation is estimated at 2.3 percent (WEO, April 2023).

The Netherlands inflation is expected to be 3.9 percent in 2023 and 4.2 percent in 2024 (WEO, April 2023).

Latin America and the Caribbean inflation is expected to be at 13.3 percent for 2023 and 9.0 percent for 2024 (WEO, April 2023).

According to the IMF, the inflation for Aruba is projected at 3.8 percent in 2023 and 2.4 percent in 2024. (WEO, April 2023). See table 10.

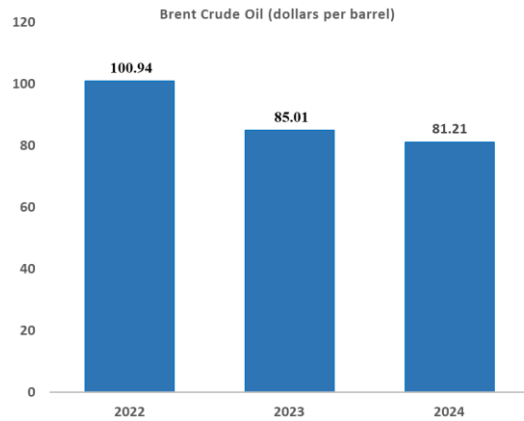
Graph 10: Inflation Development in different countries and analytical groups



Graph created by DEACI using the IMF WEO October 2022, April 2023

Oil Prices

Graph 11: Brent Crude Oil (dollars per barrel)



Graph created by DEACI using data of the U.S. Energy Information, May 2023, Apr

According to U.S. EIA (Short-term energy outlook, September 2022), the latest data for Brent Crude Oil prices shows an amount of \$70.89 per barrel in 2021. For 2022 and 2023 respectively \$100.94 and \$94.58 per barrel is expected. (In the last outlook the price per barrel was \$102.09 in 2022 and was projected at \$94.58 in 2023).

Energy prices have fallen due to that Europe was able to diversify its energy sources and a

not so strong winter contributed to lower energy demand, which helped kept gas prices low.

The U.S. Economy and the European Area and its impact on the Caribbean Region

The IMF expects for the U.S. a real GDP growth of 2.1 percent for 2022 and for 2023 a growth of 1.6 percent and a growth of 1.1 percent in 2024.

The U.S. market account for approximately 84.4 percent of the tourism industry of Aruba in 2023. (ATA, March 2023, Monthly report). The market-share of the TSV from the Europe visiting Aruba in 2023 is 5.7 percent. (ATA, March 2023, Monthly report). The total arrivals in March 2023 compared to the same period in 2022 has increased by 14.0 percent.

ANNEXES

Annexes

Annex A: CARTAC and the MARUBA Model

DEACI structurally monitors the economy and advises the Minister of Economic Affairs, Communications, Sustainable Development on current and future economic developments. For analyzing purposes, the DEACI uses a macro-economic model tool, the MARUBA model. This MARUBA Model is based on the National Accounts and reflects the functioning of the Aruban economy, and is used to forecast the macro economic developments of Aruba.

In March and April 2021 an additional Technical Assistance mission (after two Technical Assistance missions in 2020) was held by **The Caribbean Regional Technical Assistance Centre (CARTAC)**. CARTAC is one of ten IMF Regional Technical Assistance

Centers (RTACs) located around the world in the Pacific, the Caribbean, in Africa, the

Middle East, India and Central America. These Centers were created to help countries strengthen human and institutional capacity to design and implement sound macroeconomic policies that promote growth and reduce poverty.

The objective of CARTAC 's mission with Aruba was to analyze and review the medium-term projections of the MARUBA model before proceeding to publish these projections. During this mission, proposed recommendations for improvement of the medium-term projection of the model were implemented.

Annex B: Economic Outlook 2022-2023

Table 4: Economic Outlook 2022-2023 October 2022 compared to the Economic Outlook 2023-2024 May 2023

Nominal (in %)	Economic Outlook October 2022			Economic Outlook May 2023		
	Estimate 2021	Estimate 2022	Projection 2023	Estimate 2022	Estimate 2023	Projection 2024
Inflation (%)	0.7	5.6	5.4	5.5	4.4	3.2
GDP at market prices (In M. Afls)	5379	5916	6184	5927	6526	6828
GDP at market prices (%)	16.4	10.0	4.5	11.4	10.1	4.6
Private consumption (%)	3.3	2.1	4.0	3.2	6.6	0.8
Public consumption (%)	-4.9	-2.5	3.1	4.2	2.0	4.1
Total consumption (%)	0.6	0.7	3.7	3.5	5.2	1.8
Private investments (%)	7.7	14.4	7.9	14.2	28.5	5.9
Public investments (%)	-55.0	41.0	-9.1	-18.6	57.5	0.0
Total investments (%)	5.2	14.9	7.6	13.7	28.8	5.8
Export Goods and Services (%)	52.7	34.0	4.7	35.4	10.0	4.4
<i>Export (tourism) (%)</i>	66.0	38.9	4.2	38.9	10.2	4.4
Import Goods and Services (%)	20.3	25.0	4.0	26.6	9.7	2.2
Tourism						
Total Stayover Visitors (number *1000)	807	1110	1175	1101	1175	1198
Total Cruise Passengers (number *1000)	136	666	749	610	832	832
Export from Tourism(In M. Afls)	3179	4415	4602	4415	4865	5081

Table created by DEACI using the MARUBA Model, May 2023

Annex C: Assumptions Outlook 2023-2024

Table 5: Baseline assumptions Outlook 2022-2023 October 2022 compared to Economic Outlook 2023 – 2024, May 2023

Baseline Assumptions 2023-2024			
	2023- Baseline Outlook October 2022	2023- Baseline Outlook April 2023	2024- Baseline Outlook April 2023
Stayover Visitors	105% (2023 vs 2019) 1,174,891 visitors	105% (2023 vs 2019) 1,174,891 visitors	102% (2023 vs 2024) 1,198,389 visitors
Cruise Visitors	90% level (2022 vs 2019) 748,801 visitors	100% level (2023 vs 2019) 832,001 visitors	100% level (2023 vs 2019) 832,001 visitors
Ad-Hoc Investments	Calculation with a 50% risk factor for planned project that as per 2022 didn't start constructing yet	Calculation with a 50% risk factor for planned project that as per 2022 didn't start constructing yet	Calculation with a 50% risk factor for planned project that as per 2022 didn't start constructing yet and for ongoing projects no risk factor
Average Daily Rate Expenditure non- Accomodation Stayover	ADR +3.0 % 2023 vs 2022 Exp. Non accommodation aligned with pre-COVID -19 level average growth trend	ADR +10.0 % 2023 vs 2022 Exp. Non accommodation aligned with pre-COVID -19 level average growth trend	Same level as 2023 Exp. Non accommodation aligned with pre-COVID -19 level average growth trend
Government Expenditure	Multi annual budget	Multi annual budget	MARUBA-model calculation
Labor Market	Labor market will grow with tourism and investments development. Average wages will grow with the wage rate.	Labor market will grow with tourism and investments development. Average wages will grow with the wage rate.	Labor market will grow with tourism and investments development. Average wages will grow with the wage rate.

Table created by DEACI using the MARUBA Model, May 2023

Annex D: Assumptions Scenario A and scenario B for the year 2024

Table 6: Scenarios 2024 Assumptions Economic Outlook 2023-2024, May 2023

	Scenario A: Positive	Scenario B: Conservative
	Projection 2024	Projection 2024
Inflation	3.2	3.2
Stayover Visitors	5.0 % growth (2024 vs 2023)	-1.0 % (2024 vs 2023)
Cruise Visitors	Is the same amount to the year 2023 832,001	100% level (2024 vs 2019) 832,001

Table created by DEACI using the MARUBA Model, May 2023

