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A note to the reader

The following report presents the price statistics for September 2019.

- As of January 2017, the expenditure weights will be based on the Household Expenditure Survey held by the CBS during the months of May to June of 2016. In order to calculate consistent annual rates of change, the CPI has to be calculated retrospectively for 2 years. Therefore, June of 2019 has been chosen as the new base period for the CPI. Subsequently, the CPI figures for 2017, 2018 and 2019 have been revised accordingly.
- At the end of September 2019 the Consumer Price Index (CPI) shows an increase of 0.2% compared to the end of August 2019. The sector which affected the CPI the most was “Transport” (-1.8%), which led to an effect of -0.23 percentage points (ppts) on the Δ CPI of September 2019 (0.2%).
- Compared to September 2018 the CPI increased by 4.4%. The sector which affected the CPI the most was “Food and non-alcoholic beverages” (15.5%). Specifically, the prices of “Food” (16.3%) registered an increase and caused an effect of 2.32 ppts on the end of period inflation of September 2019 (4.4%).
- The period average inflation for the period September 2018 - September 2019 is 4.1%, which is 1.8 ppts higher compared to the period average inflation for the period September 2017 - September 2018 (2.3%).
- Utilities (Water and Electricity) did not register price changes in September 2019. The price of gasoline registered a decrease of 4.9% in September 2019 and caused an effect of -0.23 ppts on the Δ CPI of September 2019. The price of diesel registered a decrease of 2.5% in September 2019 and had an effect of -0.01 ppt on the Δ CPI of September 2019.

This report is divided in 7 sections. An overview of the monthly percentage changes in the CPI and index per sector is presented in section 1. Section 2 provides the yearly percentage changes in the CPI and index per sector. The development of indices of main sectors and utilities is outlined in section 3. Section 4 presents the percentage change in the CPI of Aruba’s major trading partners and compares the CPI of Aruba and the USA. Section 5 presents an overview of the monthly and yearly percentage changes of the core inflation. Section 6 presents the price movements in food & catering services. The development of the subsistence level is presented in section 7 and is followed by the appendices.

For other specific information contact us at CBS or visit www.cbs.aw.

1 Monthly change of the CPI

1.1 CPI and Inflation

The CPI of the total population of Aruba for the month of September 2019 is 100.00; an increase of 0.2% compared to the CPI of August 2019 (99.80). An overview of the percentage change in the CPI (Δ CPI) for different periods during 2018 and 2019 is shown in Table 1. The terms percentage change in the CPI and “inflation” (deflation) are considered similar and are used interchangeably. The inflation over the last 12 months (end of period inflation) is 4.4%, while the inflation over a period of 24 months (period average inflation) is 4.1%.

Table 1: Overview of Δ CPI

Period		% Changes		Index	
		2019	2018	Current	Last
Monthly	Aug - Sep	0.2	-0.2	100.00	99.80
Year-to-date	Dec - Sep	3.4	3.5	100.00	96.67
Last 12 months ¹	Sep - Sep	4.4	4.7	100.00	95.77
Last 24 months ²	Sep - Sep	4.1	2.3	98.09	94.25

Source: Central Bureau of Statistics Aruba

¹ End of period inflation

² Period average inflation

Figure 1 depicts the monthly Δ CPI over a period of one year starting from September 2018, whereas the Δ CPI for the month September for the years 2010 to 2019 is illustrated in Figure 2.

1.2 Changes in sector

Figure 3 provides an overview of the percentage changes for the indices per sector for September 2019. The percentage change in index is further denoted as Δ I. The largest Δ I is observed for the sector “Clothing and footwear” with an increase of 5.5%.

1.3 Changes in categories and subcategories

The largest positive and negative Δ I is seen in the categories “Household appliances” (18.0%) and “Health products and services n.e.c.” (-19.8%). In the “Food and non-alcoholic beverages” sector a decrease of 0.4% is observed for the category “Food”, while the category “Non-alcoholic beverages” registered an increase of 0.9% in September. In the “Transport” sector the major Δ I is observed for the category “Transport services” (7.5%), mainly caused by an increase in “Plane tickets” (12.2%). In the “Recreation and culture” sector the major Δ I is observed for the category “Holidays” (5.4%)¹.

The categories which influenced the CPI calculation the most are “Operation of personal transport equipment”, “Household appliances” and “Clothing”, which had an effect of respectively, -0.26, 0.21 and 0.11 ppts on the Δ CPI. Reference is made to tables 16 and 17 in Appendices 1 and 2. Table 16 provides an overview

of the indices for the months September 2018, December 2018, August 2019 and

September 2019 together with corresponding weights per sector and the monthly, year-to-date (ytd), end of period and period average percentage changes for September 2019. In table 17 an overview of the effect on the monthly, year-to-date (ytd), end of period and period average CPI per sector and category for September 2019 is presented. The course of indices for 2010 – up to September 2019 is illustrated in Appendix 5.

Figure 1: Monthly Δ CPI, 2018 - 2019

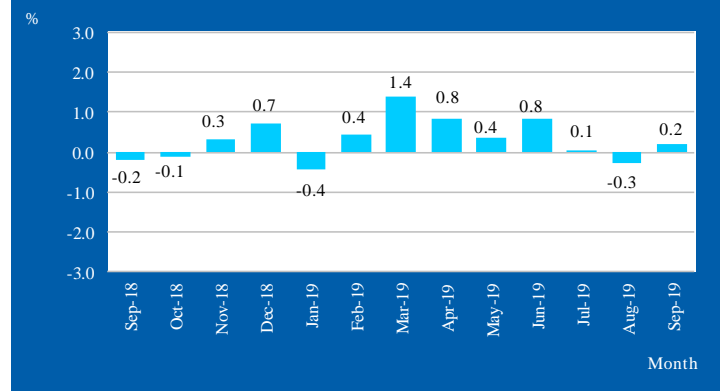


Figure 2: Monthly Δ CPI for September, 2010 - 2019

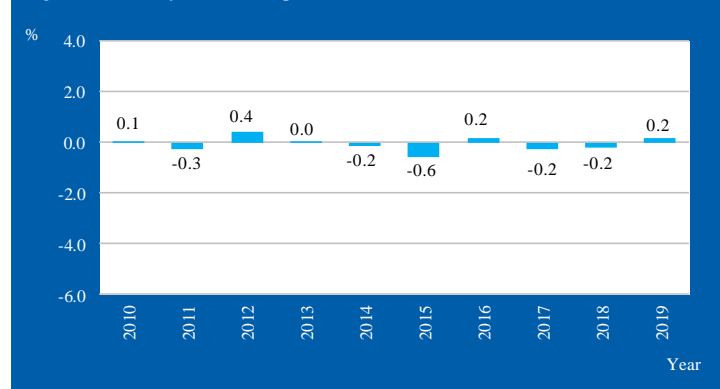
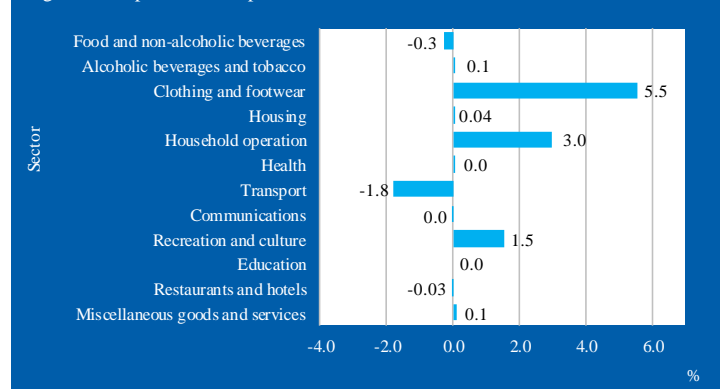


Figure 3: Δ I per sector, September 2019



¹ The focus is on the four major sectors which are: Housing, Transport, Food and non-alcoholic beverages and Recreation and culture. Together these sectors form 64% of the total weight of the basket of goods and services.

2 End of period change of the CPI

2.1 End of period change CPI for September 2019

The CPI increased from 95.77 in September 2018 to 100.00 in September 2019, an increase of 4.4%. This Δ CPI is the second highest registered over a period of 5 years for the month September, and is 0.3 ppts lower than the Δ CPI registered in 2018 (4.7%) (see table 2).

Table 2: End of period Δ CPI for September, 2015 - 2019

Period	Δ CPI	Index
2014-2015	0.3	93.60
2015-2016	-0.7	92.96
2016-2017	-1.6	91.45
2017-2018	4.7	95.77
2018-2019	4.4	100.00

Source: Central Bureau of Statistics Aruba

2.2 Changes in sector

An overview of the percentage change per sector over the period September 2018 - September 2019 is presented in table 3. The largest Δ I is observed for the sector "Food and non-alcoholic beverages" with an increase of 15.5%. Furthermore, increases of 14.7%, 8.1% and 8.0% are observed for the "Alcoholic beverages and tobacco", "Clothing and footwear" and "Communications" sectors, respectively. A comparison of the Δ I's for the years 2018 and 2019 is provided in figure 4.

Table 3: Percentage change for September, 2018 - 2019

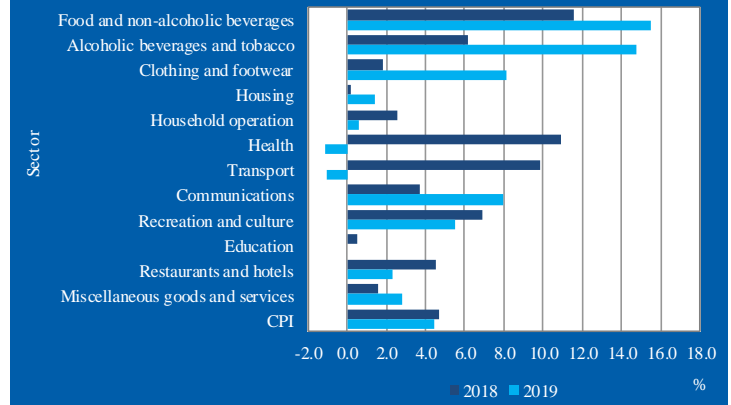
Sector	% Change
Food and non-alcoholic beverages	15.5
Alcoholic beverages and tobacco	14.7
Clothing and footwear	8.1
Housing	1.4
Household operation	0.6
Health	-1.1
Transport	-1.0
Communications	8.0
Recreation and culture	5.5
Education	0.0
Restaurants and hotels	2.4
Miscellaneous goods and services	2.8
CPI	4.4

Source: Central Bureau of Statistics Aruba

2.3 Changes in categories

The largest positive and negative Δ I in categories observed over a period of one year are respectively, "Holidays" (24.5%) and "Audio-visual, photographic and information processing equipment" (-20.7%). For an overview of the end of period percentage changes per category refer to table 16 in Appendix 1.

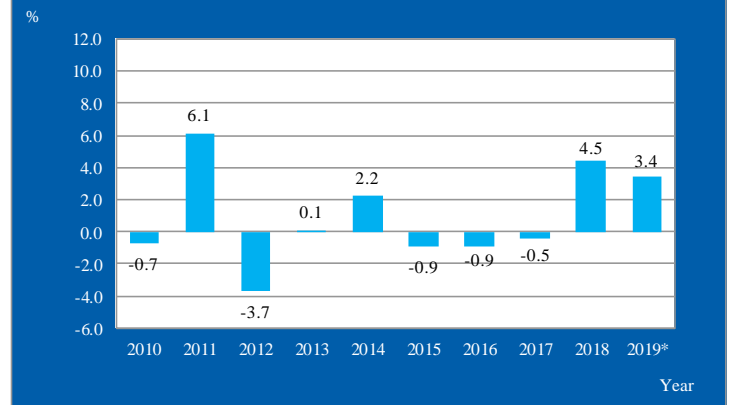
Figure 4: Δ I per sector for September, 2018 - 2019



2.4 End of year change CPI 2010 - 2019

The end of year Δ CPI for the period 2010 - 2019 is shown in figure 5. The Δ CPI for 2019 is calculated by comparing the CPI of September 2019 with the CPI of December 2018. At the end of each year, the end of year percentage change equals the ytd Δ CPI. The ytd Δ CPI for September 2019 is 3.4%.

Figure 5: End of year Δ CPI 2010 - 2019



*ytd

2.5 Period average change CPI for September 2019

The period average change CPI (Δ ACPI) for September 2019 is 4.1%. Table 4 provides an overview of the Δ ACPI for the month September for the years 2015 to 2019. The Δ ACPI for 2019 increased by 1.8 ppts compared to 2018 (2.3%).

Table 4: Overview of Δ ACPI for September, 2015 - 2019

Period	Δ ACPI	Index
2014-2015	1.1	93.89
2015-2016	-1.0	92.93
2016-2017	-0.8	92.15
2017-2018	2.3	94.25
2018-2019	4.1	98.09

Source: Central Bureau of Statistics Aruba

3 Development of indices of main sectors and utilities

3.1 Indices main sectors

The four major sectors, “Housing”, “Transport”, “Food and non-alcoholic beverages” and “Recreation and culture”, constitute 64% of the total weight of the basket of goods and services, which are observed on a monthly basis. An overview of the course of indices for 2010 – up to September 2019 per sector and for the CPI is provided in figures 9-1 to 9-12 in Appendix 5.

Changes in the indices of the sectors “Housing” and “Transport” are mainly the result of changes in the international oil prices and prices of utilities during the respective months. The development of crude oil, fuel surcharge, electricity, water, gasoline and diesel prices is provided in table 5 and in the adjoining figures 6-1 and 6-2.

Table 5: Prices of utilities, gasoline and diesel, 2018 - 2019

Month	Crude oil per barrel ¹	Total energy charge ²		Electricity ³	Water ⁴	Gasoline ⁵	Diesel ⁵
		≤ 500 kWh	501-1000 kWh				
Sep-18	70.15	34.52	35.72	265.65	137.05	215.90	185.00
Oct-18	71.44	34.52	35.72	265.65	137.05	216.40	190.10
Nov-18	57.91	34.52	35.72	265.65	137.05	214.60	194.20
Dec-18	49.09	34.52	35.72	265.65	137.05	199.40	181.00
Jan-19	50.65	34.52	35.72	265.65	137.05	188.50	165.10
Feb-19	54.45	34.52	35.72	265.65	137.05	189.40	170.20
Mar-19	57.84	34.52	35.72	265.65	137.05	197.70	177.30
Apr-19	63.89	34.52	35.72	265.65	137.05	197.70	181.10
May-19	60.89	34.52	35.72	265.65	137.05	209.50	185.00
Jun-19	54.66	34.52	35.72	265.65	137.05	209.50	183.70
Jul-19	57.28	34.52	35.72	265.65	137.05	208.00	174.20
Aug-19	55.17	34.52	35.72	265.65	137.05	215.10	177.20
Sep-19	57.03	34.52	35.72	265.65	137.05	204.50	172.80

Source: Central Bureau of Statistics Aruba

¹ Average West Texas Intermediate (WTI) crude oil price per barrel in US\$ (Source: U.S. Energy Information Administration)

² Total energy charge in Afl. cents per kWh

³ Electricity price in Afl.

⁴ Water price in Afl.

⁵ Gasoline and diesel prices in Afl. cents per liter

3.2 Electricity

The price of electricity is determined in Aruban florins (Afl.) for an average usage by households. The average usage is 725.5 kWh per month. The electricity price for an average consumption of 725.5 kWh did not change in September 2019, it remained at Afl. 265.65. Figure 6-1 provides an overview of the course of changes in the electricity price for the period 2011 to 2018.

The total energy charge per kWh for a usage of electricity up to 500 kWh did not change in September 2019, it stayed at Afl. 34.52 cents per kWh. The total energy charge per kWh for a usage of electricity between 501 - 1000 kWh did not change in September 2019, it stayed at Afl. 35.72 cents per kWh.

3.3 Water

The price of water is determined in Afl. for an average usage (water consumption) by households. Figure 6-1 provides an overview of the course of changes in the water price for the period 2011 to 2018. The water price for an average usage by households did not change in September 2019, it remained at Afl. 137.05.

3.4 Gasoline and Diesel

The retail price of gasoline decreased by 4.9% from 215.1 cents per liter in August 2019 to 204.5 cents per liter in September 2019. In September 2019, the retail price of diesel registered a decrease of 2.5% from 177.2 cents per liter in August 2019 to 172.8 cents per liter in September 2019.

Figure 6-1 Electricity price, water price and energy charge in Afl., 2012 - 2019

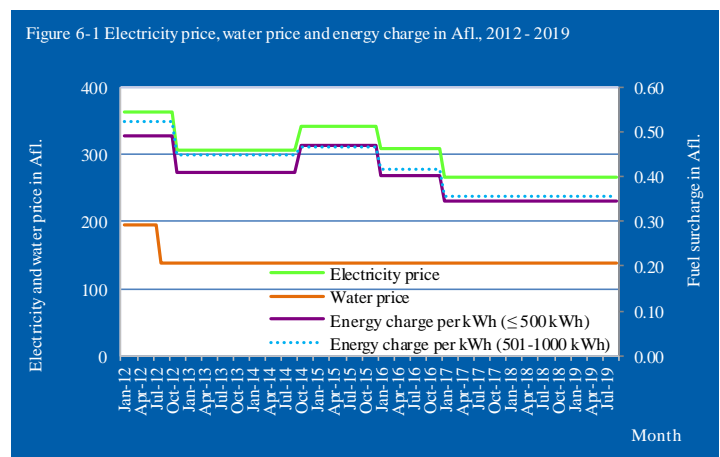
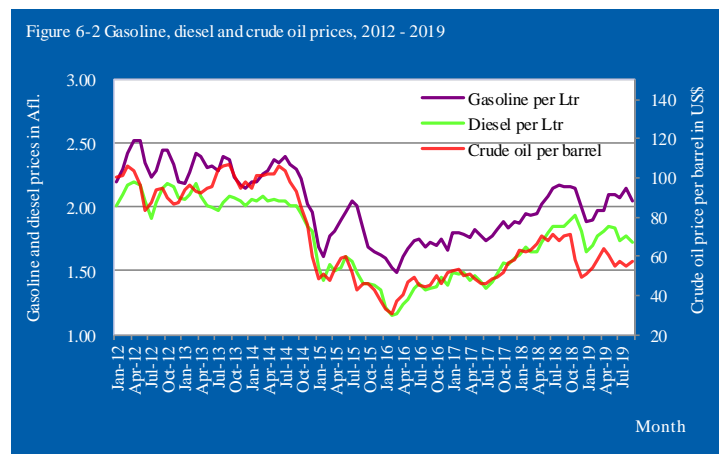


Figure 6-2 Gasoline, diesel and crude oil prices, 2012 - 2019



4 Percentage change CPI of Aruba's major trading partners

4.1 Comparison of the CPI of Aruba and the USA

Table 6 provides an overview of the Δ CPI of Aruba's major trading partners starting from September 2018. In September 2019 the Δ CPI of the USA, Curaçao and the Netherlands were 0.1%, -0.6% and 0.6%.

Table 6: Monthly Δ CPI 2018 - 2019 per Country

Period	Aruba	USA	Curaçao	Netherlands
Sep-18	0.0	0.1	0.3	-0.4
Oct-18	-0.1	0.2	-0.2	0.4
Nov-18	0.5	-0.3	0.4	-0.2
Dec-18	0.3	-0.3	0.6	-0.1
Jan-19	-0.4	0.2	-0.2	0.1
Feb-19	0.6	0.4	-0.5	0.9
Mar-19	0.9	0.6	-0.3	0.4
Apr-19	0.6	0.5	0.8	0.7
May-19	0.4	0.2	0.9	-0.1
Jun-19	0.8	0.0	0.8	-0.1
Jul-19	0.1	0.2	-0.2	1.0
Aug-19	-0.3	0.0	0.2	0.4
Sep-19	0.2	0.1	-0.6	0.6

Source: CBS Aruba, Bureau of Labor Statistics (USA), CBS Curaçao and CBS Netherlands

The USA is considered Aruba's largest trading partner². Table 7 provides an overview of the Δ CPI for Aruba and the USA in September 2019. Aruba's monthly Δ CPI for September 2019 is 0.1 ppt higher than the Δ CPI of the USA.

Table 7: Overview of Δ CPI, 2019

Period	Aruba	USA
Monthly Aug - Sep	0.2	0.1
Year-to-date Dec - Sep	3.4	2.2
Last 12 months ¹ Sep - Sep	4.4	1.7
Last 24 months ² Sep - Sep	4.1	1.9

Source: Central Bureau of Statistics Aruba

¹ End of period inflation

² Period average inflation

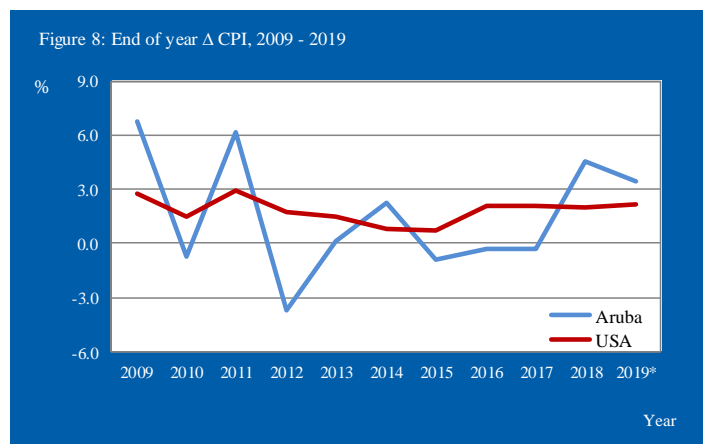
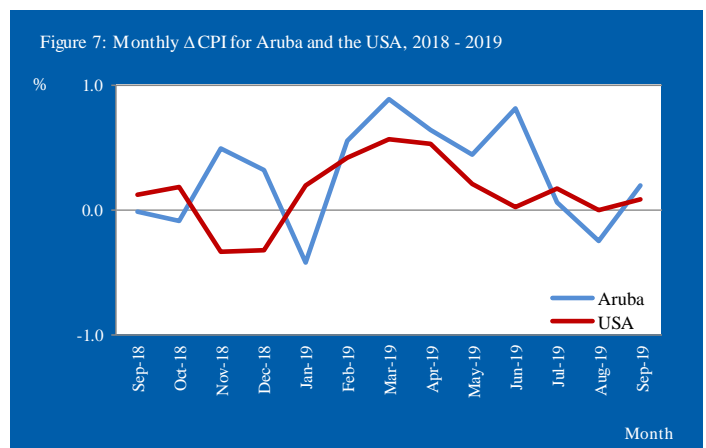
The Δ CPI of Aruba over the last 12 months is 2.7 ppts higher compared to the USA's 12-month Δ CPI. The Δ CPI over the last 24 months for Aruba is 2.2 ppts higher than the Δ CPI of the USA. The monthly inflation for both Aruba and the USA is depicted in figure 7 over a period of one year. Furthermore, an overview of the end of year Δ CPI over the period 2009 - 2019 for Aruba and the USA is provided in table 8 and figure 8.

Table 8: End of year Δ CPI, 2009 - 2019

Period	Aruba	USA
2009	6.8	2.7
2010	-0.7	1.5
2011	6.1	3.0
2012	-3.7	1.7
2013	0.1	1.5
2014	2.2	0.8
2015	-0.9	0.7
2016	-0.3	2.1
2017	-0.3	2.1
2018	4.6	2.0
2019*	3.4	2.2

Source: Central Bureau of Statistics Aruba

* ytd



*ytd

² "55% of Aruba's import by sea and air originates from the USA" (Source: Foreign Trade Statistics Report, 2nd Quarter 2019).

5 Core inflation

5.1 Core inflation

Core inflation is a measure of inflation which excludes certain items that face volatile price movements e.g. food products and energy. By calculating the core inflation these more volatile components are eliminated from the inflation. Core inflation indices serve to assess the mid- and long-term trend of the overall price level. For the purpose of adjusting monetary policy, many economists focus more intently on the core rate of inflation, as this allows for an in-depth assessment of inflationary processes ongoing in the economy.

5.2 Monthly change of the core inflation

In September 2019 the core inflation (measured over the period September 2018 - 2019) was 2.9%. In September 2019 the food index was 12.7%, while the energy index shows an increase of 0.8%.

Table 9: Monthly inflation¹ and core inflation, 2018 - 2019

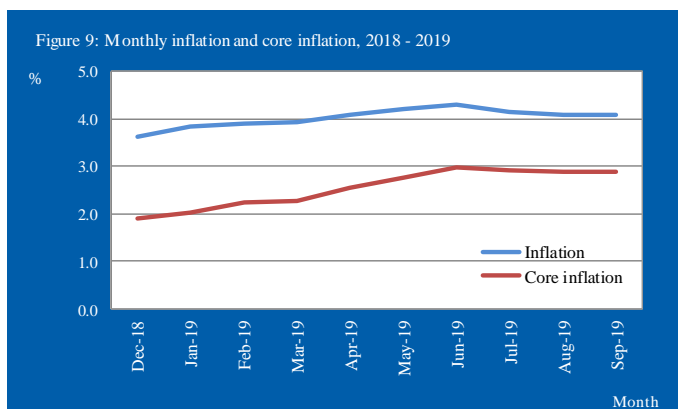
Period	Inflation	Food	Energy ²	Core Inflation
Dec-18	3.6	11.4	3.8	1.9
Jan-19	3.8	12.4	3.7	2.0
Feb-19	3.9	12.1	3.4	2.2
Mar-19	3.9	12.1	3.3	2.3
Apr-19	4.1	12.0	3.1	2.5
May-19	4.2	11.9	2.9	2.8
Jun-19	4.3	12.0	2.5	3.0
Jul-19	4.2	12.1	1.9	2.9
Aug-19	4.1	12.4	1.4	2.9
Sep-19	4.1	12.7	0.8	2.9

Source: Central Bureau of Statistics Aruba

¹ Period average inflation

² Energy : Electricity, water, gasoline and diesel

The monthly inflation and core inflation for Aruba is shown in figure 9 over a period of one year starting from September 2018.



5.3 End of year change of the core inflation, 2014 - 2019

The end of year core inflation of the total population of Aruba for the year 2019 (up to September) is 3.0%, an increase of 1.1 ppts compared to the core inflation of 2018. Table 10 provides an overview of the end of year inflation and core inflation over the period 2014 - 2019.

The end of year inflation and core inflation is presented in figure 10 over the period 2014 - 2019.

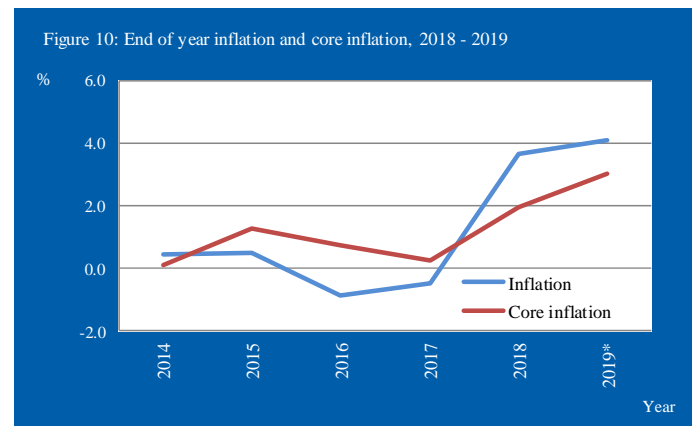
Table 10: End of year core inflation, 2014 - 2019

Period	2014	2015	2016	2017	2018	2019*
Inflation	0.4	0.5	-0.9	-0.5	3.6	4.1
Food	2.2	1.9	-0.1	0.8	12.2	13.1
Electricity	2.9	8.5	-9.9	-14.0	0.0	0.0
Water	0.0	0.0	0.0	0.0	0.0	0.0
Gasoline and diesel	-2.3	-20.1	-7.9	9.2	13.9	2.8
Core inflation	0.1	1.3	0.7	0.3	1.9	3.0

Source: Central Bureau of Statistics Aruba

*current month

Note: the figures for the years 2014-2017 are based on the weights of Dec 2006=100



*current month

Note: the figures for the years 2014-2017 are based on the weights of Dec 2006=100

6 Development of Food & catering services

6.1 Monthly change of Food & catering services for September 2019

The “Food & catering services” index showed a decrease of 0.2% in September 2019, after a decrease of 0.4% in August 2019. The index for “Food at home” showed a decrease of 0.3% in September, as six (6) of the eleven (11) “Food at home” indices decreased in September 2019. The “Vegetables” index registered the largest decrease (-4.0%) in September 2019. Furthermore, decreases were posted in the indices for “Potatoes and other tubers” (-2.1%), “Fruit” (-0.8) and “Fish and other seafood” (-0.7%).

The “Bread and cereals” index registered the largest increase (1.9%) in September 2019. Other increases were registered for the indices of “Oils and fats” (1.0%), “Non-alcoholic beverages” (0.9%) and “Milk, cheese and eggs” (0.7%).

Table 11 provides an overview of the corresponding weights per food group together with the percentage changes and effect for September 2019.

Table 11: Percentage change of Food for September 2019

Food	Weight	% Change	Effect
Food & catering services	1,492.8	-0.2	-0.050
<i>Food at home</i>	1,125.3	-0.3	-0.050
Bread and cereals	205.2	1.9	0.040
Meat	229.8	-0.1	-0.004
Fish and other seafood	56.4	-0.7	-0.004
Milk, cheese and eggs	140.0	0.7	0.012
Oils and fats	31.6	1.0	0.005
Fruit	72.0	-0.8	-0.038
Potatoes and other tubers	18.5	-2.1	-0.005
Vegetables	75.7	-4.0	-0.069
Sugar, jam, honey and other confectionery	49.6	0.3	0.001
Food products n.e.c.	82.7	-0.2	-0.002
Non-alcoholic beverages	163.9	0.9	0.014
<i>Food away from home</i>	367.5	0.0	0.000
Other goods and services	8,507.2	0.3	0.247
Other goods	5,147.2	0.2	0.101
Other services	3,360.0	0.4	0.147
CPI	10,000.0	0.2	0.197

Source: Central Bureau of Statistics Aruba

In September 2019, “Food at home” and “Food away from home” as a group showed a decrease in price of 0.2% compared to August 2019, and had an influence of -0.05 ppts on the CPI, while the remaining goods and services, as a group, experienced an increase in price of 0.3%, causing an effect of 0.25 ppts on the CPI.

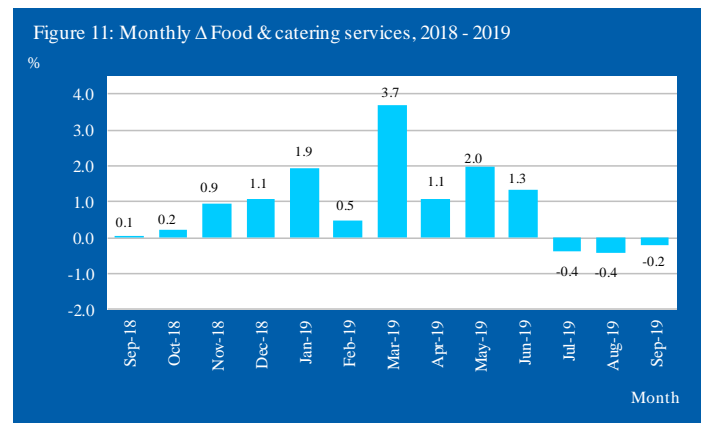
An overview of the percentage change and effect for “Food at home” and “Food away from home” for September 2019 is presented in table 12.

Table 12: Effect on the CPI of September 2019 of “Food at home” and “Food away from home”

Category	Weight	% Change	Effect
Food at home	1,087.7	-0.3	-0.05
Food away from home	429.8	0.0	0.00
Total group	1,517.5	-0.2	-0.05
Remaining goods and services	8,482.5	0.3	0.25
CPI	10,000.0	0.2	0.20

Source: Central Bureau of Statistics Aruba

Figure 11 depicts the monthly Δ Food and catering services over a period of one year starting from September 2018.



6.2 End of Period change of Food & catering services for September 2019

Over the last twelve (12) months, the “Food & catering services” has increased by 12.2%. The “Food at home” index showed an increase of 15.5%. The “Fruit” index increased by 43.9%, the largest increase among the “Food at home” food groups. The index for “Food away from home” was unchanged in September 2019 and has increased by 2.2% over the last twelve (12) months.

Table 18 provides an overview of the monthly and end of period percentage changes and effect for September 2019 for the food groups.

7 Subsistence level

7.1 Subsistence level

The subsistence level is the minimum level of income which is perceived necessary to achieve an adequate standard of living in a given country. The subsistence level is usually determined by estimating the cost of all the essential resources that an average adult consumes in one month or year. This is commonly called a basic needs index, and varies according to the price of food, clothing, housing, transport and other items in the "basket". Equivalence scales are used to adjust for the assumed standard of living, of households of different sizes and composition. The scale assigns a weight of 1.0 for the first adult and 0.5 for each additional adult in the household (aged 15+) and a weight of 0.3 for each child (aged 0-14 years). The subsistence level is based on figures of the report "Bestaansminimum 2010" published by the CBS in December 2010 and is monthly updated for inflation using the monthly CPI. The reference unit used in this report is one of a household consisting of two adults and two children (aged 0-14 years).

7.2 Monthly change of the subsistence level for September 2019

Table 13 provides an overview of the subsistence level for a family of two adults and two children (aged 0-14 years) by sector registered over a period of 5 years for the month September. Over a period of one year the subsistence level increased by Afl. 355, from Afl. 4,637 in September 2018 to Afl. 4,992 in September 2019. The "Food and non-alcoholic beverages" sector shows the largest increase (Afl. 291), over this period.

Table 13: Monthly subsistence level in Aruba (in Afl.) by sector for a family of 2 adults and 2 child (aged 0-14 years) for September, 2015 - 2019

Sector	Sep-15	Sep-16	Sep-17	Sep-18	Sep-19	Change in Afl.
						Sep-18 - Sep-19
Food and non-alcoholic beverages	1,580	1,568	1,681	1,876	2,167	291
Clothing and footwear	239	244	253	257	278	21
Housing	1,442	1,405	1,338	1,341	1,360	19
Household operation	130	131	128	131	132	1
Health	69	69	71	79	78	-1
Transport	242	241	247	272	269	-3
Communications	128	129	125	129	140	11
Recreation and culture	179	178	152	162	171	9
Education	64	65	74	75	75	0
Miscellaneous goods and services	303	306	309	314	323	9
Total	4,376	4,336	4,378	4,637	4,992	355

Source: Central Bureau of Statistics Aruba

An overview of the subsistence level, for the most common family types, over the period September 2018 - September 2019 is presented in table 14.

Table 14: Subsistence level in Aruba (in Afl.) by family size and composition, September 2019 (Base period December 2010)

Period	Equivalence scales				
	1	1.3	1.5	1.8	2.1
	1 adult	1 adult + 1 child	2 adults	2 adults + 1 child	2 adults + 2 children
Sep-18	2,208	2,870	3,312	3,974	4,637
Oct-18	2,211	2,875	3,317	3,980	4,644
Nov-18	2,228	2,896	3,342	4,010	4,678
Dec-18	2,244	2,917	3,366	4,039	4,712
Jan-19	2,255	2,931	3,382	4,058	4,735
Feb-19	2,264	2,943	3,396	4,075	4,754
Mar-19	2,317	3,013	3,476	4,171	4,867
Apr-19	2,338	3,039	3,507	4,208	4,909
May-19	2,361	3,069	3,541	4,249	4,957
Jun-19	2,384	3,099	3,575	4,290	5,005
Jul-19	2,379	3,093	3,569	4,283	4,997
Aug-19	2,372	3,084	3,558	4,270	4,981
Sep-19	2,377	3,090	3,566	4,279	4,992

Source: Central Bureau of Statistics Aruba

7.3 Comparison of the subsistence level and minimum wage

In September 2019 the subsistence level for a single adult household is Afl. 2,377, which represents an income deficit of Afl. 615, an increase of Afl. 118 compared to the deficit observed one year ago (Afl. 497). This deficit is the highest registered over a period of five years for the month September.

Table 15: Monthly income surplus/deficit (in Afl.) for a single adult household for September, 2015 - 2019

Period	Minimum		Surplus/deficit
	1 adult	wage	
2015	2,084	1,637	-447
2016	2,065	1,678	-387
2017	2,085	1,711	-374
2018	2,208	1,711	-497
2019	2,377	1,762	-615

Source: Central Bureau of Statistics Aruba

Table 16: Monthly & Yearly Changes (%) in the Consumer Price Index for September 2019, Total Population (Jun 2019 = 100)

DESCRIPTION	WEIGHT coefficient	2018 Sep	2018 Dec	2019 Aug	2019 Sep	Monthly Aug - Sep	Ytd Dec - Sep	End of period Sep 18 - Sep 19	Period average Sep 18 - Sep 19
Food and non-alcoholic beverages	1,087.7	138.68	143.00	160.63	160.16	-0.3	12.0	15.5	12.7
Food	964.1	141.48	146.27	165.17	164.50	-0.4	12.5	16.3	13.1
Non-alcoholic beverages	123.6	116.87	117.49	125.19	126.31	0.9	7.5	8.1	8.4
Alcoholic beverages and tobacco	78.2	115.95	115.87	132.91	133.01	0.1	14.8	14.7	12.4
Alcoholic beverages for consumption at home	62.2	96.31	96.42	114.87	114.98	0.1	19.2	19.4	15.2
Tobacco	16.0	192.27	191.41	203.00	203.07	0.0	6.1	5.6	7.1
Clothing and footwear	276.8	74.79	76.46	76.60	80.84	5.5	5.7	8.1	4.8
Clothing	212.8	77.54	79.88	80.82	85.96	6.4	7.6	10.9	5.7
Footwear	64.0	65.62	65.09	62.56	63.82	2.0	-2.0	-2.8	1.2
Housing	2,522.2	101.50	101.94	102.88	102.92	0.0	1.0	1.4	1.0
Actual rentals for housing	666.7	124.87	125.41	126.65	126.81	0.1	1.1	1.6	1.7
Imputed rentals for housing	34.4	104.17	104.51	105.29	105.29	0.0	0.7	1.1	1.1
Maintenance and repair of the dwelling	517.0	85.42	86.82	89.76	89.76	0.0	3.4	5.1	2.3
Water supply and miscellaneous services relating to the dwelling	463.6	95.30	95.30	95.30	95.30	0.0	0.0	0.0	0.1
Electricity, gas and other fuels	840.4	96.16	96.16	96.16	96.16	0.0	0.0	0.0	0.2
Household operation	929.2	76.66	74.94	74.92	77.15	3.0	3.0	0.6	0.1
Furniture, furnishings, carpets and other floor coverings	128.8	45.78	43.47	45.54	45.78	0.5	5.3	0.0	-2.9
Household textiles	58.6	63.95	65.15	60.93	60.68	-0.4	-6.9	-5.1	0.2
Household appliances	246.0	55.21	49.35	47.29	55.82	18.0	13.1	1.1	-5.7
Glassware, tableware and household utensils	17.2	60.93	59.81	65.11	65.63	0.8	9.7	7.7	8.3
Tools and equipment for house and garden	58.2	50.28	51.02	46.61	46.65	0.1	-8.6	-7.2	1.5
Goods and services for routine household maintenance and cleaning	420.5	104.74	104.84	106.36	106.23	-0.1	1.3	1.4	2.0
Health	223.1	85.94	85.40	84.96	84.96	0.0	-0.5	-1.1	5.7
Medical products, appliances and equipment	152.3	89.94	89.37	88.53	89.57	1.2	0.2	-0.4	4.8
Out-patient services	52.4	77.72	77.72	77.72	77.72	0.0	0.0	0.0	10.8
Other treatments	7.8	76.23	74.38	76.07	76.07	0.0	2.3	-0.2	1.5
Health products and services n.e.c.	10.5	76.23	74.38	76.07	61.02	-19.8	-18.0	-19.9	-0.2
Transport	1,257.4	99.82	97.47	100.58	98.78	-1.8	1.3	-1.0	2.6
Purchase of vehicles	442.6	90.22	90.24	90.24	90.24	0.0	0.0	0.0	1.7
Operation of personal transport equipment	763.3	107.28	103.17	107.91	104.54	-3.1	1.3	-2.6	3.1
Transport services	51.5	71.64	75.09	80.73	86.77	7.5	15.5	21.1	2.1
Communications	849.6	72.15	77.94	77.95	77.93	0.0	0.0	8.0	9.1
Telephone and telefax equipment	43.8	20.73	17.07	17.20	16.87	-2.0	-1.2	-18.6	-20.9
Telephone and telefax services	805.8	74.95	81.25	81.25	81.25	0.0	0.0	8.4	9.6
Recreation and culture	1,013.3	78.71	81.77	81.80	83.05	1.5	1.6	5.5	0.8
Audio-visual, photographic and information processing equipment	58.5	65.53	58.47	54.86	51.94	-5.3	-11.2	-20.7	-10.7
Other major durables for recreation and culture	20.0	39.87	33.19	33.65	33.65	0.0	1.4	-15.6	-7.1
Other recreational items and equipment; gardens and pets	266.6	113.94	114.53	118.57	120.58	1.7	5.3	5.8	2.6
Recreational and cultural services	309.1	89.04	89.04	89.04	89.04	0.0	0.0	0.0	3.9
Newspapers, books and stationery	43.7	73.79	75.38	76.39	76.39	0.0	1.3	3.5	11.6
Holidays	315.4	44.41	55.25	52.45	55.31	5.4	0.1	24.5	-6.4
Education	98.0	109.30	109.30	109.30	109.30	0.0	0.0	0.0	0.4
Pre primary and primary education	24.0	86.66	86.66	86.66	86.66	0.0	0.0	0.0	0.0
Secondary education	43.4	94.62	94.62	94.62	94.62	0.0	0.0	0.0	0.9
Post-secondary non-tertiary education	4.6	102.85	102.85	102.85	102.85	0.0	0.0	0.0	0.0
Tertiary education	23.6	160.49	160.49	160.49	160.49	0.0	0.0	0.0	0.0
Education not definable by level	2.5	109.74	109.74	109.74	109.74	0.0	0.0	0.0	0.7
Restaurants and hotels	442.0	114.50	114.15	117.24	117.20	0.0	2.7	2.4	4.0
Catering services	429.8	115.50	115.14	118.09	118.09	0.0	2.6	2.2	4.1
Accommodation services	12.2	79.32	79.27	87.11	85.71	-1.6	8.1	8.1	2.5
Miscellaneous goods and services	1,222.6	84.11	83.74	86.34	86.45	0.1	3.2	2.8	2.6
Personal care	427.1	98.24	98.30	101.09	101.49	0.4	3.2	3.3	3.0
Personal effects n.e.c.	106.6	91.30	86.74	105.39	105.10	-0.3	21.2	15.1	15.0
Social protection	78.2	115.39	115.39	115.39	115.39	0.0	0.0	0.0	0.0
Insurance	610.7	68.97	68.97	68.97	68.97	0.0	0.0	0.0	0.0
CPI	10,000.0	95.77	96.67	99.80	100.00	0.2	3.4	4.4	4.1

Source: Central Bureau of Statistics Aruba

Table 17: Monthly & Yearly Effect on the Consumer Price Index per sector and category for September 2019 (Jun 2019 = 100)

DESCRIPTION	WEIGHT coefficient	Monthly Aug - Sep	Ytd Dec - Sep	End of period Sep 18 - Sep 19	Period average Sep 18 - Sep 19
Food and non-alcoholic beverages	1,087.7	-0.05	1.93	2.44	1.98
Food	964.1	-0.06	1.82	2.32	1.86
Non-alcoholic beverages	123.6	0.01	0.11	0.12	0.12
Alcoholic beverages and tobacco	78.2	0.00	0.14	0.14	0.12
Alcoholic beverages for consumption at home	62.2	0.001	0.12	0.12	0.09
Tobacco	16.0	0.000	0.02	0.02	0.02
Clothing and footwear	276.8	0.12	0.13	0.17	0.10
Clothing	212.8	0.11	0.13	0.19	0.10
Footwear	64.0	0.01	-0.01	-0.01	0.01
Housing	2,522.2	0.01	0.26	0.37	0.28
Actual rentals for housing	666.7	0.01	0.10	0.14	0.15
Imputed rentals for housing	34.4	0.00	0.00	0.00	0.00
Maintenance and repair of the dwelling	517.0	0.00	0.16	0.23	0.11
Water supply and miscellaneous services relating to the dwelling	463.6	0.00	0.00	0.00	0.00
Electricity, gas and other fuels	840.4	0.00	0.00	0.00	0.01
Household operation	929.2	0.21	0.21	0.05	0.01
Furniture, furnishings, carpets and other floor coverings	128.8	0.00	0.03	0.00	-0.02
Household textiles	58.6	0.00	-0.03	-0.02	0.00
Household appliances	246.0	0.21	0.16	0.02	-0.08
Glassware, tableware and household utensils	17.2	0.00	0.01	0.01	0.01
Tools and equipment for house and garden	58.2	0.00	-0.03	-0.02	0.00
Goods and services for routine household maintenance and cleaning	420.5	-0.01	0.06	0.07	0.09
Health	223.1	0.00	-0.01	-0.02	0.11
Medical products, appliances and equipment	152.3	0.02	0.00	-0.01	0.07
Out-patient services	52.4	0.00	0.00	0.00	0.04
Other treatments	7.8	0.00	0.00	0.00	0.00
Health products and services n.e.c.	10.5	-0.02	-0.01	-0.02	0.00
Transport	1,257.4	-0.23	0.17	-0.14	0.33
Purchase of vehicles	442.6	0.00	0.00	0.00	0.07
Operation of personal transport equipment	763.3	-0.26	0.11	-0.22	0.25
Transport services	51.5	0.03	0.06	0.08	0.01
Communications	849.6	0.00	0.00	0.51	0.58
Telephone and telefax equipment	43.8	0.00	0.00	-0.02	-0.02
Telephone and telefax services	805.8	0.00	0.00	0.53	0.60
Recreation and culture	1,013.3	0.13	0.13	0.46	0.07
Audio-visual, photographic and information processing equipment	58.5	-0.02	-0.04	-0.08	-0.04
Other major durables for recreation and culture	20.0	0.00	0.00	-0.01	-0.01
Other recreational items and equipment; gardens and pets	266.6	0.05	0.17	0.18	0.08
Recreational and cultural services	309.1	0.00	0.00	0.00	0.11
Newspapers, books and stationery	43.7	0.00	0.00	0.01	0.04
Holidays	315.4	0.09	0.00	0.36	-0.11
Education	98.0	0.00	0.00	0.00	0.00
Pre primary and primary education	24.0	0.00	0.00	0.00	0.00
Secondary education	43.4	0.00	0.00	0.00	0.00
Post-secondary non-tertiary education	4.6	0.00	0.00	0.00	0.00
Tertiary education	23.6	0.00	0.00	0.00	0.00
Education not definable by level	2.5	0.00	0.00	0.00	0.00
Restaurants and hotels	442.0	0.00	0.14	0.12	0.21
Catering services	429.8	0.00	0.13	0.12	0.21
Accommodation services	12.2	0.00	0.01	0.01	0.00
Miscellaneous goods and services	1,222.6	0.01	0.34	0.30	0.28
Personal care	427.1	0.02	0.14	0.15	0.13
Personal effects n.e.c.	106.6	0.00	0.20	0.15	0.15
Social protection	78.2	0.00	0.00	0.00	0.00
Insurance	610.7	0.00	0.00	0.00	0.00
CPI	10,000.0	0.20	3.44	4.41	4.07

Source: Central Bureau of Statistics Aruba

Table 18: Monthly & Yearly Changes (%) and effect in the Food & catering services for September 2019, Total Population (Jun

DESCRIPTION	WEIGHT coefficient	% Change		Effect	
		Monthly Aug - Sep	End of period Sep 18 - Sep 19	Monthly Aug - Sep	End of period Sep 18 - Sep 19
Food & catering services	1,517.5	-0.2	12.2	-0.050	2.556
Food at home	1,087.7	-0.3	15.5	-0.050	2.440
Bread and cereals	178.1	1.9	4.1	0.040	0.089
Rice	23.5	-0.1	1.1	0.000	0.004
Bread	72.1	4.0	6.2	0.037	0.058
Pasta products	9.2	0.9	8.5	0.001	0.008
Other cereals and cereal products	73.3	0.3	2.4	0.002	0.019
Meat	242.5	-0.1	3.9	-0.004	0.121
Bovine	67.3	-0.6	2.6	-0.005	0.021
Swine	25.5	-1.3	2.5	-0.004	0.008
Poultry	75.7	0.7	0.0	0.007	0.000
Other meat and meat preparations	74.0	-0.1	10.4	-0.001	0.092
Fish and other seafood	49.0	-0.7	9.1	-0.004	0.048
Fish and seafood preparations	49.0	-0.7	9.1	-0.004	0.048
Milk, cheese and eggs	135.3	0.7	6.3	0.012	0.107
Cheese	55.4	0.4	6.1	0.003	0.047
Eggs	16.6	4.1	15.4	0.006	0.022
Milk	40.0	0.6	4.5	0.003	0.025
Other milk products	23.3	0.0	6.1	0.000	0.012
Oils and fats	32.2	1.0	11.0	0.005	0.051
Corn oil	2.8	-0.6	4.7	0.000	0.002
Butter and margarine	9.2	0.5	10.2	0.001	0.015
Other oils and fats	20.1	1.5	12.4	0.004	0.034
Fruit	97.6	-0.8	43.9	-0.038	1.472
Oranges	9.4	3.6	-4.2	0.004	-0.005
Bananas and plantains	19.9	-1.1	19.2	-0.005	0.079
Apples	9.3	1.0	3.1	0.002	0.005
Avocado	5.0	-8.8	49.8	-0.082	0.294
Grapes	9.2	-2.4	-3.1	-0.004	-0.006
Nuts	11.9	0.8	6.4	0.001	0.007
Lemons and mandarins	6.0	9.3	3.5	0.006	0.002
Cherries and strawberries	8.8	2.6	67.0	0.026	0.429
Melons and watermelons	7.7	3.6	76.9	0.028	0.368
Papayas and pineapples	6.9	-2.5	51.5	-0.017	0.228
Other fruits and fruit products	3.5	1.9	56.8	0.004	0.072
Potatoes and other tubers	18.2	-2.1	14.6	-0.005	0.034
Potatoes	12.2	-2.8	10.2	-0.006	0.019
Other tubers	2.0	3.6	24.7	0.001	0.004
Sweet potatoes and yucca	4.0	-1.3	40.7	0.000	0.010
Vegetables	89.1	-4.0	20.9	-0.069	0.299
Lettuce	6.8	-22.5	40.7	-0.018	0.019
Tomatoes	9.7	-3.3	13.9	-0.004	0.016
Onions and garlic	18.7	-4.3	28.4	-0.028	0.146
Celery and broccoli	15.3	-5.5	10.5	-0.019	0.032
Other vegetables	15.3	1.0	39.4	0.002	0.064
Other preserved or processed vegetables	8.4		6.9	0.000	0.009
Frozen vegetable mixtures	14.8	-1.3	7.8	-0.003	0.014
Sugar, jam, honey and other confectionery	42.0	0.3	5.8	0.001	0.024
Sugar	12.1	0.1	8.9	0.000	0.010
Jams and jellies	2.5	1.6	8.5	0.000	0.002
Other confectionery products	27.5	0.2	4.3	0.001	0.012
Food products n.e.c.	80.1	-0.2	8.1	-0.002	0.073
Other food products	80.1	-0.2	8.1	-0.002	0.073
Non-alcoholic beverages	123.6	0.9	8.1	0.014	0.122
Coffee and tea	20.9	0.3	5.3	0.001	0.010
Other non-alcoholic beverages	14.6	-0.7	7.1	-0.001	0.013
Soft and sports drinks	31.0	0.5	5.5	0.002	0.021
Fruit juices	57.1	1.6	10.4	0.013	0.077
Food away from home	429.8	0.0	2.2	0.000	0.116
Food and beverage consumption away from home	429.8	0.0	2.2	0.000	0.116
Other goods and services	8,482.5	0.3	2.3	0.247	1.855
Other goods	4,735.8	0.2	1.9	0.101	0.849
Other services	3,746.7	0.4	2.8	0.147	1.006
CPI	10,000	0.2	4.4	0.197	4.411

Source: Central Bureau of Statistics Aruba

Table 19: CPI: Main indices for September 2019, Total Population (Jun 2019 = 100)

DESCRIPTION	WEIGHT coefficient	2018 Sep	2018 Dec	2019 Aug	2019 Sep	Monthly Jul - Aug	Ytd Dec - Aug	End of period Aug 18 - Aug 19
CPI for "All items"	10,000.0	95.77	96.67	99.80	100.00	0.2	3.4	4.4
CPI for "Goods"	6,272.5	90.83	91.13	95.77	95.85	0.1	5.2	5.5
CPI for "Durable goods"	1,293.2	72.25	71.83	72.66	74.18	2.1	3.3	2.7
CPI for "Semi-durable goods"	954.1	49.75	50.04	50.27	51.26	2.0	2.4	3.0
CPI for "Non-durable goods"	4,025.2	106.53	107.06	113.98	113.38	-0.5	5.9	6.4
CPI for "Services"	3,727.5	104.10	106.00	106.59	106.98	0.4	0.9	2.8
CPI for "Gasoline" and "Diesel"	552.3	92.38	85.70	91.76	87.41	-4.7	2.0	-5.4
CPI for "Food at home"	961.4	141.88	146.68	165.64	164.97	-0.4	12.5	16.3
CPI excluding "Food and non-alcoholic beverages"	8,874.7	90.92	91.40	92.77	93.05	0.3	1.8	2.3
CPI excluding "Gasoline" and "Diesel"	9,447.7	95.97	97.31	100.27	100.73	0.5	3.5	5.0
CPI excluding "Food and non-alcoholic beverages", "Gasoline" and "Diesel"	8,322.4	90.82	91.78	92.84	93.42	0.6	1.8	2.9
CPI excluding "Rentals actually paid by tenants or subtenants"	9,145.8	95.62	96.56	99.89	100.09	0.2	3.7	4.7
CPI excluding "Housing"	7,446.7	94.23	95.29	99.18	99.43	0.3	4.3	5.5
CPI excluding "Gasoline", "Diesel", "Water" and "Electricity"	8,289.2	95.67	97.20	100.57	101.10	0.5	4.0	5.7

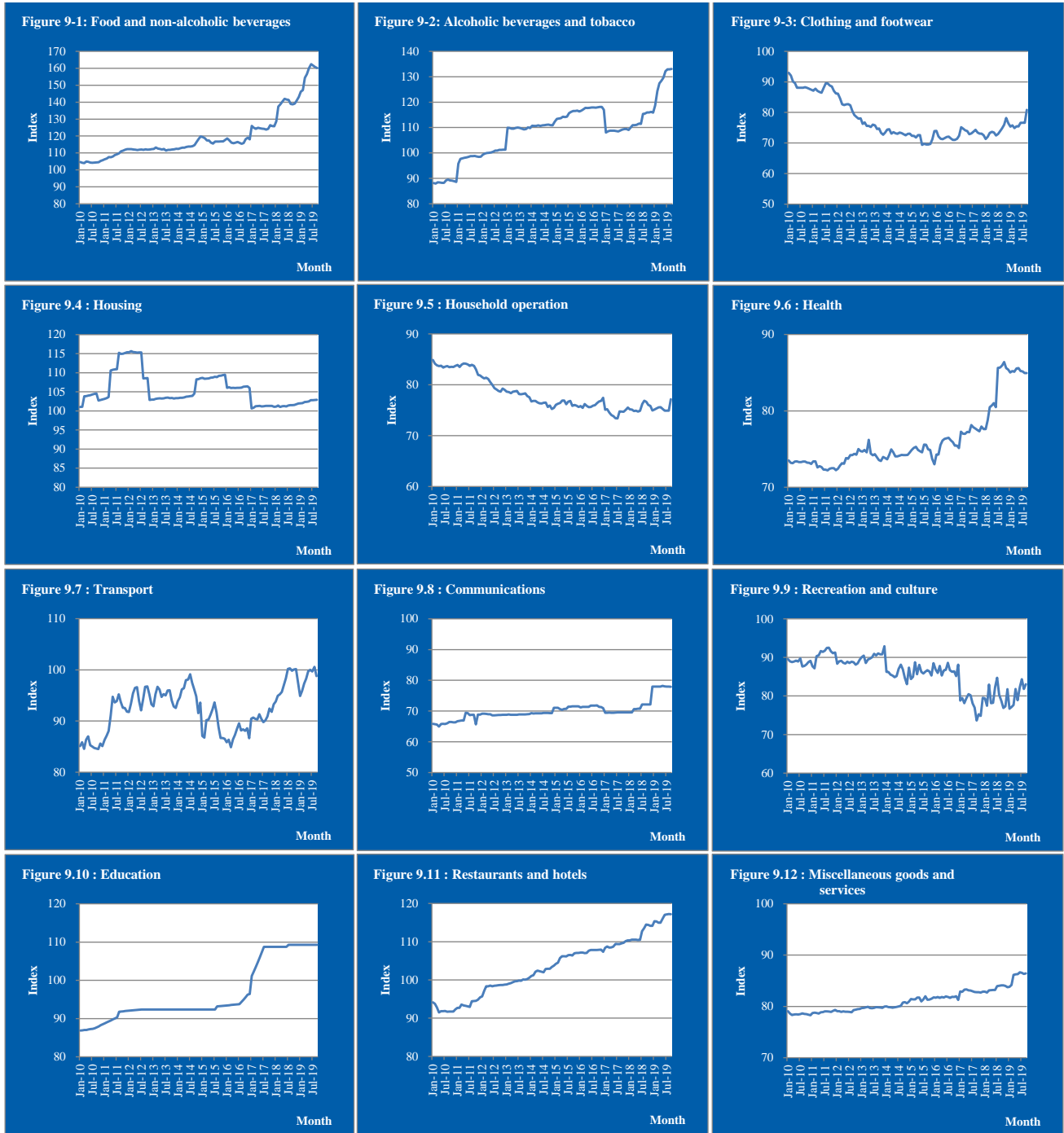
Source: Central Bureau of Statistics Aruba

Table 20: CPI: Effect on main indices for September 2019, Total Population (Jun 2019 = 100)

DESCRIPTION	WEIGHT coefficient	Monthly Aug - Sep	Ytd Dec - Sep	End of period Sep 18 - Sep 19
CPI for "All items"	10,000.0	0.20	3.44	4.41
CPI for "Goods"	6,272.5	0.05	3.06	3.29
CPI for "Durable goods"	1,293.2	0.20	0.31	0.26
CPI for "Semi-durable goods"	954.1	0.10	0.12	0.15
CPI for "Non-durable goods"	4,025.2	-0.24	2.63	2.88
CPI for "Services"	3,727.5	0.15	0.38	1.12
CPI for "Gasoline" and "Diesel"	552.3	-0.24	0.10	-0.29
CPI for "Food at home"	961.4	-0.06	1.82	2.32
CPI excluding "Food and non-alcoholic beverages"	8,874.7	0.25	1.51	1.97
CPI excluding "Gasoline" and "Diesel"	9,447.7	0.44	3.34	4.70
CPI excluding "Food and non-alcoholic beverages", "Gasoline" and "Diesel"	8,322.4	0.49	1.41	2.26
CPI excluding "Rentals actually paid by tenants or subtenants"	9,145.8	0.19	3.34	4.28
CPI excluding "Housing"	7,446.7	0.19	3.18	4.04
CPI excluding "Gasoline", "Diesel", "Water" and "Electricity"	8,289.2	0.44	3.34	4.70

Source: Central Bureau of Statistics Aruba

Course of Indices for 2010 up to September 2019



Glossary

The Consumer Price Index and Inflation

The Consumer Price Index (CPI) measures changes in prices of consumer goods and services by households. Consumer price indices can be intended to measure either the rate of price inflation or deflation as perceived by households or changes in their cost of living. In case of inflation, the percentage change is positive and it indicates a decrease in the purchasing power of the consumers.

Monthly percentage change

Percentage change in price indices of any aggregates of the CPI in relation to the respective price indices of the previous month.

Year-to-date (ytd)

Percentage change in price indices of any aggregates of the CPI in relation to the respective price indices of December prior to the year under review.

End of period inflation (last 12 months)

Percentage change in price indices of any aggregates of the CPI in relation to the respective price indices of the same month of the previous year.

Period average inflation (last 24 months)

The period average inflation is calculated by comparing the annual average CPI of the concerning period with the annual average CPI of the concerning period of the previous year.

Effect

Contribution of all percentage changes (of all respective aggregates) to the CPI.

Core inflation

Core inflation is a measure of inflation that excludes certain items, which face volatile price movements. Core inflation eliminates the inflation of certain products that can have temporary price shocks because these shocks can diverge from the overall trend of inflation and give a false measure of inflation. The core rate of inflation is calculated by: total inflation excluding food and energy prices. In part, that is because the core is less volatile and reflects better the relationship of supply and demand in domestic product markets. The core usually is a better measure of the basic rate of inflation that will tend to emerge in the absence of supply shocks.

Food & catering services

The “Food & catering services” index is composed of the indices for the “Food & Non-alcoholic beverages” sector (“Food at home”) and the “Catering services” (“Food away from home”) category.

Subsistence level

The subsistence level is the minimum level of income, which is perceived necessary to achieve an adequate standard of living in a given country. The subsistence level is usually determined by estimating the cost of all the essential resources that an average adult consumes in one month or year. This is commonly called a basic needs index, and varies according to the price of food, clothing, housing, transport and other items in the “basket”. The subsistence level is monthly updated for inflation using the monthly CPI.