Consumer Price Index

September 2016





Table of Contents

A note to the reader	ii
1 MONTHLY CHANGE OF THE CPI	1
1.1 CPI AND INFLATION 1.2 CHANGES IN SECTOR 1.3 CHANGES IN CATEGORIES AND SUBCATEGORIES	1
2 END OF PERIOD CHANGE OF THE CPI	2
 2.1 END OF PERIOD CHANGE CPI FOR SEPTEMBER 2016 2.2 CHANGES IN SECTOR	2 2 2
3 DEVELOPMENT OF INDICES OF MAIN SECTORS AND UTILITIES	
3.1 INDICES MAIN SECTORS	3 3 3
4 PERCENTAGE CHANGE CPI OF ARUBA'S MAJOR TRADING PARTNERS	4
4.1 COMPARISON OF THE CPI OF ARUBA AND THE USA	4
5 CORE INFLATION	5
 5.1 Core inflation 5.2 Monthly change of the core inflation	5
6 DEVELOPMENT OF FOOD & CATERING SERVICES	6
6.1 MONTHLY CHANGE OF FOOD & CATERING SERVICES FOR SEPTEMBER 2016 6.2 End of Period change of Food & catering services for September 2016	
7 SUBSISTENCE LEVEL	7
 7.1 Subsistence level 7.2 Monthly change of the subsistence level for September 2016 7.3 Comparison of the subsistence level and minimum wage 	7
APPENDICES	
APPENDIX 1: MONTHLY AND YEARLY % CHANGES IN THE CPI FOR SEPTEMBER 2016 APPENDIX 2: EFFECT ON THE CPI PER SECTOR AND CATEGORY FOR SEPTEMBER 2016 APPENDIX 3: MONTHLY & YEARLY CHANGES (%) AND EFFECT IN THE FOOD & CATERING SERVICES FOR SEPTEMBER 2016	9
APPENDIX 4: MONTHLY AND YEARLY % CHANGES AND EFFECT IN THE MAIN INDICES FOR SEPTEMBER 2016	
Appendix 5: Course of indices for 2010 – up to September 2016 Appendix 6: Glossary	

A note to the reader

he following report presents the price statistics for September 2016.

- At the end of September 2016 the Consumer Price Index (CPI) shows an increase of 0.2% compared to the end of August 2016. The sectors which affected the CPI the most were "Housing" (0.2%) and "Food and non-alcoholic beverages" (0.4%), which led to an effect of 0.06 percentage points (ppts) each on the Δ CPI of September 2016 (0.2%).
- Compared to September 2015 the CPI decreased by 0.7%. The sector which affected the CPI the most was "Housing" (-2.6%). Specifically, the price of "Electricity, gas and other fuels" decreased by 9.7% and caused an effect of -0.95 ppts on the end of period inflation of September 2016 (-0.7%).
- The period average inflation for the period September 2015 September 2016 is -1.0%, which is 2.1 ppts lower compared to the period average inflation for the period September 2014 September 2015 (1.1%).
- Utilities (Water and Electricity) did not register price changes in September 2016. The price of gasoline increased by 2.3% and caused an effect of 0.11 ppts. The price of diesel registered an increase of 1.8% in September 2016 and had an insignificant effect on the Δ CPI of September 2016 (0.2%).

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.

Contact information:

Central Bureau of Statistics L.G. Smith Boulevard 160 Oranjestad - Aruba Phone: 583-7433 ext 296 Fax: 583-8057 E-mail: LdSilva@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 2016 is 117.35; an increase of 0.2% compared to the CPI of August 2016 (117.17). An overview of the percentage change in the CPI (Δ CPI) for different periods during 2015 and 2016 is shown in Table 1. The terms percentage change in the CPI and "inflation" (deflation) are considered similar and are used interchangeably. The deflation over the last 12 months (end of period inflation) is 0.7%, while the deflation over a period of 24 months (period average inflation) is 1.0%.

Table 1: Overview of Δ CPI

Period		2016	2015	Current	Last
Monthly	Aug - Sep	0.2	-0.6	117.35	117.17
Year-to-date	Dec - Sep	-0.9	-1.1	117.35	118.41
Last 12 months ¹	Sep - Sep	-0.7	0.3	117.35	118.14
Last 24 months ²	Sep - Sep	-1.0	1.1	117.31	118.51

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 2015, whereas the Δ CPI for the month September for the years 2007 to 2016 is illustrated in Figure 2.

1.2 Changes in sector

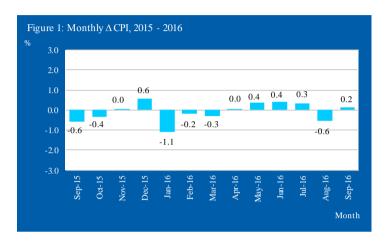
Figure 3 provides an overview of the percentage changes for the indices per sector for September 2016. The percentage change in index is further denoted as Δ I. The largest Δ I is observed for the sector "Education" with an increase of 0.7%.

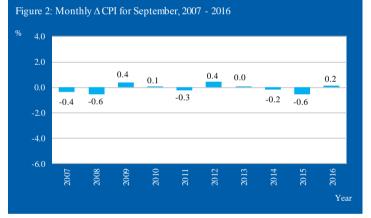
1.3 Changes in categories and subcategories

The largest positive and negative Δ I is seen in the categories "Audio-visual, photographic and information processing equipment" (7.7%) and "Holidays" (-13.5%). In the "Food and non-alcoholic beverages" sector an increase of 0.6% is observed for the category "Food", while the "Non-alcoholic beverages" category shows a decrease of 0.4%. In the "Transport" sector the major Δ I is observed for the category "Transport services" (-4.5%), mainly caused by a decrease in "Plane tickets" (6.5%). In the "Recreation and culture" sector the major Δ I is observed for the category "Holidays" (-13.5%)¹.

The categories which influenced the CPI calculation the most are "Operation of personal transport equipment", "Holidays", "Food" and "Transport services", which had an effect of respectively, 0.11, -0.10, 0.07 and -0.07 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 2015, December

2015, August 2016 and September 2016 together with corresponding weights per sector and the monthly, year-to-date (ytd), end of period and period average percentage changes for September 2016. In table 17 an overview of the effect on the monthly, ytd, end of period and period average CPI per sector and category for September 2016 is presented. The course of indices for 2010 – up to September 2016 is illustrated in Appendix 5.







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

S Consumer Price Index Aruba End of period change September 2016

2 End of period change of the CPI

2.1 End of period change CPI for September 2016

The CPI decreased from 118.14 in September 2015 to 117.35 in September 2016, a decrease of 0.7%. This Δ CPI is the third lowest registered over a period of 5 years for the month September, and is 1.0 ppt lower than the Δ CPI registered in 2015 (0.3%) (see table 2).

Period	Δ CPI	Index
2011-2012	-2.1	119.38
2012-2013	-1.5	117.54
2013-2014	0.2	117.82
2014-2015	0.3	118.14
2015-2016	-0.7	117.35
	5.7	/100

Source: Central Bureau of Statistics Aruba

2.2 Changes in sector

An overview of the percentage change per sector over the period September 2015 - September 2016 is presented in table 3. The largest Δ I is observed for the sector "Housing" with a decrease of 2.6%. Furthermore, decreases of 0.8%, 0.5% and 0.5% are observed for the "Food and non-alcoholic beverages", "Recreation and culture" and "Transport" sectors, respectively. A comparison of the Δ I's for the years 2015 and 2016 is provided in figure 4.

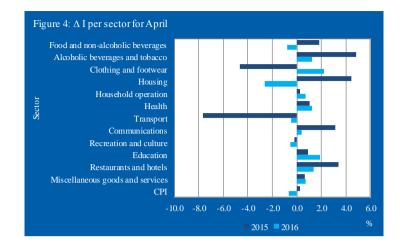
Table 3: Percentage change for September, 2015 - 2016

Sector	% Change
Food and non-alcoholic beverages	-0.8
Alcoholic beverages and tobacco	1.2
Clothing and footwear	2.2
Housing	-2.6
Household operation	0.7
Health	1.3
Transport	-0.5
Communications	0.4
Recreation and culture	-0.5
Education	1.9
Restaurants and hotels	1.4
Miscellaneous goods and services	0.7
CPI	-0.7

Source: Central Bureau of Statistics Aruba

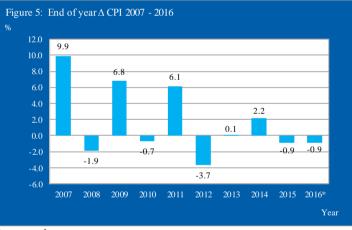
2.3 Changes in categories

The largest positive and negative Δ I in categories observed over a period of one year are respectively, "Audio-visual, photographic and information processing equipment" (20.6%) and "Telephone and telefax equipment"(-12.1%). For an overview of the end of period percentage changes per category refer to table 16 in Appendix 1.



2.4 End of year change CPI 2007 - 2016

The end of year \triangle CPI for the period 2007 - 2016 is shown in figure 5. The Δ CPI for 2016 is calculated by comparing the CPI of September 2016 with the CPI of December 2015. At the end of each year, the end of year percentage change equals the ytd Δ CPI. The ytd Δ CPI for September 2016 is -0.9%.



*year-to-date

2.5 Period average change CPI for September 2016

The period average change CPI (Δ ACPI) for September 2016 is -1.0%. Table 4 provides an overview of the Δ ACPI for the month September for the years 2012 to 2016. The Δ ACPI for 2016 decreased by 2.1 ppts compared to 2015.

Table 4: Overview of ∆ ACPI for September, 2012 - 201

Period	Δ ΑCPI	Index
2011-2012	2.9	121.01
2012-2013	-2.9	117.49
2013-2014	-0.2	117.28
2013-2014	-0.2	117.20
2014-2015	1.1	118.51
2015-2016	-1.0	117.31

Source: Central Bureau of Statistics Aruba

The burged of statistics Consumer Price Index Aruba Indices of main sectors and utilities

3 Development of indices of main sectors and utilities

3.1 Indices main sectors

The four major sectors, "Housing", "Transport", "Food and nonalcoholic 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 2009 - up to September 2016 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, 2015 - 2016

	Crude oil	Fuel surcharge ²	Fuel surcharge ²				
Month	per barrel ¹	≤ 500 kWh	501-1000 kWh	Electricity ³	Water ⁴	Gasoline⁵	Diesel⁵
Sep-15	45.78	30.52	32.56	342.59	137.05	182.40	140.40
Oct-15	46.07	30.52	32.56	342.59	137.05	168.20	139.50
Nov-15	42.48	30.52	32.56	342.59	137.05	165.00	138.40
Dec-15	37.41	30.52	32.56	342.59	137.05	162.00	135.00
Jan-16	32.65	21.90	27.80	308.76	137.05	160.00	121.50
Feb-16	30.19	21.90	27.80	308.76	137.05	152.30	115.40
Mar-16	37.41	21.90	27.80	308.76	137.05	148.20	116.80
Apr-16	40.19	21.90	27.80	308.76	137.05	161.80	123.90
May-16	46.59	21.90	27.80	308.76	137.05	168.00	127.10
Jun-16	48.95	21.90	27.80	308.76	137.05	173.80	136.70
Jul-16	45.24	21.90	27.80	308.76	137.05	175.20	140.30
Aug-16	44.54	21.90	27.80	308.76	137.05	168.30	134.40
Sep-16	45.31	21.90	27.80	308.76	137.05	172.10	136.80

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 Fuel surcharge in Afl. cents per kWh

³ Electricty 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 2016, it remained at Afl. 308.75. Figure 6-1 provides an overview of the course of changes in the electricity price for the period 2010 to 2016.

The component in the electricity tariff which is sensitive to price changes is the fuel surcharge (brandstofclausule). Fuel surcharge for a usage of electricity up to 500 kWh surcharge did not change in September 2016, it stayed at Afl. 21.90 cents per kWh. Fuel surcharge for a usage of electricity between 501 - 1000 kWh did not change in September 2016, it stayed at Afl. 27.80 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 2010 to 2016. The water price for an average usage by households did not change in September 2016, it remained at Afl. 137.05.

3.4 Gasoline and Diesel

The retail price of gasoline increased by 2.3% from 168.3 cents per liter in August 2016 to 172.1 cents per liter in September 2016. In September 2016, the retail price of diesel registered an increase of 1.8% from 134.4 cents per liter in August 2016 to 136.8 cents per liter in September 2016.

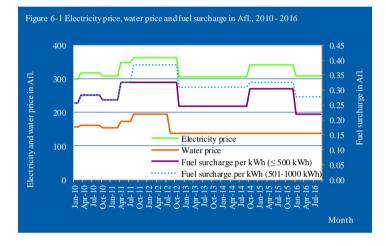
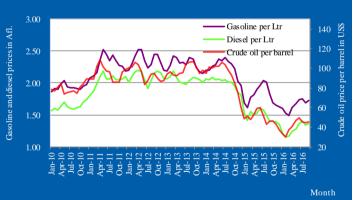


Figure 6-2 Gasoline, diesel and crude oil prices, 2010 - 2016



CDS CONSUMER PRICE INDEX ATUBA CPI of Aruba's major trading partners

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 2015. In September 2016 the Δ CPI of the USA, Curaçao and the Netherlands were 0.2%, -0.4% and -0.3%.

Table 6: Monthly Δ CPI 2015 - 2016 per Country

Period	Aruba	USA	Curaçao	Netherlands
Sep-15	-0.6	-0.2	-0.4	-0.2
Oct-15	-0.4	0.0	-1.0	-0.1
Nov-15	0.0	-0.2	0.1	-0.6
Dec-15	0.6	-0.3	0.0	-0.1
Jan-16	-1.1	0.2	0.5	-1.0
Feb-16	-0.2	0.1	-0.7	0.6
Mar-16	-0.3	0.4	-0.1	1.0
Apr-16	0.02	0.5	0.0	0.1
May-16	0.4	0.4	-0.1	0.2
Jun-16	0.4	0.3	0.4	-0.3
Jul-16	0.3	-0.2	0.6	0.5
Aug-16	-0.6	0.1	0.4	0.1
Sep-16	0.2	0.2	-0.4	-0.3

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 for 2016. Aruba's monthly Δ CPI for September 2016 is equal to the Δ CPI of the USA.

Table 7: Overview of △ CPI, 2016

Period		Aruba	USA
Monthly	Aug - Sep	0.2	0.2
Year-to-date	Dec - Sep	-0.9	2.1
Last 12 months 1	Sep - Sep	-0.7	1.5
Last 24 months ²	Sep - Sep	-1.0	0.9

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 2.2 ppts lower compared to the USA's 12-month Δ CPI. The Δ CPI over the last 24 months for Aruba is 1.9 ppts lower 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 2006 - 2016 for Aruba and the USA is provided in table 8 and figure 8.

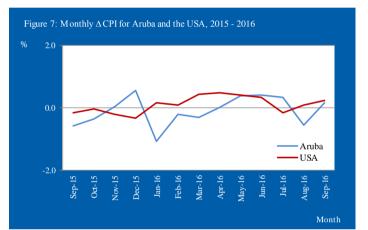
² "71% of Aruba's import by sea and air originates from the USA" (Source: Foreign Trade Statistics Report, 1st Quarter 2016).

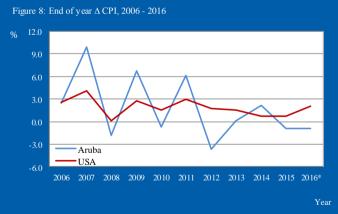
Table 8: End of year Δ CPI, 2006 - 2016

Period	Aruba	USA
2006	2.5	2.5
2000	9.9	4.1
2007	-1.9	0.1
2000	6.8	2.7
2009	-0.7	1.5
2010	-0.7	3.0
2011	-3.7	3.0 1.7
2012	-3.7	1.7
2013	0.1 2.2	0.8
2014	-0.9	0.8
	-0.9	2.1
2016*	-0.9	2.1

Source: Central Bureau of Statistics Aruba

* ytd





*ytd

CDS Consumer Price Index Aruba

Core inflation

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 2016 the core inflation (measured over the period September 2015 - 2016) was 0.8%, a decrease of 0.3 ppts compared to September 2015. In September 2016 the food index shows a decrease of 0.8%, while the energy index shows a decrease of 7.6%. Over the past year the food index decreased by 4.5 ppts and the energy index decreased by 7.0 ppts. Table 9 provides an overview of the monthly inflation and core inflation starting from September 2015.

Table 9: Monthly inflation¹ and core inflation, 2015 - 2016

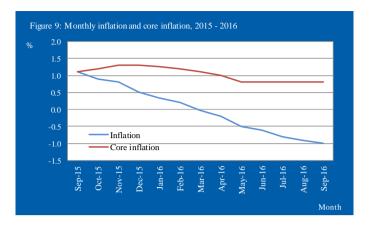
				Core
Period	Inflation	Food	Energy ²	Inflation
Sep-15	1.1	3.7	-0.6	1.1
Oct-15	0.9	3.3	-1.7	1.2
Nov-15	0.8	2.7	-2.2	1.3
Dec-15	0.5	1.9	-3.0	1.3
Jan-16	0.3	1.4	-3.3	1.3
Feb-16	0.2	0.8	-3.5	1.2
Mar-16	0.0	0.5	-4.1	1.1
Apr-16	-0.2	0.1	-4.6	1.0
May-16	-0.5	0.0	-5.1	0.8
Jun-16	-0.6	0.0	-5.7	0.8
Jul-16	-0.8	-0.3	-6.4	0.8
Aug-16	-0.9	-0.6	-7.2	0.8
Sep-16	-1.0	-0.8	-7.6	0.8

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 2015.



5.3 End of year change of the core inflation, **2011 - 2016**

The end of year core inflation of the total population of Aruba for the year 2016 is 0.8%, 0.5 ppts lower than the core inflation of 2015. Table 10 provides an overview of the end of year inflation and core inflation over the period 2011 - 2016.

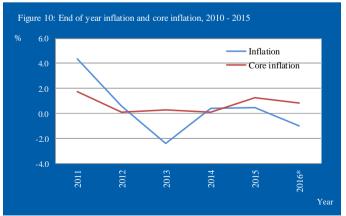
The end of year inflation and core inflation is presented in figure 10 over the period 2011 - 2016.

Table 10: End of year core inflation, 2011 - 2016

Period	2011	2012	2013	2014	2015	2016*
Inflation	4.4	0.6	-2.4	0.4	0.5	-1.0
Food	4.5	2.5	0.0	2.2	1.9	-0.8
Electricity	10.3	2.5	-13.3	2.9	8.5	-7.4
Water	11.5	-3.6	-19.9	0.0	0.0	0.0
Gasoline and diesel	18.9	2.7	-2.5	-2.3	-20.1	-13.7
Core inflation	1.7	0.1	0.3	0.1	1.3	0.8

Source: Central Bureau of Statistics Aruba

*current month



*current month

6 Development of Food & catering services

6.1 Monthly change of Food & catering services for September 2016

The "Food & catering services" index shows an increase of 0.3% in September 2016, after a decrease of 0.3% in August 2016. The index for "Food at home" shows an increase of 0.4% in September, as seven (7) of the eleven (11) "Food at home" indices increased in September 2016. The "Fruit" index registered the largest increase (5.4%) in September 2016. Furthermore, increases were posted in the indices for "Potatoes and other tubers" (5.2%), "Fish and other seafood" (1.4%) and "Sugar, jam, honey and other confectionery" (1.0%). The "Vegetables" index registered the largest decrease (-2.2%). Furthermore, decreases of 0.6% and 0.4% were posted in the indices for "Meat" and "Non-alcoholic beverages", respectively.

Table 11 provides an overview of the corresponding weights per food group together with the percentage changes and effect for September 2016.

Food	Weight	% Change	Effect
Food & catering services	1,492.8	0.3	0.06
Food at home	1,125.3	0.4	0.06
Bread and cereals	205.2	0.0	0.00
Meat	229.8	-0.6	-0.02
Fish and other seafood	56.4	1.4	0.01
Milk, cheese and eggs	140.0	0.4	0.01
Oils and fats	31.6	0.6	0.00
Fruit	72.0	5.4	0.08
Potatoes and other tubers	18.5	5.2	0.01
Vegetables	75.7	-2.2	-0.03
Sugar, jam, honey and other confectionery	49.6	1.0	0.00
Food products n.e.c.	82.7	-0.3	0.00
Non-alcoholic beverages	163.9	-0.4	-0.01
Food away from home	367.5	0.0	0.00
Source: Central Bureau of Statistics Aruba			

Source: Central Bureau of Statistics Aruba

Reference is made to table 18 in Appendix 3. Table 18 provides an overview of the monthly and end of period percentage changes and effect for September 2016 for the food groups.

In September 2016, "Food at home" and "Food away from home" as a group show an increase in price of 0.3% compared to August 2016, and had an influence of 0.06 ppts on the CPI, while the remaining goods and services, as a group, experienced an increase in price of 0.1%, causing an effect of 0.09 ppts on the CPI.

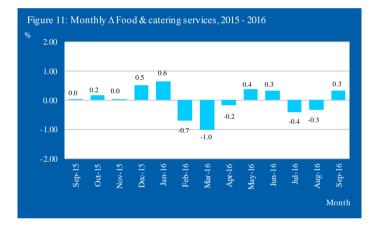
An overview of the percentage change and effect for "Food at home" and "Food away from home" for September 2016 is presented in table 12.

Table 12: Effect on the CPI of September 2016 of "Food at home" and "Food away from home"

Category	Weight	% Change	Effect
Food at home	1,125.3	0.4	0.06
Food away from home	367.5	0.0	0.00
Total group	1,492.8	0.3	0.06
Remaining goods and services	8,507.2	0.1	0.09
CPI	10,000.0	0.2	0.15

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 2015.



6.2 End of Period change of Food & catering services for September 2016

Over the last twelve (12) months the "Food & catering services" index has decreased by 0.3%. The "Food at home" index shows a decrease of 0.8%. The "Milk, cheese and eggs" index decreased by 6.8%, the largest decrease among the "Food at home" food groups, while the "Fruit" index shows the largest increase (10.8%). The index for "Food away from home" was unchanged in September 2016 for the third straight month and has increased by 1.4% over the last twelve (12) months.

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 vears).

7.2 Monthly change of the subsistence level for September 2016

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 decreased by Afl. 40, from Afl. 4,376 in September 2015 to Afl. 4,336 in September 2016. The "Housing" sector shows the largest decrease (Afl. 37) over this period.

Table 13: Monthly subsistence level in Aruba (in Afl.) by sector for a family of
2 adults and 2 children (aged 0-14 years) for September, 2012 - 2016

Sector	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16
Food and non-alcoholic beverages	1,518	1,513	1,551	1,580	1,568
Clothing and footwear	272	257	251	239	244
Housing	1,434	1,365	1,381	1,442	1,405
Household operation	135	134	129	130	131
Health	68	67	68	69	69
Transport	263	261	262	242	241
Communications	123	123	124	128	129
Recreation and culture	183	188	179	179	178
Education	63	63	63	64	65
Miscellaneous goods and services	296	298	301	303	306
Total	4,356	4,271	4,311	4,376	4,336

rce: Central Bureau of Statistics Aruba

An overview of the subsistence level, for the most common family types, over the period September 2015 - September 2016 is presented in table 14.

Table 14: Subsistence level in Aruba (in Afl.) by family size and composition,

September 2016 (Base period December 2010)

	Equivalence scales									
	1	1.3	1.5	1.8	2.1					
	1 adult	1 adult	2 adults	2 adults	2 adults					
Period		+ 1 child		+ 1 child	+ 2 children					
Sep-15	2,084	2,709	3,126	3,751	4,376					
Oct-15	2,082	2,707	3,123	3,748	4,372					
Nov-15	2,084	2,710	3,127	3,752	4,377					
Dec-15	2,097	2,727	3,146	3,775	4,404					
Jan-16	2,080	2,704	3,120	3,744	4,368					
Feb-16	-2,071	-2,692	-3,106	-3,727	-4,348					
Mar-16	2,059	2,677	3,089	3,707	4,325					
Apr-16	2,057	2,674	3,086	3,703	4,320					
May-16	2,062	2,681	3,093	3,712	4,331					
Jun-16	2,069	2,689	3,103	3,723	4,344					
Jul-16	2,068	2,688	3,102	3,722	4,342					
Aug-16	2,060	2,678	3,090	3,708	4,326					
Sep-16	2,065	2,684	3,097	3,716	4,336					

Source: Central Bureau of Statistics Aruba

7.3 Comparison of the subsistence level and minimum wage

In September 2016 the subsistence level for a single adult household is Afl. 2,065, which represents an income deficit of Afl. 387, a decrease of Afl. 60 compared to the deficit observed one year ago (Afl. 447). This deficit is the lowest registered over a period of five years for the month September.

Tabel 15: Monthly income surplus/deficit (in Afl.) for a single adult household for September, 2012 - 2016

		Minimum	
Period	1 adult	wage	Surplus/deficit
2012	2,074	1,605	-469
2013	2,034	1,637	-397
2014	2,053	1,637	-416
2015	2,084	1,637	-447
2016	2,065	1,678	-387

Source: Central Bureau of Statistics Aruba



DESCRIPTION	WEIGHT		2015	2016	2016	Monthly	Ytd	End of period	Period avera
	coefficient	Sep	Dec	Aug	Sep	Aug - Sep	Dec - Sep	Sep 15 - Sep 16	Sep 15 - Sep
Food and non-alcoholic beverages	1,125.3	147.42	148.53	145.68	146.31	0.4	-1.5	-0.8	-0.7
Food			150.22			0.6	-1.6	-0.8	-0.8
Non-alcoholic beverages			138.63			-0.4	-0.9	-0.4	-0.1
Alcoholic beverages and tobacco	81.9	147.09	146.82	148.73	148.90	0.1	1.4	1.2	3.1
Alcoholic beverages for consumption at home	59.3	123.07	122.86	124.84	124.83	0.0	1.6	1.4	2.9
Tobacco	22.6	210.06	209.63	211.37	212.03	0.3	1.1	0.9	3.5
Clothing and footwear		87.70	93.30	90.21		-0.6	-3.9	2.2	0.4
Clothing		88.90	95.61	91.85	91.27	-0.6	-4.5	2.7	1.0
Footwear	75.5	78.97	76.47	78.30	77.77	-0.7	1.7	-1.5	-4.3
Housing	2,553.3	127 02	120 10	122.05	124.24	0.2	-2.9	-2.6	-1.6
Actual rentals for housing			149.87			0.2	1.3	1.7	1.8
Maintenance and repair of the dwelling			108.99			1.2	-1.2	-0.4	1.5
Water supply and miscellaneous services relating to the dwelling			119.95			0.0	0.0	0.0	0.0
Electricity, gas and other fuels			154.54			0.0	-9.7	-9.7	-7.3
Household operation	741.3	95.75	95.47	95.92	96.43	0.5	1.0	0.7	-0.5
Furniture, furnishings, carpets and other floor coverings	142.1	53.27	54.75	54.66	58.01	6.1	5.9	8.9	0.4
Household textiles	69.5	107.34	102.40	101.07	97.81	-3.2	-4.5	-8.9	-7.5
Household appliances	111.3	65.36	64.32	61.14	61.24	0.2	-4.8	-6.3	-7.2
Glassware, tableware and household utensils	31.8	64.51	63.66	66.01	65.76	-0.4	3.3	1.9	-1.7
Tools and equipment for house and garden			74.25	69.47	69.51	0.0	-6.4	-10.7	-12.8
oods and services for routine household maintenance and cleaning	346.6	125.54	126.15	128.78	129.14	0.3	2.4	2.9	2.8
llasht	225.0	04.62	02.10	06 12	05.02			1.2	
Health Medical products, appliances and equipment		94.63 99.86	92.18	96.13 102.62		- 0.3 -0.5	4.0 5.4	1.3 2.3	0.5 1.2
Out-patient services		81.53		82.85		-0.5	1.6	1.6	1.2
Other health products and services		95.04		92.23	92.02	-0.2	1.0	-3.2	-2.9
	50.5	55.01	50.70	52.25	52.02	0.2		5.2	2.0
Transport	1,815.4	112.07	109.25	111.27	111.56	0.3	2.1	-0.5	-4.3
Purchase of vehicles	811.4	107.49	107.49	107.49	107.49	0.0	0.0	0.0	-1.7
Operation of personal transport equipment	840.1	120.08	112.92	115.37	116.95	1.4	3.6	-2.6	-7.3
Transport services	163.8	93.70	99.14	109.03	104.11	-4.5	5.0	11.1	0.5
Communications		90.34		90.63		0.1	0.4	0.4	1.2
Postal services			118.02			0.0	0.0	0.0	0.9
Telephone and telefax equipment		33.82	34.25	27.83	29.72	6.8	-13.2	-12.1	-3.1
Telephone and telefax services	670.6	92.58	92.58	93.14	93.14	0.0	0.6	0.6	1.2
Recreation and culture	891.2	109.44	111.74	109.42	108.87	-0.5	-2.6	-0.5	0.9
Audio-visual, photographic and information processing equipment					79.50	7.7	15.1	20.6	3.9
Other major durables for recreation and culture		49.05		49.67	49.67	0.0	-7.3	1.3	18.2
Other recreational items and equipment; gardens and pets			138.54			-0.2	1.5	-0.3	1.5
Recreational and cultural services	335.0	108.27	108.12	105.06	105.06	0.0	-2.8	-3.0	0.3
Newspapers, books and stationery	82.1	89.41	88.20	88.84	88.84	0.0	0.7	-0.6	-2.9
Holidays	71.0	114.69	148.01	116.65	100.89	-13.5	-31.8	-12.0	-0.6
Education	83.0	117.69	117.88	119.11	119.89	0.7	1.7	1.9	1.3
Pre primary and primary education			109.07			0.0	0.0	0.0	0.0
Secondary education			119.45			0.0	0.0	0.0	1.8
Post-secondary non-tertiary education			129.44			0.0	0.0	0.0	0.0
Tertiary education			128.31			3.7	9.9	11.0	3.6
Education not definable by level	12.4	123.03	123.31	124.99	126.03	0.8	2.2	2.4	1.6
Restaurants and hotels	272 7	134 29	135.15	136 14	136 14	0.0	0.7	1.4	2.1
Catering services			135.77			0.0	0.7	1.4	2.1
Accommodation services			98.61			0.0	0.1	0.2	1.1
Miscellaneous goods and services	767.0	102.60	103.19	103.05	103.34	0.3	0.1	0.7	0.5
Personal care			119.11			0.3	0.5	1.1	0.5
Personal effects n.e.c.			108.25			0.0	-1.0	0.9	-3.1
Social protection	28.7	145.84	145.84	145.84	145.84	0.0	0.0	0.0	8.2
Insurance	289.1	85.40	85.40	85.46	85.46	0.0	0.1	0.1	0.3
Financial services n.e.c.	26.9	96.96	98.25	97.36	98.24	0.9	0.0	1.3	0.9
Other services n.e.c.	93.0	96.96	98.25	97.36	98.24	0.9	0.0	1.3	0.9
					117.35	0.2	-0.9	-0.7	-1.0

Table 16: Monthly & Yearly Changes (%) in the Consumer Price Index for September 2016, Total Population (Dec 2006 = 100)

Source: Central Bureau of Statistics Aruba



DESCRIPTION	WEIGHT	Monthly	Ytd	End of period	Period average
	coefficient	Aug - Sep	Dec - Sep	Sep 15 - Sep 16	Sep 15 - Sep 16
Food and non-alcoholic beverages	1,125.3	0.06	-0.21	-0.11	-0.10
Food	961.4	0.07	-0.19	-0.10	-0.10
Non-alcoholic beverages	163.9	-0.01	-0.02	-0.01	0.00
Alcoholic beverages and tobacco	81.9	0.00	0.01	0.01	0.03
Alcoholic beverages for consumption at home	59.3	0.00	0.01	0.01	0.02
Тоbассо	22.6	0.00	0.00	0.00	0.01
Clothing and footwear	625.9	-0.03	-0.19	0.10	0.02
Clothing	550.4	-0.03	-0.20	0.11	0.04
Footwear	75.5	0.00	0.01	-0.01	-0.02
Housing	2,553.3	0.06	-0.85	-0.77	-0.47
Actual rentals for housing	854.2	0.02	0.14	0.19	0.19
Maintenance and repair of the dwelling	444.6	0.05	-0.05	-0.01	0.06
Water supply and miscellaneous services relating to the dwelling	505.7	0.00	0.00	0.00	0.00
Electricity, gas and other fuels	748.8	0.00	-0.94	-0.95	-0.72
Household operation	741.3	0.03	0.06	0.04	-0.03
Furniture, furnishings, carpets and other floor coverings	142.1	0.04	0.04	0.06	0.00
Household textiles	69.5	-0.02	-0.03	-0.06	-0.05
Household appliances	111.3	0.00	-0.03	-0.04	-0.05
Glassware, tableware and household utensils	31.8	0.00	0.01	0.00	0.00
Tools and equipment for house and garden	40.0	0.00	-0.02	-0.03	-0.04
oods and services for routine household maintenance and cleaning	346.6	0.01	0.09	0.11	0.10
Health	235.8	-0.01	0.07	0.02	0.01
Medical products, appliances and equipment	140.3	-0.01	0.06	0.03	0.01
Out-patient services	57.2	0.00	0.01	0.01	0.00
Other health products and services	38.3	0.00	0.00	-0.01	-0.01
Transport	1,815.4	0.04	0.35	-0.08	-0.75
Purchase of vehicles	811.4	0.00	0.00	0.00	-0.12
Operation of personal transport equipment	840.1	0.11	0.29	-0.22	-0.63
Transport services	163.8	-0.07	0.07	0.14	0.01
Communications	706.3	0.00	0.02	0.02	0.06
Postal services	6.1	0.00	0.00	0.00	0.00
Telephone and telefax equipment	29.6	0.00	-0.01	-0.01	0.00
Telephone and telefax services	670.6	0.00	0.03	0.03	0.06
Recreation and culture	891.2	-0.04	-0.22	-0.04	0.07
Audio-visual, photographic and information processing equipment	123.8	0.06	0.11	0.14	0.03
Other major durables for recreation and culture	19.2	0.00	-0.01	0.00	0.01
Other recreational items and equipment; gardens and pets	260.1	-0.01	0.05	-0.01	0.04
Recreational and cultural services	335.0	0.00	-0.09	-0.09	0.01
Newspapers, books and stationery	82.1	0.00	0.00	0.00	-0.02
Holidays	71.0	-0.10	-0.28	-0.08	0.00
Education	83.0	0.01	0.01	0.02	0.01
Pre primary and primary education	30.4	0.00	0.00	0.00	0.00
Secondary education	25.2	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	10.4	0.00	0.01	0.01	0.00
Education not definable by level	12.4	0.00	0.00	0.00	0.00
Restaurants and hotels	373.7	0.00	0.03	0.06	0.09
Catering services	367.5	0.00	0.03	0.06	0.09
Accommodation services	6.2	0.00	0.00	0.00	0.00
Miscellaneous goods and services	767 0	0.03	0.01	0.05	0.03
Miscellaneous goods and services Personal care	767.0 262.0	0.02 0.01	0.01	0.05	0.03
Personal effects n.e.c.	67.3	0.00 0.00	-0.01	0.01	-0.02
Social protection	28.7 289.1		0.00	0.00	0.03
Insurance Financial services n.e.c.	289.1	0.00 0.00	0.00 0.00	0.00	0.01
Financial services n.e.c. Other services n.e.c.	26.9 93.0	0.00	0.00	0.00	0.00
СРІ	10,000	0.15	-0.90	-0.68	-1.02

Table 17: Monthly & Yearly Effect on the Consumer Price Index per sector and category for September 2016 (Dec 2006 = 100)

Source: Central Bureau of Statistics Aruba

		% (Change	Effect		
ESCRIPTION	WEIGHT coefficient	Monthly Aug - Sep	End of period Sep 15 - Sep 16	Monthly Aug - Sep	End of period Sep 15 - Sep 16	
ood & catering services	1,492.8	0.3	-0.3	0.06	-0.05	
Food at home	1,125.3	0.4	-0.8	0.06	-0.11	
Bread and cereals	205.2	0.0	0.5	0.00	0.01	
Rice	18.8	0.2	0.4	0.00	0.00	
Bread	98.1	0.0	0.2	0.00	0.00	
Pasta products	7.6	0.5	0.1	0.00	0.00	
Other cereals and cereal products	80.7	0.0	0.9	0.00	0.01	
Meat	229.8	-0.6	-4.8	-0.02	-0.14	
Bovine	44.7	-0.3	-4.4	0.00	-0.02	
Swine	28.1	0.4	-4.4	0.00	0.00	
Poultry	59.5	-0.8	-5.7	-0.01	-0.05	
-						
Other meat and meat preparations	97.5	-0.9	-5.5	-0.01	-0.07	
Fish and other seafood	56.4	1.4	2.1	0.01	0.01	
Fish and seafood preparations	56.4	1.4	2.1	0.01	0.01	
Milk, cheese and eggs	140.0	0.4	-6.8	0.01	-0.11	
Milk	58.8	0.0	-10.9	0.00	-0.09	
Cheese	46.9	-0.4	0.2	0.00	0.00	
Eggs	14.3	1.0	-4.2	0.00	-0.01	
Other milk products	19.9	4.1	-8.3	0.01	-0.02	
Oils and fats	31.6	0.6	0.5	0.00	0.00	
Butter and margarine	9.9	1.6	3.4	0.00	0.00	
Corn oil	9.4	-0.4	0.0	0.00	0.00	
Other oils and fats	12.3	0.7	-1.8	0.00	0.00	
Fruit	72.0	5.4	10.8	0.08	0.15	
Oranges, lemons and mandarins	11.1	0.7	-6.8	0.00	-0.01	
Bananas and plantains	13.8	1.1	6.7	0.00	0.02	
Apples and pears	11.2	2.6	10.3	0.00	0.02	
Grapes	6.0	2.3	13.9	0.00	0.01	
Melons and watermelons	6.7	-2.4	1.8	-0.01	0.00	
Nuts	6.9	0.0	5.1	0.00	0.00	
Other fruits and fruit products	16.4	14.0	21.5	0.08	0.11	
Potatoes and other tubers	18.5	5.2	5.4	0.01	0.01	
Potatoes	11.2	6.9	7.4	0.01	0.01	
		2.2				
Sweet potatoes and yucca Other tubers	2.5		3.3	0.00	0.00 0.00	
Other tubers	4.8	0.5	-0.3	0.00	0.00	
Vegetables	75.7	-2.2	-4.5	-0.03	-0.05	
Lettuce	6.7	-1.8	-35.3	0.00	-0.02	
Celery and broccoli	6.3	-4.1	-21.8	-0.01	-0.03	
Tomatoes & peppers	15.5	-1.3	-2.2	0.00	0.00	
Onions	7.8	-6.2	-1.5	-0.02	0.00	
Frozen vegetable mixtures	6.7	1.3	5.3	0.00	0.00	
Other vegetables	12.7	-1.6	-1.3	0.00	0.00	
Other preserved or processed vegetables	20.0	0.6	3.7	0.00	0.01	
Sugar iom honou and attact and attact	40.0	10	63	0.00	0.00	
Sugar, jam, honey and other confectionery	49.6	1.0	0.2	0.00	0.00	
Sugar	14.4	2.5	-1.8	0.00	0.00	
Jams and jellies	2.8	-0.9	0.7	0.00	0.00	
Other confectionery products	32.4	0.6	0.9	0.00	0.00	
Food products n.e.c.	82.7	-0.3	2.2	0.00	0.02	
Other food products	82.7	-0.3	2.2	0.00	0.02	
Non-alcoholic beverages	163.9	-0.4	-0.4	-0.01	-0.01	
Coffee and tea	30.1	-2.3	-13.1	-0.01	-0.04	
Soft and sports drinks	49.7	0.0	6.4	0.00	0.03	
Fruit juices	61.0	0.0	0.5	0.00	0.00	
Other non-alcoholic beverages	23.1	-0.7	-0.4	0.00	0.00	
Food away from home Food and beverage consumption away from home	367.5 367.5	0.0 0.0	1.4 1.4	0.00 0.00	0.06 0.06	
ther goods and services	8,507.2	0.1	-0.8	0.09	-0.63	
Other goods	5,147.2	0.5	-2.0	0.23	-0.98	
Other services	3,360.0	-0.4	1.1	-0.13	0.35	
	10,000	0.2	-0.7	0.15	-0.68	

Table 18: Monthly & Yearly Changes (%) and effect in the Food & catering services for September 2016, Total Population (Dec 2006 = 100)

Source: Central Bureau of Statistics Aruba

Table 19: CPI: Main indices for September 2016, Total Population (Dec 2006 = 100)

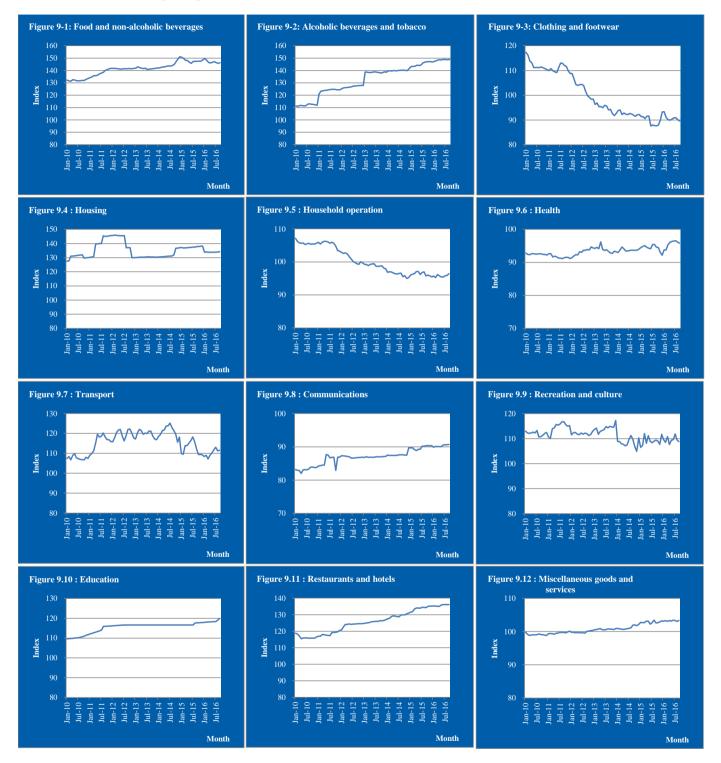
DESCRIPTION	WEIGHT	2015	2015	2016	2016	Monthly	Ytd	End of period	Period average
	coefficient	Sep	Dec	Aug	Sep	Aug - Sep	Dec - Sep	Sep 15 - Sep 16	Sep 15 - Sep 16
CPI for "All items"	10,000.0	118.14	118.41	117.17	117.35	0.2	-0.9	-0.7	-1.0
CPI for "Goods"	6,272.5	118.71	118.32	116.14	116.67	0.5	-1.4	-1.7	-2.5
CPI for "Durable goods"	1,293.2	91.83	92.28	92.45	93.43	1.1	1.2	1.7	-1.3
CPI for "Semi-durable goods"	954.1	90.46	93.38	91.12	90.48	-0.7	-3.1	0.0	-1.1
CPI for "Non-durable goods"	4,025.2	134.05	132.59	129.68	130.35	0.5	-1.7	-2.8	-2.9
CPI for "Services"	3,727.5	117.19	118.56	118.90	118.48	-0.4	-0.1	1.1	1.5
CPI for "Gasoline" and "Diesel"	552.3	116.67	103.98	107.82	110.23	2.2	6.0	-5.5	-13.7
CPI excluding "Food and non-alcoholic beverages"	8,874.7	114.43	114.59	113.55	113.67	0.1	-0.8	-0.7	-1.1
CPI excluding "Gasoline" and "Diesel"	9,447.7	118.23	119.25	117.71	117.76	0.0	-1.2	-0.4	-0.3
CPI excluding "Food and non-alcoholic beverages", "Gasoline" and "Diese	8,322.4	114.28	115.29	113.93	113.90	0.0	-1.2	-0.3	-0.2
CPI excluding "Rentals actually paid by tenants or subtenants"	9,145.8	115.24	115.47	113.95	114.13	0.2	-1.2	-1.0	-1.3
CPI excluding "Housing"	7,446.7	111.40	111.62	111.42	111.55	0.1	-0.1	0.1	-0.8
CPI excluding "Gasoline", "Diesel", "Water" and "Electricity"	7,435.0	110.75	111.97	111.32	111.36	0.0	-0.5	0.6	0.4

Table 20: CPI: Effect on main indices for September 2016, Total Population (Dec 2006 = 100)

ESCRIPTION	WEIGHT coefficient	Monthly Aug - Sep	Ytd Dec - Sep	End of period Sep 15 - Sep 16	Period average Sep 15 - Sep 16
PI for "All items"	10,000.0	0.15	-0.90	-0.68	-1.02
CPI for "Goods"	6,272.5	0.29	-0.87	-1.08	-1.56
CPI for "Durable goods"	1,293.2	0.11	0.12	0.18	-0.14
CPI for "Semi-durable goods"	954.1	-0.05	-0.23	0.00	-0.09
CPI for "Non-durable goods"	4,025.2	0.23	-0.76	-1.26	-1.34
CPI for "Services"	3,727.5	-0.13	-0.03	0.41	0.54
CPI for "Gasoline" and "Diesel"	552.3	0.11	0.29	-0.30	-0.78
CPI excluding "Food and non-alcoholic beverages"	8,874.7	0.09	-0.69	-0.57	-0.92
CPI excluding "Gasoline" and "Diesel"	9,447.7	0.04	-1.19	-0.37	-0.24
CPI excluding "Food and non-alcoholic beverages", "Gasoline" and "Diese	8,322.4	-0.02	-0.98	-0.27	-0.14
CPI excluding "Rentals actually paid by tenants or subtenants"	9,145.8	0.14	-1.04	-0.86	-1.21
CPI excluding "Housing"	7,446.7	0.09	-0.04	0.10	-0.55
CPI excluding "Gasoline", "Diesel", "Water" and "Electricity"	7,435.0	0.02	-0.39	0.38	0.28

Appendix 5

Course of Indices for 2010 up to September 2016



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.