

SOME CONSIDERATIONS CONCERNING THE EVOLUTION OF FOOD PRICES AT NATIONAL LEVEL (2016-2020)

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Abstract

The paper seeks to present the evolution in dynamics of indices, consumer prices, for food products (milling and bakery products; fruits and canned fruits; vegetables and canned vegetables; oils and fats; eggs; meat, meat preparations and canned meat; fish and canned fish; milk and dairy products; sugar and sugary products, honey, alcoholic beverages, cocoa and coffee, other food products), at national level and at the same time makes a comparative look with the other groups of marketed products (non-food goods; services).

For the period 2016-2020, there are variations in the average, consumer price indices (in the case of food products) from 100.95% for cocoa and coffee, to 105.62% in the case of eggs.

The situation of the average levels of the consumer price index, by groups of products, it can be seen that the maximum level occurs in food products (103.23%), followed by the general level (102.43%), non-food goods (102.26%) and services (101.54%).

Key words: price, food, non-food products, services

INTRODUCTION

The price of a product should be regarded as representing an equivalent good for the money paid. That doesn't necessarily mean it has to be the cheapest on the market.

The price of a product is constituted in a strategic variable of the economic agent, its fixation being a strategic decision on which depends the size and importance of the market segment to be seized as well as the reactions of the competitors.

At the level of the market economy, the prices of agro-food products are characterized by particular aspects, such as: a variation, over time, due to the perishability of the products, the degree of storage price and the size of the specific storage capacities, the degree of rarity (in certain situations), their qualities and the degree of demand by consumers; tendency to standardize or decrease; increases or decreases the incomes of producers, depending on the way of manifestation of consumption (its

intensity); their variation may increase, decrease or standardize the price of other products for consumption.

METHOD AND MATERIAL

The elaboration of this study appealed to the method of comparison in time, by means of which the evolution in dynamics of the phenomenon is monitored for a certain period, and highlights the deviations registered from the terms of reference with which it is operated. The analysis refers to the period of time between 2016 and 2020, thus constituting a dynamic series consisting of 5 terms.

The work operates with consumer price indices (CPI) measures the overall evolution of the prices of purchased goods and of the tariffs of services used by the population in a certain period (the current period), compared to a previous period (the base or reference period). The consumer price index is calculated only for the elements that enter the direct consumption of the population, excluding: consumption from own resources,

expenditures of an investment and accumulation nature, interest paid on loans, insurance rates, fines, taxes, etc., as well as expenditure related to the payment of labour for the agricultural production of individual households.

The consumer price index is calculated as a laspeyres index with a fixed base. The consumer price index is determined by successive aggregations, based on the prices/tariffs recorded for goods subject to direct consumption of the population.

The indices refer to the evolution of food prices, the level of which is shown for the whole group of products, for the subgroups of this category (milling and bakery products; vegetables and canned vegetables; fruit and canned fruit; oil, bacon, fat; eggs; meat, meat preparations

and canned meat; fish and canned fish; milk and canned fish; milk and milk products; sugar and sugary products, honey, alcoholic beverages, cocoa and coffee; other foodstuffs, but also for the various products covered by the subgroups concerned.

In order to form an overview of the evolution of food prices, it is also made to compare them with the existing situation in the case of industrial products, services, as well as with the general level of prices.

RESULTS AND DISCUSSIONS

Table 1 contains data relating to the trend in prices of milling and bakery products, which are presented at a general level also for the products constituting this group.

Table 1. Milling and bakery products – price dynamics *

No.	Specification	Y E A R				
		2016	2017	2018	2019	2020
1.	General level	100.60	102.32	104.46	103.53	105.12
2.	Milling products	99.99	101.23	102.84	104.48	106.15
2.1.	Flour	99.32	101.49	103.25	105.19	107.36
2.2.	Cornflour	101.11	100.87	102.29	103.60	104.55
3.	Bread, bread products, specialties, by-products of wheat, maize, rye	100.57	102.42	104.71	103.45	105.06
3.1.	Bread	100.52	102.36	105.02	103.50	105.27
3.2.	Bakery products	100.35	102.40	104.41	103.59	104.48
3.3.	Bakery specialties	100.61	103.14	103.07	103.23	103.95

<http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table> (15.12.2021)

a. General level. For the milling and bakery products group at the level of 2016, compared to the reference term, the prices increased by 0.60%, a trend that was maintained also for the other terms of the dynamic series - +2.32% in 2017, +4.46% for 2018, +3.53% for the level of 2019 and +5.12% for 2020. As such one can appreciate the upward evolution of the price, with variable tendencies.

b. Milling products. In the case of milling products, the upward trend of the price from 2017 to 2020 is observed (advance of 1.01, 1.02, 1.04 and 1.06 times of the reference terms for 2017, 2018, 2019 and 2020). In 2016 we are talking about a decrease in prices by 0.01%. Thus, we

are talking about an uneven-upward evolution of the indicator.

c. Flour. For flour the situation is similar to the one presented above, the differences are related to a sharper decrease in 2016 (-0.68%), respectively to higher increases for the years 2017-2020.

d. Cornflour. In the case of cornmeal, it is noted that the price has evolved upwards (+1.11% in 2016, +0.87% for 2017, +2.29% at the level of 2018, +2.60% in the case of 2019 and +4.55% in 2020).

e. Bread and bread products. For the group of bread and bread products, specialties, wheat, maize and rye substitutes, it is found that the price has

evolved upwards (exceedances of the reporting bases, as follows: 0.57% in 2016, 2.42% for 2017, 4.71% at the level of 2018, 3.45% in 2019 and +5.06% for 2020).

f. Bread. At the level of bread, the price evolution is observed increasing, the exceedances of the comparison terms being of: 0.52% in 2016, 2.36% for 2017, 3.50% in the case of 2019, 5.02% in 2018 and 5.27% in the year 2020.

g. Bread products. If we refer to the bread products, we can see the existence of the upward-variable trend. The exceedances of the reporting bases ranged from 0.35% in 2016 to 4.48% in the case of 2020.

h. Bakery specialties. For bakery specialties, the situation presents itself somewhat similarly, with the one previously highlighted (extreme exceedances of 0.61 and 3.95% respectively for the years 2016 and 2020).

Figure 1 shows the amplitudes of price changes for products of the milling and bakery group of activities. Annual amplitudes of variation are found from 3.34% for specialties up to 8.04% for flour. It can be said that these amplitudes are acceptable.

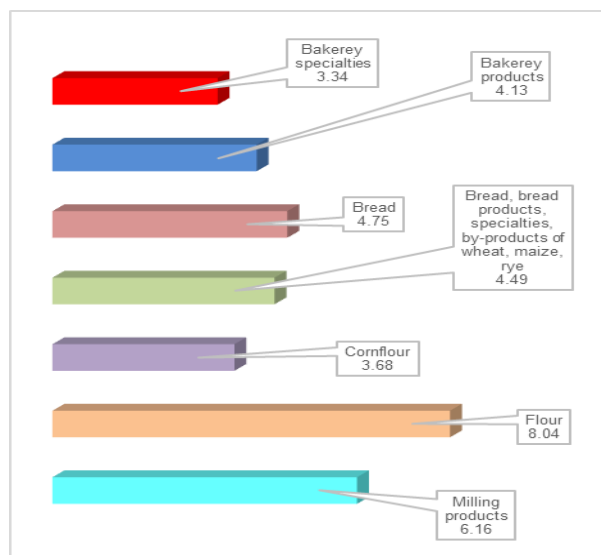


Fig. 1. Total amplitude of price change - milling and bakery products - % (processed after: www.inse.ro)

Table 2 contains data on the price development for vegetables and

preserved vegetables, which are presented at a general level and for the products constituting that group.

Table 2. Vegetables and canned vegetables – price dynamics

No.	Specification	YEAR				
		2016	2017	2018	2019	2020
1.	General level	97.45	100.58	121.50	104.61	96.49
2.	Beans and other legumes	98.02	101.75	103.62	102.65	118.02
3.	Potatoes	98.19	91.00	139.64	123.61	71.51
4.	Other vegetables and canned vegetables	96.20	101.83	123.46	99.73	100.47

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (15.12.2021)

a. General level. For the group of vegetables and canned vegetables, there is a decrease in the price in 2016 and 2020 by 2.55 and 3.51% respectively compared to the comparison bases, after which from 2017 to 2019 we only see price increases, as follows: +0.58% in 2017, +21.50% at the level of 2018 and +4.61% for 2019.

b. Beans and other legumes. In the case of beans and other legumes, a decrease of 1.98% in the price is observed in 2016, after which the advance of the reference terms was of 1.01, 1.03, 1.02 and 1.18 times for the years 2017, 2018, 2019 and 2020 respectively.

c. Potatoes. For potatoes there are three years characterized by the decrease in the price level: (2016, 2017 and 2020 – 1.81, 9.0 respectively 28.49%), but also two years for which the price level increases (2018 and 2019 - +39.64 and +23.61% respectively).

d. Other vegetables and canned vegetables. For other vegetables and canned vegetables, there are two downward trends in price in 2016 and 2019 (96.20 and 99.73 respectively), but there are also three growth trends in 2017, 2018 and 2020 (101.83, 123.46 and 100.47% respectively).

Figure 2 shows the amplitudes of the price variation for products of the group of vegetables and preserved vegetables. It can be observed the existence of significant amplitudes for beans and other

legumes (20.0%) respectively for other vegetables and canned vegetables (27.26%), as well as very significant amplitudes in potatoes (68.13%).

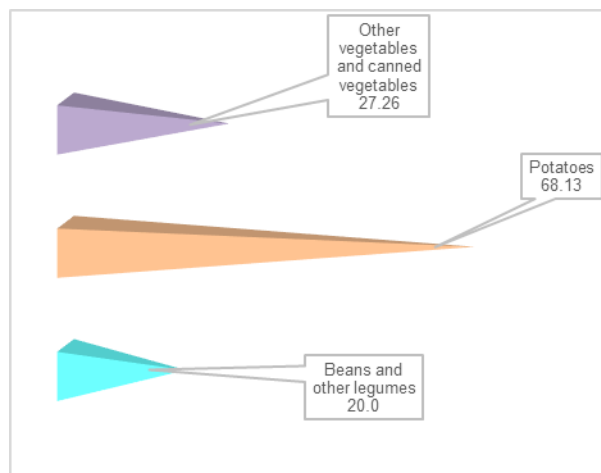


Fig. 2. Total amplitude of price change - vegetables and canned vegetables - % (processed after: www.inse.ro)

The evolution of fruit prices and canned fruit is presented in Table 3.

Table 3. Fruit and canned fruit – price dynamics *

No.	Specification	YEAR				
		2016	2017	2018	2019	2020
1.	General level	102.12	109.76	91.96	116.74	101.88
2.	Fresh fruit	101.19	111.06	91.66	118.41	106.92
3.	Citrus fruit and other southern fruits	103.37	108.49	91.46	116.11	95.82
4.	Canned fruit	101.11	102.84	102.37	102.66	104.02

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (15.12.2021)

a. General level. In the case of the group of fruits and canned fruits, it can be observed the existence of a single situation of decrease in prices (2018 – decrease of 8.04% compared to the reference term). For the rest of the components of the dynamic series, there are overruns of the comparison terms, as follows: 1.02 times in the case of 2016, 1.09 times at the level of 2017, 1.16 times in 2019 and 1.01 times in 2020.

b. Fresh fruit. For fresh fruits, the same trends presented at the general level of the product group are noted: +1.19% in 2016, +11.06% for 2017, -8.34% at the level of 2018, +18.41% in 2019 and +6.92% in the case of 2020.

c. Citrus and other southern fruits.

With regard to the evolution of prices for citrus fruit and other southern fruits, there are some differences from the previous situations. Under these conditions, the advance of the bases of comparison were recorded in 2016, 2017 and 2019 (1.03, 1.08, respectively 1.16 times), and decreases compared to these occurred in 2018 and 2020 (-8.54 and -4.18%).

d. Canned fruit. If we refer to the canned fruits, we can see the upward, certain trend in the price level. As a result, we are talking about successive annual increases of: 1.11% in the case of 2016, 2.84% for 2017, 2.37% in 2018, 2.66% in 2019 and 4.02% in 2020.

Figure 3 shows the amplitudes of price variation for products of the group of fruit and preserved fruit. It is established the existence of significant amplitudes of fresh fruits (26.75%) respectively for citrus fruits and other southern fruits (24.65%), as well as insignificant amplitudes for canned fruits (2.91%).

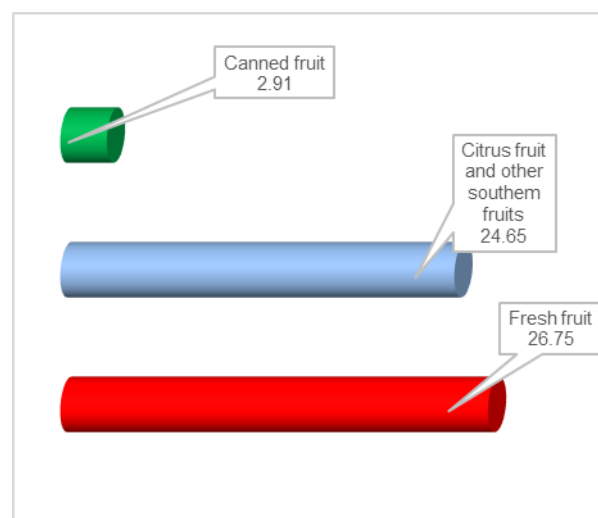


Fig. 3. Total amplitude of price change - fruit and canned fruit - % (processed after: www.inse.ro)

Table 4 shows the evolution of oil, fat and egg prices for the period under analysis.

a. Oil, bacon, fat. For this product group, prices recorded a continuous year-on-year increase, as follows: +0.63% in 2016, +0.15% for 2017, +0.74% at the level of 2018, +1.81% in the case of 2019 and +6.71% in 2020.

Table 4. Oils, fats and eggs – price dynamics *

No.	Specification	Y E A R				
		2016	2017	2018	2019	2020
1.	Oil, bacon, fats	100.63	100.15	100.74	101.81	106.71
2.	Edible oil	101.06	99.83	100.30	101.11	107.55
3.	Margarine	99.11	101.66	102.11	103.00	103.66
4.	Eggs	100.38	143.19	80.65	100.93	102.97

<http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table> (15.12.2021)

b. Edible oil. If we refer to the evolution of the price for comestible oil, we can see a downward trend in 2017 compared to 2016 (-0.17%), and for the rest of the terms of the dynamic series we have only exceedances of the reporting bases (from 0.30% in 2018 to 7.55% at the level of 2020).

c. Margarine. Regarding the evolution of the margarine price, it is observed a decrease at the beginning of the analysed period (-0.89% in the case of 2016), after which four increasing trends appear (+1.66% at the level of 2017, +2.11% in the case of 2018, +3.0% in 2019 and +3.66% for 2020).

d. Eggs. Eggs show the fluctuating trend in prices, characterized by increases in 2016 and 2017 (overshoots of 0.38 and 43.19% of the comparison bases), decrease in 2018 (-19.35%), increases for 2019 and 2020 (+0.93, respectively +2.97%).

Convenient amplitudes are found to exist (4.55 and 7.72% for margarine and edible oil respectively).

The prices for meat, meat preparations and canned meat, the data in Table 5 shall be used to present the prices of meat, meat preparations and preserved meat.

Table 5. Meat, meat preparations and canned meat – price dynamics

No.	Specification	Y E A R				
		2016	2017	2018	2019	2020
1.	General level	101.17	104.40	102.57	107.15	104.31
2.	Meat of cattle	101.07	104.40	105.89	104.61	104.06
3.	Pig meat	101.95	105.50	101.30	111.24	104.21
4.	Poultry meat	100.54	102.97	102.71	103.76	102.62
5.	Meat products	101.44	104.26	102.54	107.02	105.29
6.	Canned meat	100.66	103.41	102.72	104.85	105.50

<http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table> (15.12.2021)

a. General level. In the case of this group of products, the strictly upward evolution of the price can be ascertained, the annual growth rates of the indicator being: 1.01 times in the case of 2016, 1.02 times for 2018, 1.04 times at the level of 2020 and 2017, 1.07 times in 2019.

b. Meat of cattle. In cattle meat we are talking about the same upward trend, as in the previous case. Thus, there are successive annual increases of: 1.07% for 2016, 4.40% in 2017, 5.89% at the level of 2018, 4.61% for 2019 and 4.06% for 2020.

c. Pig meat. For this type of meat was recorded the lowest increase in 2018 (1.30%), and the largest increase occurred at the level of 2019 (11.24%).

d. Poultry meat. Poultry meat shows strictly supra-unit levels of dynamics indices, levels that varied from one year to another, as follows: 100.54% at the level of 2016, 102.97% for 2017, 102.71% in 2018, 103.76% in the case of 2019 and 102.62% for 2020.

e. Meat preparations. If we refer to the specific situation of meat products, there are variable advances of the comparison bases, as follows: 1.01 times in 2016, 1.04 times for 2017, 1.02 times in 2018, 1.07 times at the level of 2019, 1.05 times in 2020.

f. Canned meat. In the case of canned meat, the price increased, from one year to another, in variable proportions, as follows: +0.66% at the level of 2016, +3.41% in 2017, + 2.72% for 2018, +4.85% in the case of 2019, +5.50% compared to the situation of 2020.

Figure 4 shows the amplitudes of price changes for meat products. It is found the existence of amplitudes, generally reduced (below 5.60%), except for the pig meat where the amplitude was more pronounced (9.94%).

Table 6 shows the evolution of prices for fish and canned fish.

a. General level. This product group is characterised by an upward price development. Thus, successive annual increases of the indicator are observed

by: 1.09% in 2016, 2.43% for 2017, 3.22% at the level of 2018, 4.04% for 2019, 4.63% in 2020.

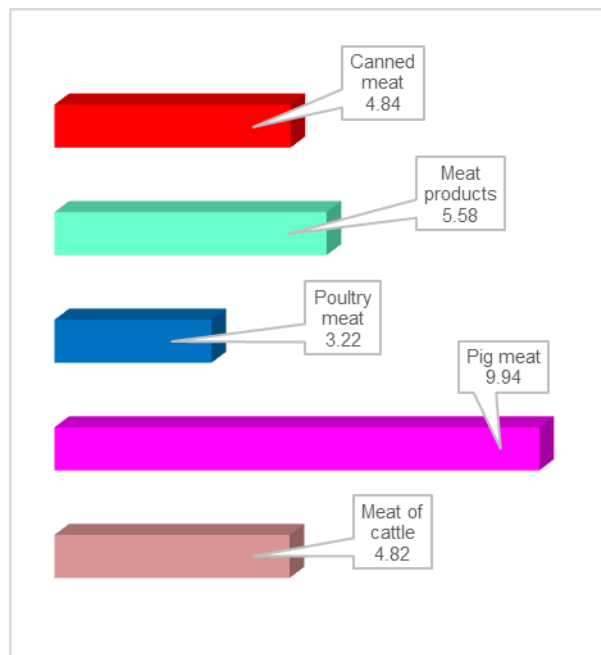


Fig. 4. Total amplitude of price change - meat, meat preparations and canned meat - % (processed after: www.inse.ro)

Table 6. Fish and canned fish – price dynamics *

No.	Specification	Y E A R				
		2016	2017	2018	2019	2020
1.	General level	101.09	102.43	103.22	104.04	104.63
2.	Fresh and frozen fish	101.29	102.44	103.07	104.25	104.81
3.	Canned fish and other fish products	100.16	102.19	103.43	103.57	103.79

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (15.12.2021)

b. Fresh and frozen fish. For fresh and frozen fish, the same trend is found, as in the previous case, the advance of the comparison terms ranging from 1.01 times in 2016 to 1.04 times for the years 2019 and 2020 respectively.

c. Canned fish and other fish products. Fish products and canned food recorded an upward price trend, a situation in which the reporting bases increased from one year to another, as follows: +0.16% at the level of 2016, +2.19% in 2017, +3.43% in the case of 2018, +3.57% in 2019, +3.79% for 2020.

It is established the existence of low amplitudes (3.52 and 3.63% for fresh and frozen fish, respectively for canned fish and other fish products).

If milk and milk products are to be considered, the data on them are presented in Table 7.

Table 7. Milk and milk products – price dynamics *

No.	Specification	Y E A R				
		2016	2017	2018	2019	2020
1.	General level	101.44	104.99	102.58	103.41	103.88
2.	Milk - total	101.38	104.74	102.77	102.87	103.14
2.1.	Cow's milk	101.48	105.16	102.78	102.57	103.17
3.	Cheese - total	102.08	103.54	102.67	104.45	105.47
3.1.	Cow's cheese	102.09	103.63	103.13	104.69	105.17
3.2.	Sheep's cheese	102.05	103.39	101.95	104.06	105.88
4.	Butter	101.61	122.77	101.46	103.46	102.65

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (15.12.2021)

a. General level. For the dairy group, the upward trend in price is observed. We are talking about successive annual increases, of the indicator, of: 1.44% for 2016, 4.99% at the level of 2017, 2.58% in 2018, 3.41% in the case of 2019, 3.88% in 2020.

b. Milk-total. In the case of milk, the upward evolution of the price is observed, the advance of the reference terms being 1.01 times for 2016, 1.02 times at the level of 2018, 1.03 times in the case of 2019 and 2020, 1.04 times in 2017.

c. Cow's milk. With regard to the price situation of cow's milk, strictly supra-unit levels of the dynamics indices are observed. Under these conditions, the years 2016 and 2017 stand out as extreme levels (101.48 and 105.16% respectively).

d. Total cheese. At the general level of the cheese product, we can say that the price evolution was definitely increasing, the terms of comparison being exceeded as follows: 2.08% in 2016, 3.54% for 2017, 2.67% at the level of 2018, 4.45% in 2019, 5.47% for 2020.

e. Cottage cheese. The price of cottage cheese is characterized by strictly supra-unit values, of the dynamics indices, the devaluations of the reporting bases ranging from 1.02 to 1.05 times (years 2016 and 2020 respectively).

f. Sheep's cheese. The price evolution trend for sheep cheese was an upward one, the annual growth rates being variable as follows: 1.02 times at the level of 2016, 1.03 times for 2017, 1.01 times

in the case of 2018, 1.04 times in 2019, 1.05 times in 2020.

g. Butter. An upward trend in the price of butter is observed during the analysed period. In this regard, the minimum and maximum levels of the recorded exceedances are noted (1.46 and 22.77% for the years 2018 and 2017 respectively).

Figure 5 shows the amplitudes of the change in prices for the milk and milk products group. It is found the existence of low amplitudes for the vast majority of products (below 4%), except for butter with a significant amplitude of variation (21.31%).

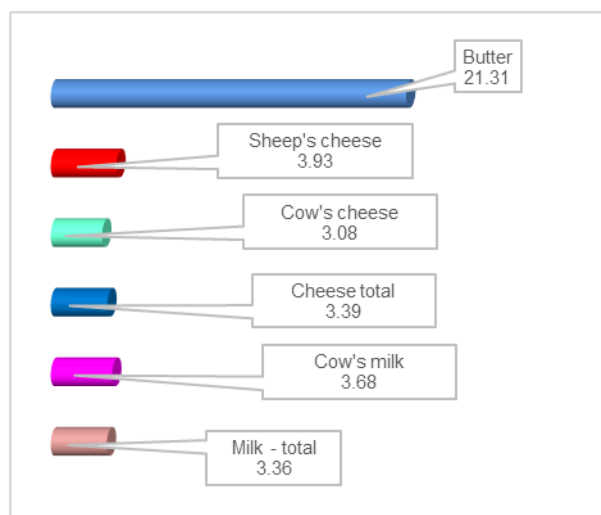


Fig. 5. Total amplitude of price change - milk and milk products - % (processed after: www.inse.ro)

The data for the price evolution for sugar, sugary products and honey are presented in Table 8.

Table 8. Sugar, sugary products and honey – price dynamics

No.	Specification	Y E A R				
		2016	2017	2018	2019	2020
1.	General level	104.05	100.93	99.25	102.49	103.60
2.	Sugar	110.15	98.26	91.64	102.80	103.02
3.	Honey bee	101.62	103.11	102.42	102.03	103.03

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (15.12.2021)

a. General level. For the sugar and sugary products group, there is a fluctuating evolution of the price, the specific increases of 2016 and 2017 (+4.05 and +0.93%), being followed by decreases in 2018 (-0.75%), after which

for 2019 and 2020 there are again increases in the level of the indicator (+2.49 and +3.60%).

b. Sugar. Regarding the evolution of the price of sugar, the same fluctuating trend is observed. We are talking about the advance of the terms of reference of 1.10, 1.02 and 1.03 times in the situation of 2016, 2019 and 2020, respectively of decreases compared to those for the years 2017 and 2018 (-1.74, respectively -8.36%).

c. Honey. For honey, there is an upward evolution of the price, the growth rate, from one year to another, being variable, as follows: 1.62% for 2016, 3.11% at the level of 2017, 2.42% in 2018, 2.03% in the case of 2019 and 3.03% in 2020.

The amplitude of variation for sugar was 18.51% - quite important.

Table 9 contains information on the price development for products belonging to the group of alcoholic beverages.

Table 9. Alcoholic beverages – price dynamics *

No.	Specification	Y E A R				
		2016	2017	2018	2019	2020
1.	General level	98.56	101.15	101.71	102.10	103.01
2.	Wine	98.46	101.07	101.80	101.45	102.79
3.	Brandy, spirits and other alcoholic beverages	97.87	100.30	101.69	102.68	102.82
4.	Beer	98.78	101.39	101.66	102.21	103.15

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (15.12.2021)

a. General level. The alcoholic beverages group shows an uneven evolution, registering decreases for the first term of the dynamic series (2016 – 98.56%), and then - for the rest of the dynamic series components - increases appear, as follows: +1.15% in 2017, +1.71% at the level of 2018, +2.10% in 2019 and +3.01% for 2020.

b. Wine. The price of wine has evolved similarly to the sieve found at the level of the product group (sub-unitary indices in 2016 and super-unitary indices in the rest). Thus, we are talking about a decrease of 1.54% in 2016 and overruns (of the reporting bases) of 1.01 times for the years 2017, 2018 and 2019 respectively 1.02 times at the level of 2020.

c. Brandy, spirits and other strong alcoholic beverages. For brandy, spirits and other strong alcoholic beverages, the previous trends are preserved (97.87, 100.30, 101.69, 102.68 and 102.82% for the years 2016, 2017, 2018, 2019 and 2020 respectively).

d. Beer. If we refer to the evolution of the beer price, we fit in the same way of evolution: -2.22% in 2016, +1.39% at the level of 2017, +1.66% in the case of 2018, +2.21% in 2019 and +3.15% for 2020.

Figure 6 shows the amplitudes of the variation in prices of products in the group of alcoholic beverages. It is established the existence of "convenient" amplitudes for all products (below 5%).

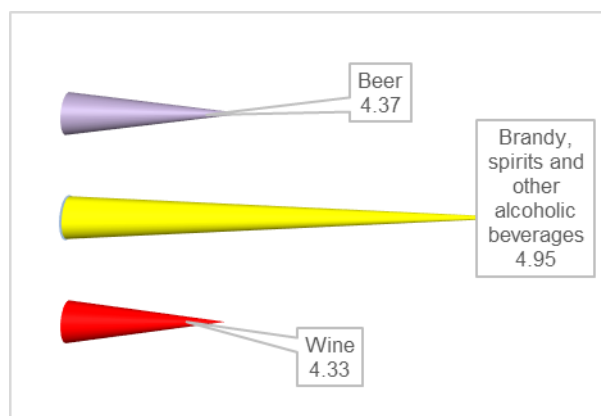


Fig. 6. Total amplitude of price change
- Alcoholic beverages - %
(processed after: www.inse.ro)

Data for miscellaneous foodstuffs are presented in Table 10.

Table 10. Miscellaneous food products – price dynamics

No.	Specification	YEAR				
		2016	2017	2018	2019	2020
1.	Cocoa and coffee	99.45	100.89	101.14	101.24	102.02
1.1.	Coffee	99.39	100.88	101.17	101.14	101.87
2.	Other foodstuffs	100.74	101.96	102.62	103.79	103.86

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (15.12.2021)

a. Cocoa and coffee. At a general level, for cocoa and coffee there is a decreasing price trend (2016 – 99.45%) and four upward trends (100.89% - 2017, 101.14% - 2018, 101.24% - 2019, 102.02% - 2020).

b. Coffee. In the case of coffee, the situation is similar to the previous one, but we are talking about different rates of decrease and growth, at the level of the components of the dynamic series. Thus, we have exceedances and decreases compared to the reference terms, as follows: +1.87% for 2020, +1.17% for 2018, +1.14% for 2019, +0.88% for 2017, -0.61% in 2016.

c. Other food products. At the general level of other food products, there is an uneven upward evolution, from year to year, of the level of the trading price: +0.74% in 2016, +1.96% for 2017, +2.62% in the case of 2018, +3.79% in 2019, +3.86% for 2020.

For coffee there is an amplitude of variation of 2.48%.

As regards the total magnitude of the price change, for the main food groups the situation is shown in Figure 7. Less convenient situations are to be noted from eggs (62.54%), vegetables and canned vegetables (25.01%), fruits and canned fruits (24.78%). For other categories of products, the amplitude can be considered a "permissible" one: meat and canned meat (5.98%); oil, bacon, fat (6.08%). For the rest of the products, the amplitude is somewhat insignificant (below 5%).

Table 11 shows the price evolution for the main categories of products intended for consumption.

a. Food commodities. In the case of food commodities, the strictly upward evolution of the price is observed, with variations in the increase from year to year. The growth rate is lower for 2016 (0.68%), average for 2018 and 2020 (3.10 and 3.24% respectively) and more pronounced for 2017 and 2019 (+4.07 and +5.08%).

b. Non-food goods. For non-food goods, there is a decrease of 0.87% in 2016, after which there is a variable growth trend, more pronounced in the situation of 2017, 2018 and 2019 (exceedances of the reporting bases by 4.11, 3.75 and 3.31 respectively), after which it decreases for 2020 (+1.01%).

c. Services. At the level of services, the situation is somewhat similar to the one presented above (-1.83% for 2016, +0.22, +2.44, +4.16 and +2.69% at the level of 2017, 2018, 2019 and 2020, respectively).

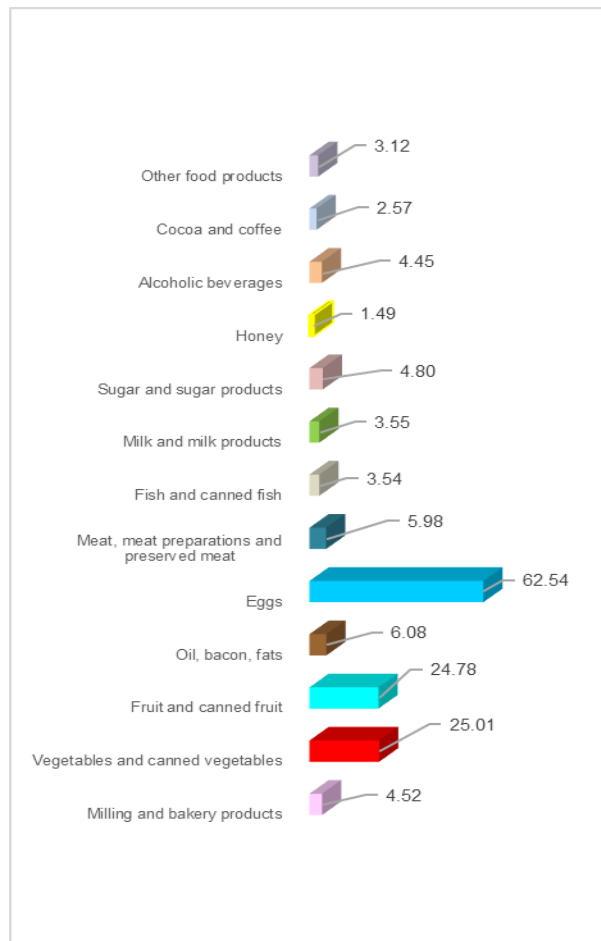


Fig. 7. Total amplitude of price change - the main categories of food products - % (processed after: www.inse.ro)

Table 11. Price dynamics for the main categories of consumer products*

No.	Specification	Y A E R				
		2016	2017	2018	2019	2020
1.	Total food goods	100.68	104.07	103.10	105.08	103.24
2.	Total non-food goods	99.13	104.11	103.75	103.31	101.01
3.	Total services	98.17	100.22	102.44	104.16	102.69
4.	General total	99.46	103.32	103.27	104.04	102.06

<http://statistici.inse.ro:8077/tempo-online/#/pages/tables/inse-table> (15.12.2021)

d. Overall total. If we refer to all categories of products intended for consumption, we are talking about the limits of variation of the consumer price indices from 99.46% in 2016 to 104.04% at the level of 2019. The rest of the terms of the dynamic series, exceed the

reporting bases by 2.06, 3.27 and 3.32% - the years 2020, 2018 and 2017 respectively.

Figure 8, we consider it eloquent for highlighting the total amplitude of variation of the consumer price index, in the main groups of products. It is found that for food products was recorded the smallest amplitude of variation (4.40%).

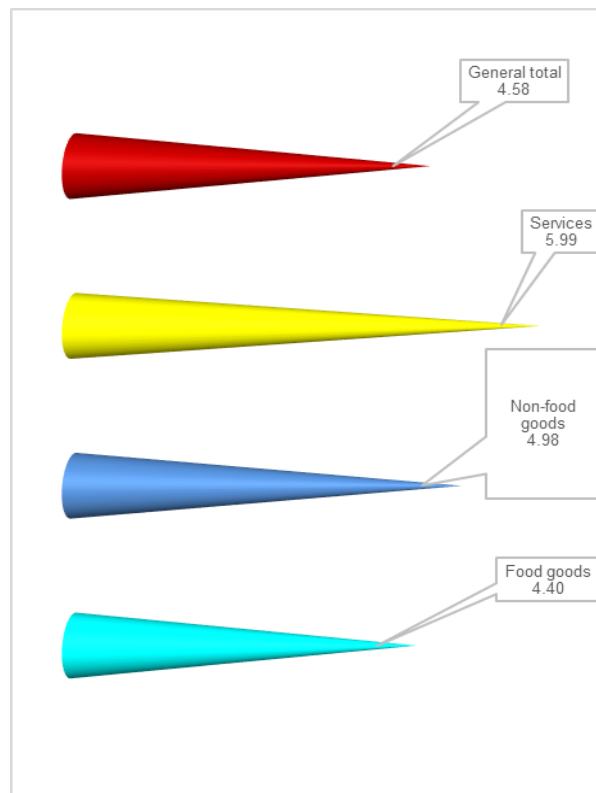


Fig. 8. Total amplitude of price change - main product groups - % (processed after: www.inse.ro)

CONCLUSIONS

The conclusions are based on the average level of the consumer price index for food products (table 12). There are variations in the average from 100.95% for cocoa and coffee, to 105.62% in the case of eggs.

If we refer to the situation of the average levels of the consumer price index, by groups of products, it can be seen that the maximum level occurs in food products (103.23%), followed by the general level (102.43%), non-food goods (102.26%) and services (101.54%).

Table 12. Prices of the main categories of food products, indices of dynamics (%) – Period average

No.	Specification	Effective level
1.	Total food commodities	103.23
2.	Milling and bakery products	103.21
3.	Vegetables and canned vegetables	104.13
4.	Fruit and canned fruit	104.49
5.	Oils, bacon, fats	102.22
6.	Eggs	105.62
7.	Meat, meat preparations and preserved meat	103.92
8.	Fish and canned fish	103.08
9.	Milk and milk products	103.26
10.	Sugar and sugary products	102.06
11.	Honey bee	102.44
12.	Alcoholic beverages	101.31
13.	Cocoa and coffee	100.95
14.	Other food products	102.59

own calculations

Regarding the evolution of prices, by means of the consumer price index, by groups of food products, the situation was as follows: for milling and bakery products, the upward trend is observed (the exception is milling products and flour - uneven evolution); in the case of vegetables and canned vegetables, the trend was fluctuating; if we refer to fruit and fruit preserves, the evolution trend has been fluctuating, with the exception of fruit preserves (increasing evolution); in oils, bacon and fat, the trend has been upward, and for edible oil and margarine, uneven developments occur; for eggs, the fluctuating evolution is observed; in the case of meat, meat preparations and canned meat, an upward trend is observed; at the level of fish and canned fish the evolution was increasing; if we refer to the situation of milk and dairy products, there is an upward trend; for sugar and sugary products the evolution was uneven; in the case of honey, the upward trend is observed; at the level of alcoholic beverages there is a fluctuating evolution; on the development of cocoa and coffee, uneven developments are noted; for other food products the trend, recorded, is increasing.

Even if for food products the price increase was the least significant, compared to the situation of the other groups of products, it is worth noting that they have the greatest impact on the monthly budget of a family and as such it

is necessary to better manage them, during the chain of these products, including at the level of the legislative component, which may intervene with appropriate social protection measures.

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