Tomasz Zalega*

Trends in consumption of Polish households in 2007–2013

Introduction

Consumption level is determined by many, both micro- and macroeconomic, factors. From a microeconomic point of view, consumption determines the development of a specific entity (consumer, household). From a macroeconomic point of view, consumption, in turn, determines not only people's living standard but also their lifestyles. Therefore, a macro-scale analysis of consumption includes an examination of the level and structure of consumption of the whole population of a given country. Nevertheless, it should be borne in mind that macroeconomic determinants of consumption behaviour of households do not have a direct impact on consumers, but only affect their overall behaviours such as: adaptation to economic conditions, career aspirations, attitudes towards national socio-economic policies, etc. Given its coverage of the whole sphere of consumption, the macroeconomic dimension of consumption seems to be not limited only to overall changes in how the population needs are met but also to include a correlation between the economic growth rate and the dynamics of consumption changes, which allows for identifying how much these two aspects are related. This means that a macroeconomic picture of consumption comprises the entire sphere of consumption, thus allowing for an analysis of links between various forms and types of consumption and the phases of social reproduction process understood as a continuous reproduction of economic goods in the economy.

Due to the limited length of the study, this article is focused exclusively on analysing the so-called real consumption, or consumption expressed in natural units. The structure of the article is as follows. A presentation of changes in food consumption in Polish households is followed by an analysis of changes in food consumption

* Professor Ph.D. in economic sciences, National Economy Department, Faculty of Management, University of Warsaw.

and mechanised household appliances, infotainment equipment and mobile equipment possessed by Polish households. Finally, a conclusion of the analysis and major findings end this study.

Structure of consumer spending items in Polish households

As claimed by A. Furnham and M. Argyle (1998), the level and structure of spending on consumer goods and services are affected by many factors, most notably: the level of households' disposable income, subjective tastes and preferences, the level of prices in the economy, current interest rates, expectations for future interest rates, expected inflation rate, government tax policy, political stability, anticipated future economic stability, and the degree of certainty of future employment.

An important aspect in assessing a household's financial situation is not only its disposable income, but also its structure, i.e. consumer goods and services on which households spend their money. Table 1 illustrates these aspects very well. Spending on food and non-alcoholic beverages as well as non-food items and services accounted for the greatest part of total household expenditure.

In 2007–2013, the average monthly expenditure varied between the different socio-economic groups and real expenditure on consumer goods and services per person was increasing. Throughout the analysed period, spending on food and non-alcoholic beverages accounted for the biggest share in total household expenditure. It should be pointed out that the percentage of this spending in the structure of total expenditure fell continuously in all types of households. The share of spending on food and non-alcoholic beverages ranged between 21.04% and 34.76% of total expenditure in 2007 and between 21.22% and 31.48% in 2013. In 2007–2013, food and non-alcoholic beverages accounted for the biggest share of the expenditure of farmer households (33% on average) and households of self-employed persons spent the least on these items (21.1% on average). It should also be noted that in 2007–2013, an income growth was accompanied by a marked decrease in the share of spending on food and non-alcoholic beverages in the total expenditure, confirming the regularity known in the economic theory as the first Ernest Engel's law.

The share of spending on alcoholic beverages and tobacco products in 2007–2013 was relatively stable and stood at 2.69% and 2.57% of the total in 2007 and 2013, respectively. Most money was spent on these items by employed persons' households (2.64%) and the least – by those of pensioners (2.34%).

Expenditure on non-food items and services includes 10 basic groups of spending on: housing occupancy chargess and energy carriers, household appliances and equipment, health, transport, communications, leisure and culture, education, restaurants and hotels, other goods and services (including expenditure on personal hygiene) and other expenditure (including gifts to other households).

Expenditure on non-food items and services includes 10 basic groups of spending on: housing occupancy charges and energy carriers, household appliances and equipment, health, transport, communications, leisure and culture, education, restaurants and hotels, other goods and services (including expenditure on personal hygiene) and other expenditure (including gifts to other households).

In 2007–2013, money spent on housing occupancy charges and energy carriers represented the largest proportion (19.69% of total expenditure) of non-food spending. "Fixed" (service, utilities and rent) charges, which do not depend very much on consumers, constitute the biggest share of this spending. Fixed expenditure, which consists mainly of charges for rent, fuel, electricity, heat and gas, increased for all types of households. In the analysed period, an upward trend was observed in the share of expenditure on housing occupancy charges and energy carriers. The share of this expenditure increased in all socio-economic groups. The highest increase occurred in households of self-employed persons (27.9%) while the lowest was noted in households of pensioners (19.4%). It can therefore be concluded that throughout the period considered spending on housing occupancy charges and energy carriers was at variance with Engel-Schwabe law known in the economic theory because the relative increase in spending and the relative increase in income were not equal. This means that in 2007–2013 spending on fixed charges grew at a faster rate than the disposable income of most metropolitan households in Poland. The continuous upward trend in the share of expenditure on housing occupancy charges and energy carriers in Poland can be mainly explained by an increase in quality and quantity of flats/houses being built and made available for use.

Transport spending took the second place among non-food expenditure. In the analysed period, the share of this expenditure stood at 9.7% of total household spending. This group of spending is affected by many determinants, including, among others, possession of cars and other means of transport by households, costs of maintaining means of transport (fuel prices) and the frequency of the use of third-party services. In 2007-2013, the largest increase in spending on transport was observed in pensioner households (an increase of 20.8%), while the lowest – in farmer households (an increase of 2.4%). The growing share of spending on transport can be explained by an increase in petrol prices and a growth in demand for means of transport, mostly cars (especially in 2008).

The analysis of changes in the structure of household spending on non-food items and services indicates a change in the importance of spending on clothing and footwear whose share showed a downward trend in the period considered. A percentage share of this spending in total expenditure declined steadily in all socio-economic groups. This decrease can be explained by the flood of cheap clothes and footwear imported from China and the import of second-hand clothes from Western Europe, which undoubtedly entailed a small increase in the prices of clothing and footwear. In 2007–2013, the highest amounts were spent on such items by households of self-employed persons (6.6%) and the lowest by pensioner households (3.2%).

Table 1. Structure of consumer spending of households in 2007–2013 (in %)

Households		Food and non-alcoholic beverages	Alcoholic beverages and tobacco products	Clothing and footwear	Housing occupancy charges and energy carriers	Household appliances and equipment	Health	Transport	Communications	Leisure and culture	Education	Restaurants and hotels
Total	2007	26.64	2.69	5.71	18.41	5.53	4.94	9.32	5.02	7.60	1.37	1.90
	2008	25.56	2.63	5.50	18.89	5.46	4.83	10.07	4.75	7.95	1.25	2.00
	2009	25.03	2.60	5.29	19.43	5.27	4.81	9.86	4.42	7.99	1.27	2.16
	2010	24.82	2.71	5.58	20.16	5.16	4.78	9.56	4.38	8.05	1.29	2.31
	2011	25.00	2.70	5.11	20.71	4.83	5.00	9.63	4.22	8.13	1.23	2.42
	2012	25.11	2.71	4.92	20.19	4.79	5.01	9.79	3.99	8.14	1.18	2.79
	2013	24.90	2.57	5.05	20.77	4.68	5.08	9.64	5.15	6.52	1.18	2.88
Employed persons	2007	25.44	2.83	6.37	17.34	5.71	3.75	10.51	5.09	8.23	1.81	2.12
	2008	24.35	2.77	6.14	17.61	5.71	3.74	11.23	4.82	8.71	1.62	2.21
	2009	24.01	2.71	5.84	18.06	5.64	3.76	10.84	4.63	8.78	1.66	2.36
	2010	23.49	2.81	5.93	18.80	5.31	3.80	10.82	4.40	8.84	1.68	2.57
	2011	24.65	2.89	5.98	19.97	5.08	4.11	11.26	4.36	9.18	1.68	2.94
	2012	23.81	2.82	5.56	18.81	5.00	4.10	11.22	3.96	8.86	1.56	3.13
	2013	23.69	2.64	5.66	19.38	4.83	3.99	10.92	5.34	7.06	1.55	3.22
Farmers	2007	34.76	2.77	5.97	14.91	5.91	3.53	10.48	4.78	4.75	1.16	0.78
	2008	32.72	2.52	5.63	15.74	5.60	3.65	11.12	4.66	5.33	1.10	1.24
	2009	33.12	2.46	5.93	16.93	5.43	3.70	9.32	4.44	5.18	0.96	1.14
	2010	31.54	2.42	5.22	18.54	5.37	3.73	11.51	4.30	5.12	0.74	0.85
	2011	34.29	2.63	5.42	18.68	5.51	3.89	10.79	4.65	5.91	0.91	0.73
	2012	31.85	2.48	5.14	17.71	4.92	3.93	11.16	4.13	5.57	0.86	1.23
	2013	31.48	2.34	5.58	18.65	5.45	4.23	10.15	4.84	4.84	0.99	1.66

Households		Food and non-alcoholic beverages	Alcoholic beverages and tobacco products	Clothing and footwear	Housing occupancy charges and energy carriers	Household appliances and equipment	Health	Transport	Communications	Leisure and culture	Education	Restaurants and hotels
Self-employed persons	2007	21.04	2.37	7.40	15.18	5.97	3.53	13.50	5.50	10.34	1.72	2.83
	2008	20.35	2.28	6.91	16.51	5.95	3.74	13.98	5.04	9.76	1.63	3.06
	2009	20.75	2.26	6.58	16.98	5.78	3.84	12.08	4.82	9.21	1.56	3.24
	2010	21.01	2.61	6.78	17.26	5.30	3.90	11.41	4.79	10.39	1.62	3.56
	2011	22.15	2.69	6.37	19.42	5.40	4.25	12.34	4.71	10.38	1.71	3.40
	2012	21.49	2.57	6.28	18.41	5.14	3.96	11.77	4.37	9.88	1.67	3.87
	2013	21.22	2.43	6.62	18.34	4.95	4.00	11.65	5.30	8.15	1.69	4.22
Pensioners	2007	29.53	2.43	3.62	22.12	5.07	8.34	5.23	4.77	5.81	0.38	1.11
	2008	28.94	2.40	3.44	23.03	4.84	8.16	5.80	4.53	5.96	0.26	1.06
	2009	27.84	2.37	3.12	23.89	4.82	8.07	5.41	4.27	6.03	0.25	1.14
	2010	28.10	2.51	3.13	24.85	4.81	7.76	5.86	4.24	5.83	0.32	1.23
	2011	29.63	2.67	3.35	26.42	4.90	8.53	6.26	4.33	6.33	0.23	1.33
	2012	28.01	2.50	2.93	24.38	4.27	8.09	6.06	3.90	6.37	0.22	1.54
	2013	27.52	2.47	3.02	24.44	4.25	8.29	6.32	4.70	5.13	0.22	1.58

* The structure of expenditure does not add up to 100.00 as the analysis does not include other goods and services and other expenditure (such as gifts to other households).

Source: Own calculations based on printout of data provided by the Central Statistical Office of Poland (GUS).

In the analysed period, a downward trend in the share of expenditure on communications in total expenditure (decrease by 1.01 percentage points) was also observed. The slow but continuous reduction in spending on these services can be explained by the decrease in their prices, which is directly connected with the development of telecommunications (especially popularisation of wireless telephones, strong competition among cable TV operators) and greater availability of the Internet. In 2007–2013, communications represented the highest proportion of household spending of self-employed persons (4.98%) and the lowest share of expenditure of pensioner households (4.44%).

There was a downward trend as regards the share of spending on household appliances and equipment in total expenditure of all socio-economic groups. In 2007–2013, an average household spent 5.17% of its total expenditure on such items. The biggest drop in spending occurred in households of self-employed persons (17.01%) while the lowest was noted in households of pensioners (16.1%).

Health care reform in Poland undoubtedly influenced the evolution of health expenditure and its importance in household budgets. It should be highlighted that health spending accounted for 4.87% of the total in 2007–2013. In 2007, the average monthly health expenditure per person was PLN 40.02 while in 2012 it was PLN 66.57, which represents an increase of 66.34%. As a result of rising drug prices, the prices of medical and pharmaceutical products were going up, thereby causing an increase in the share of health care spending in family budgets. Among this expenditure, spending on medical and pharmaceutical products (drugs) was a key item throughout the whole period. In 2013, more than 65% of average monthly expenditure on health care was represented by spending on drugs and medical products, which amounted to PLN 43.27 per person. In households of pensioners, it was twice higher than the average for all types of households in total.

Similarly to spending on clothing and footwear as well as housing occupancy charges and communications, expenditure on education represented a decreasing share in total spending. Education accounted for the highest proportion of household spending of employed persons (1.7% of the total on average) and the lowest share of expenditure of pensioner households (0.3% on average).

In 2007-2013, the share of spending on leisure and culture increased in all types of households by 0.51 percentage point in total. This increase was particularly visible in farmer households (an increase of 17.3%) and households of pensioners (an increase of 9.6%). In the period concerned, the share of spending on restaurants and hotels increased in all socio-economic groups by 0.88 percentage point. The biggest differences between 2007 and 2013 were observed for households pursuing economic activity (increase of 1.39 percentage points) while the smallest differences occurred in farmer households (only 0.47 percentage point).

Changes in food consumption in Polish households

The changes in the share of food expenditure in total spending are generally treated as the primary indicator of social welfare determining, among others, the standard of living of an average household. In practice, the share of food and non-alcoholic beverages expenditure is relatively higher (lower) in households with lower (higher) income. The relationship presented is consistent with E. Engel's first law stating that the share of food spending in total expenses decreases as the revenue (income) rises. This means that food expenditure grows at a slower rate than income, hence the relative change in demand for food is smaller than the relative change in income. In this case, income elasticity of demand E_{yd}, which is the ratio of a percentage change in demand to a percentage change in income, is as follows: $0 < E_{yd} < 1$.

In the 1920s, E. Engel's laws were revised by many statisticians, among others, H. Schulz and H.G. Johnson, who, based on empirical evidence, formulated equations showing that food spending is conditional upon total expenditure. They proved that food spending increases more slowly as total expenditure grows, meaning that the relationship is approximately linear (Zalega 2015: 170).

Changes in food spending are reflected in the quantity of food consumed by different groups of households. These variations are to a significant extent determined by such factors as place of residence, age and education of the head of household, family income, basic livelihood of the family or type of biological family. However, the level of consumption of most foods depends largely on household income. As practice shows, an increase in wealth of households is usually accompanied by increased consumption of certain food products.

Analysing consumption of selected foods per capita, it can be seen that a reduction in consumption of certain basic food products in 2007–2013 may be a consequence of one of the many macrotrends in consumption, namely a growing interest in products facilitating a comfortable life that have been highly processed for consumption. Changes in consumption patterns that are visible in the Polish society consist, among others, in an increased use of semi-finished or finished products. Continuously growing demand for potato products may be a good example here.

Table 2. Dynamics of food consumption in households in 2007–2013

Food products	Households				
	Total	Employed persons	Farmers	Self-employed persons	Pensioners
Rice (in kg)	89.2	94.4	100.0	76.2	86.2
Bread (in kg)	85.6	83.8	85.3	83.4	89.9
Pasta (in kg)	94.8	94.3	100.0	91.4	93.7
Flour (in kg)	93.4	93.2	90.0	100.0	90.4
Confectionery (in kg)	96.0	96.7	94.8	91.3	101.3
Groats and flakes (in kg)	91.9	94.1	78.3	94.1	88.2
Meat (in kg)	100.8	102.0	94.8	101.2	105.1
Fish (in kg)	89.9	91.7	85.5	94.5	87.6
Milk (in litres)	89.9	91.7	85.5	94.5	87.6
Yoghurt (in litres)	123.7	124.4	129.6	114.8	126.2
Curd cheese (in kg)	105.0	110.6	95.9	105.8	107.7
Ripened and processed cheese (in kg)	107.1	105.3	117.4	100.0	105.7
Cream and sweet cream (in litres)	91.7	94.1	83.3	91.4	98.1
Eggs (in units)	94.3	93.4	95.9	94.0	94.0
Animal fat (in kg)	81.7	82.1	75.9	79.5	89.4
Margarine and other vegetable fat (in kg)	98.6	96.6	101.0	95.9	100.9
Fruit (in kg)	93.9	97.1	86.5	90.4	101.6
Vegetables (in kg) of which: potatoes (in kg)	92.2 86.1	92.5 84.8	89.9 86.1	92.8 87.9	93.6 85.5
Sugar (in kg)	85.6	81.9	98.4	84.0	87.1
Coffee (in kg)	95.6	94.4	100.0	88.2	100.0
Tea (in kg)	92.8	100.0	85.7	85.7	100.0
Mineral and spring water (in litres)	147.6	149.4	173.3	129.1	138.6
Fruit and vegetable juice (in litres)	88.0	88.9	100.0	72.9	90.4

Source: own calculations based on: *Budżety gospodarstw domowych z lat 2008–2014* [*Household budgets in 2008–2014*], GUS, Warsaw.

In 2007–2013, there was a fall in consumption of many basic food products (Table 2): animal fat (18.3%), bread (14.4%), potatoes (13.9%) and milk (10.1%). The fall in consumption of these products can be explained by an increase in their prices (from about 13.8% to 36.4%) and continuous changes in consumption patterns of Polish households. There was also a decrease in consumption of sugar (14.4%), cream (8.3%), tea (7.2%), eggs (5.7%), pasta (5.2%) and coffee (4.4%). In all socio-economic groups, there was a rise in consumption of mineral and spring water (47.6%), yoghurt (23.7%), ripened cheese (7.1%) and curd cheese (5.0%) as well as meat (0.8%).

An analysis of the changes in the quantity of food consumed over the period may indicate that the decrease in the share of food spending in many Polish households is the result of necessity rather than an actual consequence of improved standard of living. It should be noted that the increase in meat (especially poultry) and vegetable fat consumption is a sign of changes in nutrition patterns, namely an increasing shift from animal fat consumption towards fat not containing cholesterol which is dangerous to human body. Reduced sugar consumption in all socio-economic groups is also a favourable change, which can be an important sign of a healthier lifestyle of these households. A fall in vegetable (of about 6.0%) and fruit consumption (in households of farmers and self-employed persons) is, however, worrying. As a result of the changes observed, in all groups of households there was a decrease in both the nutrient and energy content of an average food intake. The observed moderate decrease in caloric value of the diet can be generally considered as a positive change that indicates rationalisation of nutrition in the Polish society. Significant nutritional rationality in deciding on food intake in 2007-2013 is confirmed by a decrease in consumption of fats and carbohydrates and an increase in protein consumption, mainly plant protein.

Durable goods possessed by Polish households

In order to assess the structure of household consumption, housing conditions and durables possessed are of fundamental importance, apart from the income earned by each household member. They have a direct impact on individual attitudes and behaviours of consumers and significantly influence market behaviours of households, regardless of the relationship with the objective situation.

Durables, which form the so-called household infrastructure, are a key feature of consumer preferences of households and, consequently, of a consumption pattern. They are collected and consumed in the long term and confirm household wealth, provide quality of life and to some extent offset the impact of periodic reduction in current income on satisfaction of needs of each household member. Household possessions, which are an indicator of social well-being, significantly affect consumer purchasing behaviour. Generally, the more durables a household possesses, the greater freedom it has in disposition of its current income and, on average, the better it assesses its standard of living. In addition, the relevant literature increasingly draws attention to the fact that contemporary apartments/houses with durable household equipment are beginning to fulfil many new social functions, namely, as put by Gilles Pronovost, a Canadian cultural sociologist, they are becoming places of "consumption of art", a kind of substitutes for cinemas, theatres, operettas, operas and concert halls, and education and fitness and wellness facilities in a broad sense (Pronovost 2007). All these functions are fulfilled at home thanks to infotainment equipment possessed and the rapid development and spread of electronic means for cultural content transmis-

sion such as satellite and cable television, radio and the Internet. Thus, the home is beginning to replace some social institutions to a certain extent, thereby contributing to diminishing the living space of today's consumers, which in turn impacts their purchasing behaviours.

Durable goods fulfil three basic functions: utilitarian, exchange and symbolic. Utilitarian functions of durables directly serve to meet specific needs or are a means of satisfying the felt needs indirectly. Exchange functions have a certain exchange value, e.g., in periods of goods shortages in the market, they are either items of exchange or investment of surplus money. A symbolic function means that some goods, being rare and signalling wealth, have become social distinctions, for instance a house in an exclusive part of town, all kinds of equipment fitted with new information technologies, etc. Currently, most goods have lost their symbolic function and partly their exchange function as well. As durables are widely available in the market, most of them are no longer a rarity or a sign of wealth. Exceptions include durables considered as the so-called Veblen goods, or goods that are associated with conspicuous consumption most frequently occurring in high-income households and those regarded as economic elites.

Households belonging to a specific socio-economic group often emphasise their wealth in an effort to get closer to a particular pattern developed under the influence of fashion, tastes, habits, position, etc. Such behaviours are frequently a factor in changing consumption behaviour of a society and modernising the structure of consumption and the structure of household durables. In addition, household durable goods together with the home affect a wide range of everyday consumer behaviours of all household members that determine the internal functioning of the household. They also determine the amount of free time and the way in which it is spent.

Taking into consideration the types of needs of households and their members that are satisfied, durables are divided into three basic groups (Zalega, 2012: 171–172):

- mechanised household appliances, i.e. goods used directly by households for housework mechanisation (e.g. preparation and storage of food products – cookers and ovens, food processors, refrigerators, freezers) and cleaning home, laundry and clothing maintenance, e.g. automatic and agitator-type washing machines, dishwashers, hot press, food processors, sewing machines and other;
- infotainment equipment, i.e. consumer electronics satisfying diverse needs for home entertainment, leisure or study, which directly satisfies individual needs of household members, such as TV sets, video recorders, radio sets, video cameras, personal computers and other;
- mobility-related goods that meet transport needs, i.e. bicycles, motorcycles, cars.

The ongoing globalisation and internationalisation of the world economy as well as the continuous technical progress (in particular information technology development) have a significant effect on the changes in household infrastructure. An effect of these changes are new and better quality products. Therefore, households seek

to change their equipment and appliances, both by replacing existing equipment with new products and purchasing completely new, hitherto unknown goods. Over the last few years, goods that in the mid-1990s still indicated a high material status of their owners (such as microwave ovens, dishwashers, plasma and LCD TV sets, hi-fi stereo music systems, digital cameras, microcomputers, etc.) have become popular in Polish households. Currently, these products are considered as popular household equipment that has almost "blended" in the functioning of an average household.

The type of durable goods possessed is indirectly linked to the number of people working in the household and also to the nature of their professional activity, family size and presence of children, place of residence and adopted lifestyle. Items possessed essentially depend on the economic situation of a household because of a significant correlation between the level of household income and its possessions.

In 2007–2013, durables possessed by households were varied and show certain differences between the various socio-economic types. There were changes in the level and structure of household durables, both mechanised household appliances, infotainment equipment and mobile equipment.

In each household, an important role is played by equipment for improvement and mechanisation of housework. As a result of rising income and falling prices of mechanised household appliances, these products have become more popular in Polish households in recent years. In 2013, almost all households had a refrigerator or a freezer (98.8%), an electric washing and dewatering machine (97.1%) and an electric vacuum cleaner (95.0%). More than three fifths of Polish households had a food processor, every second household had a microwave oven and one in six households had a dishwasher.

In addition to mechanised household appliances, an important role in the household is also played by equipment for entertainment and leisure (the so-called infotainment equipment) and equipment for mobility and individual communication (the so-called mobile equipment). Although infotainment equipment is not necessary for living, consumers are willing to purchase it. This is because leisure and entertainment play nowadays an increasingly important role in the lives of most households. Furthermore, in 2007-2013 infotainment equipment was still being intensively replaced with "new generation" products, a tendency that started back in the 1990s. Such equipment was increasingly present in households, with more modern, thus higher standard, products taking the lead. The increased presence of technologically advanced equipment in households was accompanied by a decline in the percentage of households possessing audiovisual equipment of the so-called old generation, such as CRT TV sets, video recorders and CD players.

A TV set is equipment present in almost every Polish household. It is in possession of over 98% of families, with more and more of them having plasma and LCD TVs. In 2013, every third Polish household had a plasma or LCD TV set. It should also be borne in mind that today a TV set does not only mean access to TV shows, but

is also a database of photographs and films and a viable alternative to the computer (especially the desktop one). This phenomenon will be stronger in the near future with the spread of high-tech TVs known as OLED (Organic Light-Emitting Diode). More than three fifths of households had a satellite or cable television equipment. The same proportion of households had a radio or a radio cassette player.

In electronics, leaders are, however, mobile phones the popularity of which does not dependent only on the acceptance of new technologies, but also on their functionality, leading to a slow shift from fixed-line phones towards mobile phones. In 2013, the proportion of households having mobile phones (92.8%) was higher than those having fixed-line phones (50.1%) by over 76%. Various types of new, particularly digital, technologies are also extremely popular. DVD players and digital cameras were present in every second household.

Mobile equipment is the third and last category of durables in the division of durables by type of needs satisfied by households.

Poland's accession to the European Union in 2004 indirectly led to a decline in car prices in Poland. This resulted in an intensified upward trend in the number of households having this means of transport. In 2007–2013, more than half of Polish households had a passenger car. Car owners included primarily households of self-employed persons (89.6%) and farmers (88.6%), which is directly related to lifestyles of entrepreneurs and farmers. Only every third pensioner household could boast a passenger car.

More and more often, Polish households purchased two-wheeled vehicles such as motorcycles, scooters and mopeds. Two-wheelers were used most frequently by farmers (16.9%) and least frequently by pensioner households (2.6%). Bicycles were also increasingly present in households. They were owned by more than three fifths of households. In the analysed period, a bicycle was owned by more than 9 out of 10 farmers, while it was present only in every second pensioner household.

In this period, the biggest changes in the possession of durables can be noticed in the case of goods classified as infotainment equipment (Table 3).

Comparing the percentages of households possessing durable goods in 2013 with the percentages in 2007, it can be noticed that during this period there was a significant increase in the number of households possessing: a dishwasher – more than two-fold, a digital camera (+90.4%), a computer with Internet access (+85.7%), satellite or cable television equipment (+43.1%), a personal computer (+34.8%), a DVD player (+30.9%), a microwave oven (+26.1) and a video camera (+26.0%).

Smaller increases in the number of households having durable goods were noted for such goods as: a printer (+21.6%), an MP3 player (+13.6%), home cinema (+13.4%), a radio or radio cassette player (+9.5%), a mobile phone (+13.4) and an electric cooker with ceramic hob (+5.9%).

Virtually no changes were observed in Polish households as regards automatic washing machines, electric vacuum cleaners refrigerators/freezers and TV sets.

Table 3. Changes in durables possessed by households in 2007–2013 (2007 = 100)

Items	Households			
	Employed persons	Farmers	Self-employed persons	Pensioners
Electric washing and dewatering machine or automatic washing machine	100.6	99.8	100.4	101.0
Electric vacuum cleaner	98.7	99.5	99.4	100.3
Refrigerator or freezer	99.7	99.4	99.5	99.9
Electric cooker with ceramic hob	98.9	131.7	100.0	93.0
Microwave oven	121.7	142.1	107.0	133.6
Food processor	98.7	98.3	96.3	103.4
Dishwasher	244.4	278.2	175.1	258.1
TV set	99.3	100.0	99.9	100.7
Satellite or cable TV equipment	128.0	193.2	121.1	130.0
Home cinema	104.8	131.9	108.1	108.7
Hi-fi stereo music system	81.4	81.3	84.8	85.5
Radio or radio cassette player	110.9	108.8	110.2	108.2
Radio or radio cassette player with CD player	69.3	66.2	65.3	82.2
MP3 player	114.3	134.5	97.4	108.1
CD player	64.4	80.0	60.0	79.7
Video recorder/player	44.7	51.4	42.9	60.0
DVD player	118.2	136.6	109.9	158.8
Video camera	128.8	131.8	113.7	129.6
Digital camera	167.3	238.2	135.9	220.2
Personal computer	125.5	141.7	115.1	157.1
Computer with Internet access including: broadband	160.7	252.5	128.3	201.4
Computer without Internet access	43.0	44.3	66.7	60.9
Printer	115.1	133.7	110.8	127.0
Mobile phone	103.2	106.8	101.8	141.6
Bicycle (excl. children's bike)	98.6	98.4	99.8	100.4
Motorcycle, scooter, moped	152.1	131.8	142.8	117.4
Passenger car	114.3	103.8	103.4	117.6

Source: *Budżety gospodarstw domowych z lat 2008–2013* [*Household budgets in 2008–2014*], GUS, Warsaw.

In the analysed period, households tended to remove technologically obsolete goods (an example could be replacing audiovisual equipment with multimedia). This mainly includes CRT TV sets, players or video recorders and agitator-type washing machines. The period of 2007–2012 saw a decrease in the percentage of households

having: personal computers without Internet access (–46.3%), video recorders/players (–50.3%), radio cassette players with CD player (–29.3%), CD players (–29.0%) and hi-fi stereo music systems (–16.7%).

Durable goods possessed by households vary between different types of households. The highest indicators of possession of these goods are obviously found among households of self-employed persons, followed by those of employed persons. Pensioner and farmer households are at the very bottom.

In 2007–2013, households of self-employed persons had the highest increase in the numbers of dishwashers (+75.1%), satellite or cable television equipment (+21.1%), motorcycles, bicycles and scooters (+42.8%) and digital cameras (+35.9%), with the greatest decrease in equipment such as video recorders/players (–57.1%), CD players (–40.0%) and computers without Internet access (–33.3%). On the other hand, households of employed persons saw a more than twofold increase in such possessions as dishwashers, digital cameras (+67.3%), computers with Internet access (+60.7%), motorcycles, scooters and mopeds (+52.1%), with the greatest decrease in equipment such as computers without Internet access (–57.0%), video recorders/players (–55.3%), CD players (–35.6%), hi-fi stereo music systems (–19.6%) and radio cassettes players with CD player (–14.8%). In pensioner households, the number of dishwashers rose 2.5-fold and the number of digital cameras and computers with Internet access increased more than 2-fold. A high growth in durables in these households was also noted for DVD players (+58.8%), personal computers (+57.1%), mobile phones (+41.6%), video cameras (+29.6%), microwave ovens (+33.6%) and satellite or cable television equipment (+30.0). On the other hand, these households saw a decrease as regards video recorders/players (–40.0%), computers without Internet access (–39.1%), CD players (–21.3%), radio sets with CD player (–17.8%) and hi-fi stereo music systems (–14.5%). In turn, farmer households saw the greatest – more than 2.5-fold – increase in the number of dishwashers and computers with Internet access and a more than 2-fold increase in digital cameras. There was also a large increase in satellite television equipment (+93.2%), personal computers (+41.7%), DVD players (+36.6%), MP3 players (+34.5%), home cinema (+31.9%), motorcycles, scooters and mopeds (+31.8%) and printers (+33.7%). Farmers saw a decrease in the number of computers without Internet access (–55.7%), video recorders/players (–48.6%), radio cassette players with CD player (–33.8%) and CD players (–20.0%). The number of radio sets in possession of these households remained unchanged. A relatively large proportion of farmer households have also passenger cars (almost 90.0% of households). This phenomenon can be explained mainly by the fact that in rural households the car is often regarded as a means of production. It should be also remembered that cars owned by the rural population are generally cheaper, often purchased as second-hand vehicles. This should be kept this in mind as the statistics on durables possession do not generally include the standard of goods purchased and possessed.

Conclusion

An analysis of the trends in consumption of Polish households in 2007–2013 can lead to the following conclusions:

1. The structure of household spending was marked by a high, although steadily declining, share of food expenditure in total spending, a relatively high and continuously increasing share of fixed expenditure, an increasing share of spending on alcoholic beverages and tobacco products, health, transport, leisure, culture and restaurants and hotels as well as a decreasing share of spending on clothing and footwear, household appliances and equipment, communications and education.
2. The increase in the wealth of households was accompanied by increased consumption of certain food products. On average, households with higher monthly income consumed more fruit and vegetable juices, milk drinks, mineral and spring water, yoghurt, fruit, fish and confectionery per person compared with families with lower incomes. In households with lower incomes, slightly more bread, potatoes, margarine and other vegetable fats were consumed.
2. The number and quality of durable goods possessed by households were significantly improved, hence the structure of possessed assets was modernised. Black and white television sets, monophonic radio sets, cassette players or record players and typewriters virtually disappeared. They were replaced by new goods which were quickly accepted. A particularly big number of new products occurred in the ICT field: especially satellite and cable television equipment, hi-fi equipment, personal computers, printers, the Internet or mobile phones. Currently, these products are considered as popular household equipment that has almost "blended" in the functioning of an average household.

Streszczenie

Tendencje w konsumpcji gospodarstw domowych w Polsce w latach 2007–2013

Artykuł porusza problem tendencji rozwojowych konsumpcji gospodarstw domowych w Polsce w latach 2007–2013. Jego kluczowym celem jest przeanalizowanie, w oparciu o dane wtórne, zmian w konsumpcji realnej, czyli konsumpcji wyrażonej w jednostkach naturalnych. Struktura artykułu jest następująca. Po naświetleniu najważniejszych zmian w spożyciu artykułów żywnościowych przeanalizowano zmiany w wyposażeniu polskich gospodarstw domowych w zmechanizowany sprzęt gospodarczy, sprzęt informacyjno-rozrywkowy oraz sprzęt mobilny. Podsumowanie rozważań i ważniejsze wnioski kończą niniejszy tekst.

Keywords: consumption, households, consumption expenditure, food products, durable goods

Słowa kluczowe: konsumpcja, gospodarstwa domowe, wydatki konsumpcyjne, artykuły żywnościowe, dobra trwałego użytku

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