

THE DEVELOPMENT OF INCOMES AND EXPENDITURES OF HOUSEHOLDS IN THE CZECH REPUBLIC*

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The analysis of the incomes and expenditures of CR households provides very important material for the evaluation of the level of living of the population. In this evaluation it is necessary to take into account changes in the size of both the nominal and real incomes; in expenditures it is necessary to monitor changes not only in size but also in their structure. The paper provides information on the development of income and expenditure in the period 1989–2007 in households in general. Further, differences in household expenditures are evaluated according to the level of household incomes.

incomes; expenditures; households in CR; development; statistical analysis; difference

INTRODUCTION

The level of living is usually defined as *a complex of all use values – material, cultural, social and moral, which the population keeps at its disposal at the given time and space, and also conditions under which these needs are met and which create the way of life* (Jílek et al., 2001). So, it is obvious that this includes many heterogeneous indicators some of which are hardly quantifiable or they cannot be quantified at all. In this case they cannot be summarized in the only generalizing indicator. Statistics concentrate on the observation of such indicators which have a quantitative form, or can be transferred into such a form. Basic elements of the observation are incomes and population consumption, the level of living, the state of the health service, social services, social work, education and the amount of leisure time and its use (Samuelson, Nordhaus, 1991).

MATERIAL AND METHODS

Household incomes and consumption is one of the most important components for the evaluation of the level of life of the population. In the analysis it is necessary to take into account not only their amount but mainly differentiation from a view-point of social, economic and biological groups of the population.

The work stems from the data of statistic household survey – from a household book statistics. It deals with a selective investigation of a collection of 3000 households. This collection was chosen so that its structure corresponded with the household structure in the CR. Further, data on households with minimal incomes was obtained with the help of an additional survey of 400 households. Thereby the representativeness of the sample was ensured (Household incomes..., 2008).

Incomes are presented as the gross household income, the net income (the gross income minus contributions to health and social insurance and income tax), and incomes from private business where only amounts which were transferred from the business to a household and its members are included. So, it deals with net income; in these cases neither income tax nor contributions to health and social insurance are mentioned.

Expenditures are divided according to the standard COICOP (Classification of Individual Consumption by Purpose) which currently includes items split into 12 sub-sections:

- 01 Foods and non-alcoholic beverages
- 02 Alcoholic beverages, tobacco
- 03 Clothes and shoes
- 04 Living, water, energy, fuels
- 05 Housing equipment, apartment furniture; repairs
- 06 Health
- 07 Transportation
- 08 Post offices and telecommunication
- 09 Recreation and culture
- 10 Education
- 11 Boarding and accommodation
- 12 Other goods and services

For the evaluation of income and expenditure trends the period 1989–2007 was chosen. The differentiation was evaluated according to income categories where a comparison of 10% of households with the highest incomes (10. decil) and 10% of households with the lowest incomes (1. decil) was made. The group of households with the highest incomes is made up mainly of households of highly paid employees (57.2%, households of self-employed (26.9%) and 12.3% of households of lower paid employees. The group of households with the lowest incomes is made up of households of the unemployed (37%), households of lower paid employees (27.5%), households of pensioners (9%) and other households (11%). Attention

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was paid to basic expenditure items – total expenditure, consumption expenditure, expenditure on foods and non-alcoholic beverages, expenditure for habitation, water, energies and fuels, expenditure on health, expenditure for recreation and culture and expenditure on education. Both the amount and the structure of expenditure were observed.

RESULTS AND DISCUSSION

Household incomes significantly increased during the period 1989–2007; in 2007 the annual income per head of population was almost 5.5 times higher than in 1989; it showed itself more significantly in households with the highest incomes (6.3-times higher in 2007 than in 1989) (Table 1).

Fig. 1 illustrates that the most significant increase in all categories was roughly in the first ten years of the observed period. In the following years there was a significant growth in the incomes of households with the highest incomes and a smaller increase in average income households. For households with the lowest incomes it is possible to speak about stagnation or a very slight growth after 2002.

If we focus on household expenditures, it is necessary to monitor not only the amount of expenditure but mainly the changes in the structure of expenditure. A significant differentiation can be observed in the value of total consumption expenditure where expenditure of the highest income groups was 76% higher than expenditure for the average income group, while the expenditure of the lowest income group was 40% lower than that of this average (Table 2).

Observations of the share of consumption expenditures in total incomes (Table 3) show, that the average household spends on consumption items 72,3% of income; the lowest income group more than 90% of income, while the highest income group spends only 56% of income on these items (Fig. 2).

The highest share of consumer expenditure for all 3 income groups was on expenditure on food. During the observed period this increased in response to changes in prices assortment as well as a change of consumer customs by more than 3,5-times. However, the share of expenditure

on food of the total expenditures has decreased in all income groups which from the view-point of the total level of living could represent a positive phenomenon – that means more is available for meeting remaining needs. The question is; what other needs is the other expenditure focused on, or whether it is not dealt with as only “savings in foods” in the case of households with minimal incomes (Tables 4 and 5).

The second highest item of total expenditures is the expenditure on accommodation, water, energy and fuel (Table 6). Here, thanks to the still growing costs, mainly for energy, a high increase is obvious. On average in the observed period expenditure increased by almost 10-times. The difference in expenditure of the highest and the lowest income group is significant. Costs for accommodation of the lowest income groups are 37% lower than those for the average income; costs of the highest income group are 63% higher than those for the average. It is indisputable that the higher income groups can afford more quality accommodation. The lower income groups describe their habitation in a subjective evaluation, which is also part of the survey in the household book, as unsatisfactory from the view-point of size and standard.

As with the absolute increase in these expenditures, so also the share of expenditure for accommodation in total expenditures grew. On average this is about 20% in all income categories (Table 7).

The item, on which expenditure has increased significantly especially in the last year, is for health. The share of expenditure for health in 2007 was on average 2.2% of total expenditure while in 1989 it was 0.35%. When looking at amount of the expenditure, while in 1989 the average annual expenditure on for health was 79 CZK per head in 2000 it was 1199 CZK and in 2007 2657 CZK. In households with the highest incomes the annual expenditure on health in 2007 was 4200 CZK per head, while in households with the lowest incomes only 1195 CZK. This difference has to be taken as a warning signal and a certain threat because there is not the supposition that the lowest income groups are healthier and consequently they do not need to spend as much on their health (Fig. 3).

Big differences show themselves also in other items of expenditure – in expenditure on recreation and culture and in the expenditure on education (Tables 8 and 9). The share of total expenditure for recreation and culture activities in

Table 1. Gross money incomes per head/year in CR (CZK)

	1989	1990	1995	2000	2005	2006	2007
Average household	26 796	28 379	65 215	97 807	127 294	134 569	144 743
1. incomes decil	14 728	15 971	35 188	52 496	66 797	63 470	69 697
10. incomes decil	51 967	55 887	137 439	209 761	285 473	304 063	325 933

Table 2. Consumption expenditures – CZK per head/year

	1989	1990	1995	2000	2005	2006	2007
Average household	22 453	24 527	52 207	79 625	91 084	107 585	120 208
1. incomes decil	13 443	14 746	30 153	46 258	55 450	55 711	62 772
10. incomes decil	41 527	45 888	99 473	15 8391	171 877	172 246	183 047

Table 3. Development of the share of consumption expenditures

	1989	1990	1995	2000	2005	2006	2007
Average household	83.8	86.4	80.1	81.4	71.6	71.8	72.3
1. incomes decil	91.3	92.3	85.7	88.1	83.0	87.8	90.1
10. incomes decil	79.9	82.1	72.4	75.5	60.2	56.6	56.2

Table 4. Expenditures for food and beverages – CZK per head/year

	1989	1990	1995	2000	2005	2006	2007
Average household	5 902	6 304	13 273	17 010	18 775	19 599	20 866
1. incomes decil	4 579	5 005	9 701	1 2051	13 699	13 818	15 075
10. incomes decil	8 651	9 286	17 358	22 337	24 168	25 449	27 362

Table 5. Share of expenditures for food and beverages – % of total expenditures

	1989	1990	1995	2000	2005	2006	2007
Average household	26.28	25.71	25.42	21.36	20.61	20.13	20.05
1. incomes decil	34.06	33.94	32.17	26.05	24.71	24.80	24.02
10. incomes decil	20.83	20.24	17.45	14.10	12.86	13.35	13.62

Table 6. Development of expenditures for accomodation, water and fuel – CZK per head/year

	1989	1990	1995	2000	2005	2006	2007
Average household	2 170	2 385	7 167	15 872	18 336	20 157	20 652
1. incomes decil	1 547	1 639	4 383	9 093	10 943	12 319	12 988
10. incomes decil	3 802	4 239	11 437	31 284	30 920	30 276	33 602

Table 7. Share of expenditure for accommodation, water and fuel – % of total expenditures

	1989	1990	1995	2000	2005	2006	2007
Average household	9.66	9.73	13.72	19.82	20.13	20.71	19.86
1. incomes decil	11.51	11.11	14.54	19.66	19.73	22.11	20.69
10. incomes decil	9.16	9.24	11.49	19.75	17.99	17.58	18.36

Table 8. Development of expenditure on recreation and culture – CZK per head/year

	1989	1990	1995	2000	2005	2006	2007
Average household	2 636	2 852	5 678	7 956	9 673	9 925	10 930
1. incomes decil	1 383	1 383	2 711	4 002	5 376	4 862	5 916
10. incomes decil	5 114	5 743	12 785	16 361	19 158	18 697	20 460

Table 9. Development of expenditure on education – CZK per head/year

	1989	1990	1995	2000	2005	2006	2007
Average household	53	75	277	334	497	528	608
1. incomes decil	35	41	166	225	517	431	548
10. incomes decil	28	57	434	486	870	873	1018

Table 10. Difference – share: 10. incomes decil/1. incomes decil

	1989	1990	1995	2000	2005	2006	2007
Incomes	3.528	3.499	3.906	3.996	4.274	4.791	4.676
Expenditures							
Food and beverages	1.889	1.855	1.789	1.854	1.764	1.842	1.815
Habitationyyy water and fuel	2.458	2.586	2.609	3.440	2.826	2.458	2.587
Health	2.727	2.698	3.140	3.212	3.903	3.819	3.531
Recreation and culture	3.698	4.153	4.716	4.088	3.564	3.846	3.458
Education	0.800	1.390	2.614	2.160	1.682	2.026	1.858

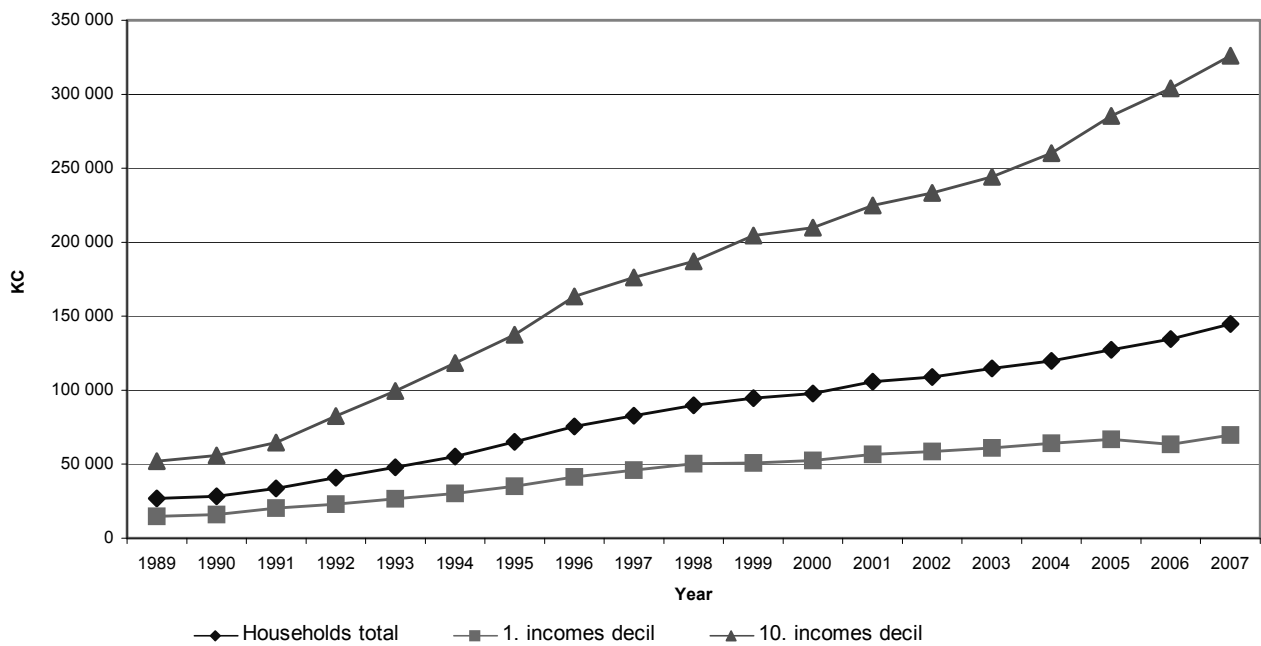


Fig. 1. Gross money incomes per head/year in CR 1989–2007 (CZK)

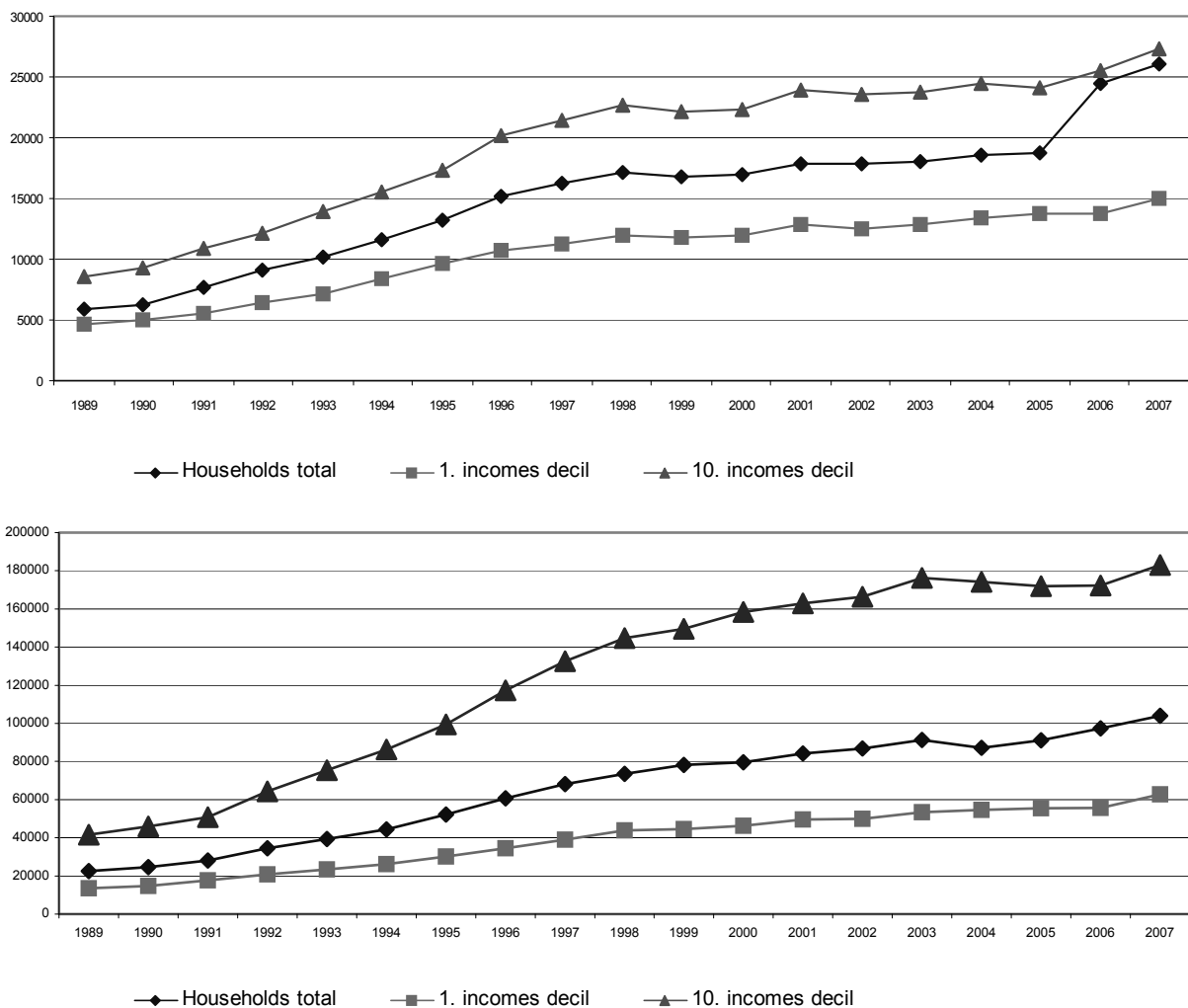


Fig. 2. Expenditures of food and beverages – CZK per head/year – years 1989–2007

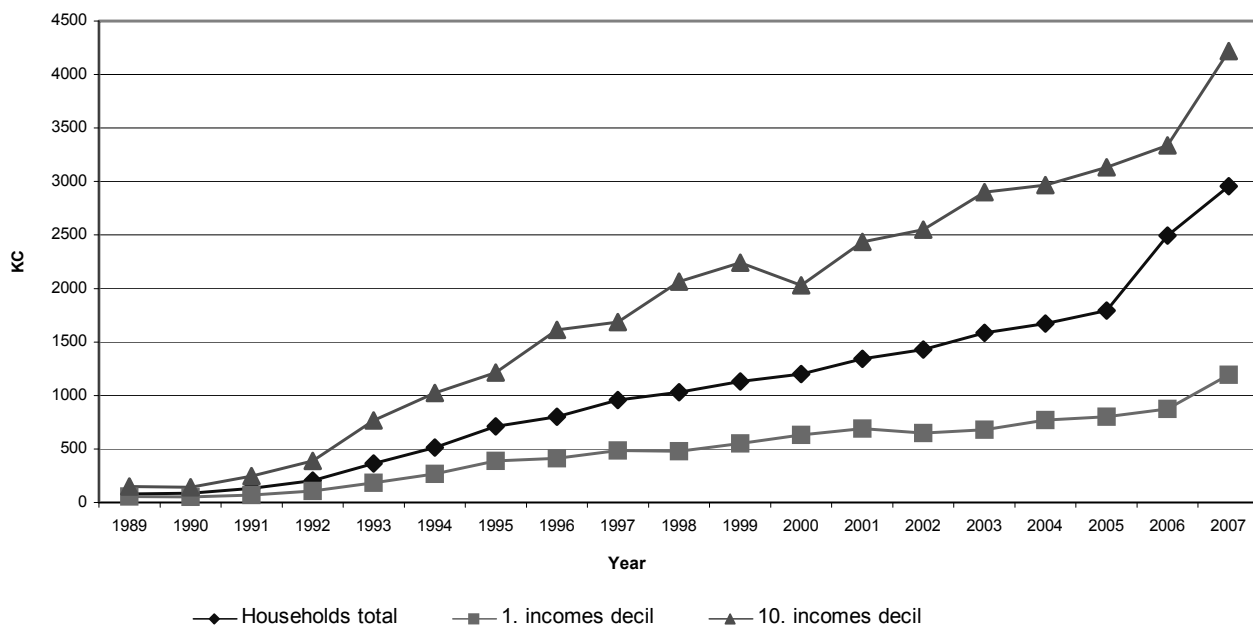


Fig. 3. Expenditures of health – CZK per head/year – years 1989–2007

2007 amounted to on average 10% and the value in observed categories is similar. However, the difference is in the real amount. Even if an increase was recorded in the observed categories in the period 1989–2007, they significantly differ. While the households with the highest incomes recorded expenditure of 20 460 CZK per head in 2007, this expenditure item in households with the lowest incomes was only 5 916 CZK, which is very much less than for the average income group (by more than 50%).

Meanwhile, the expenditure on education did not represent a big item although there was a significant increase during the observed period (more than 11-times). In absolute terms the highest expenditures on education was recorded by the group with the highest income; while looking at the share of education in total expenditure the situation is the inverse. The share of education in total expenditure in the 10th income decil amounted to 0.30% and in the first income decil 1.2% (Table 10).

CONCLUSION

On the basis of the above mentioned comparison it can be stated that income inequality and thereby also the difference in expenditure of households slightly grow. Table 10 shows the comparison of size of incomes and expenditures in households with the highest and the lowest incomes. Differences in incomes grew; the situation in expenditures is various. The expenditure on food in the highest income group was roughly 1.8-times higher but in practice during the whole period this share stayed the same. The expenditure on accommodation was roughly 2.5-times higher; the expenditure on recreation 3.5 – 4-times higher. This share is practically the same during the whole observed period. So, there is neither an improvement nor

deterioration of the situation. A slightly different situation can be seen in the expenditure on health. In this case the difference between the expenditures in the highest and the lowest income groups has grown. The situation of expenditure on education is similar although the difference is a bit smaller. The risk of danger in households with low incomes can be seen from the figures.

Nevertheless, it is necessary to add that in an international comparison the Czech Republic is in the group of countries where there is not a big income differential. According to the last data of OECD the Czech Republic is the country with the fifth lowest income inequality and together with Luxembourg, Austria, Slovakia, Finland, The Netherlands, Belgium, Switzerland, Norway, Iceland, France, Hungary, Germany and Australia belongs in the group of countries which has a lower income inequality than the OECD average. Traditionally the lowest income differential is in the Scandinavian countries – Denmark and Sweden.

REFERENCES

- Households incomes and living conditions in CR. ČSÚ Prague, 2008.
- JÍLEK, J. et al.: Fundamentals of socio-economic statistics. VŠE Prague, 2001.
- SAMUELSON, P. A. – NORDHAUS, W. D.: Economics. Prague, Svoboda 1991.
- www-oecd.org: Income Distribution and Poverty in OECD Countries, 2008.

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Analýza příjmů a vydání domácností v ČR poskytuje velmi důležitý materiál pro hodnocení životní úrovně obyvatelstva. Při hodnocení je třeba brát v úvahu změny ve velikostech příjmů jak nominálních, tak reálných, ve vydáních pak je třeba sledovat změny nejen ve velikosti, ale rovněž v jejich struktuře. Pro hodnocení vývojových tendencí příjmů a vydání bylo zvoleno období let 1989–2007. Posuzovány byly příjmy domácností celkem, diferenciací byla posuzována podle příjmových kategorií, kde bylo provedeno porovnání 10 % domácností s nejvyššími příjmy (10. decil) a 10 % domácností s nejnižšími příjmy (1. decil). Posuzovány byly změny ve výši a ve struktuře vydání.

příjmy; vydání; domácnosti ČR; vývoj; statistické analýzy; difference

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