

Statistics in focus

POPULATION AND SOCIAL CONDITIONS

02/2005

Author

Antonio PUENTE

Contents

Average household budgets in the enlarged Union are 8.9% smaller than in the EU-15 1

The influence of the explicative factors of household final consumption expenditure in the enlarged Union is rather similar to the EU-15 2

Big differences on the structure of household final consumption expenditure across Europe reflects a large variety of cultural, geographical and economic circumstances 4

The European consumer in the enlarged Union

The consumption habits of European consumers vary substantially among the 25 Member States of the European Union. Factors such as culture, tradition, household composition, income and degree of urbanisation can influence habits in each country. The accession of 10 new Member States (NMS) on May 1st 2004 has made the differences between EU member states even more apparent than before.

This document presents a comparison between the household consumption expenditure of the EU-25 member states based on HBS¹ data, together with some data from Bulgaria and Romania. Around 174 000 households from the 15 old Member States, 79 000 from the NMS and 39 000 from BU and RO were surveyed in 1999². The results of 27 national household budget surveys (25 EU countries, Bulgaria and Romania) are available in Community format and allow comparisons of standards of living across Europe.

Average household budgets in the enlarged Union are 8.9% smaller than in the EU-15

The national standards of living can be measured in terms of household final consumption expenditure. Figure 1 shows that the households of the EU-25 spent on average 22 566 PPS³ in 1999, around 8.9% less than the households of the EU-15, which spent 24 772 PPS during the same year⁴.

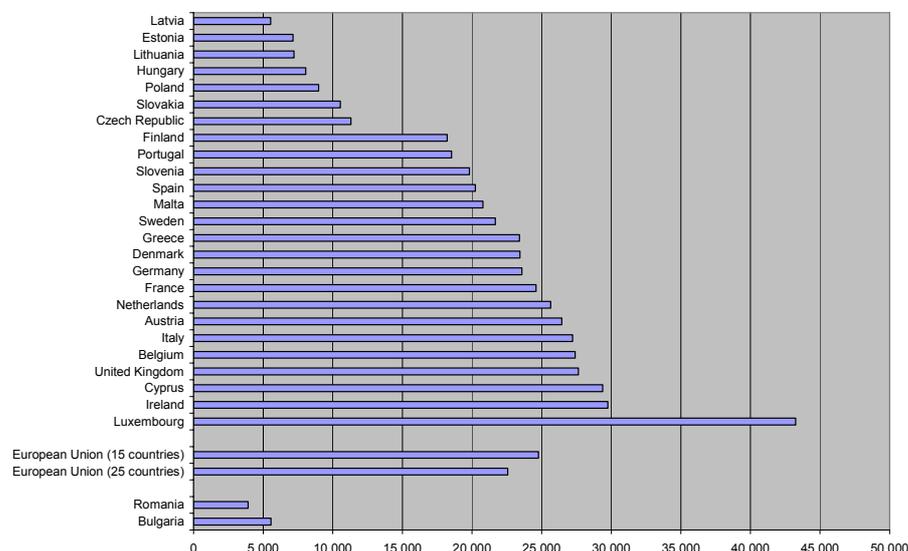


Figure 1: Average household consumption expenditure in 1999 (PPS)



¹ Household Budget Surveys.

² The reference year 1999 has been chosen because it is the latest year with HBS data available for the whole EU. The actual survey years may differ, see the methodological notes.

³ See methodological notes.

⁴ The data of the NMS, Bulgaria and Romania are not fully comparable because of methodological divergences, in particular on the treatment of owner-occupiers imputed rent.

These results are presented in 'Purchasing Power Standards' to take into account the differences in purchasing power between the countries. To a certain extent, the household consumption expenditure measured by some NMS is smaller than for other countries due to the non-imputation of any rent for the owner-occupiers.

The household final consumption expenditure of the enlarged Union varies considerably, ranging from 5 545 PPS in Latvia to 43 247 PPS in Luxembourg. The countries with the lowest consumption expenditure belong to the group of new Member States and are located in the North-East of Europe, whereas Ireland, United Kingdom and the countries of Central Europe have medium to high values of household consumption expenditure.

The variations in household final consumption expenditure between the EU-25 countries are much wider than between the EU-15. If we look at the values of the EU-15, we may easily observe that, with the exception of Luxembourg, differences are

relatively moderate. These differences between EU-15 countries become even smaller if we divide them by the household size measured in adult equivalents (please see figure 2). In that case, it may be easily observed that 9 countries lie within an interval of $\pm 12\%$ of the EU-15 average.

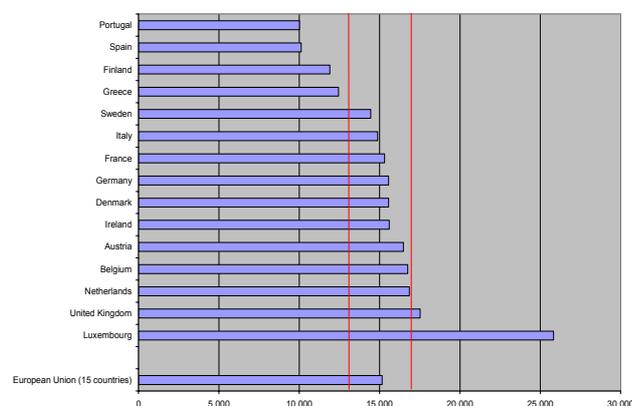


Figure 2: Average household final consumption expenditure per adult equivalent in 1999 in the EU-15 (PPS)

The influence of the explicative factors of household final consumption expenditure in the enlarged Union is rather similar to the EU-15

Several factors may be identified as influencing the household final consumption expenditure. The structure and the intensity of this influence are different for each country depending on their socio-economic characteristics. However, as we will see in this section, the structure of such influences does not change too much from the EU-15 to the EU-25. In the following paragraphs we will carry out some comparisons between some influential patterns in the EU-15 and in the NMS. Although it is possible to identify certain differences, the global picture remains quite similar.

Figure 3 shows the influence of the age of the reference person⁵ on the household consumption expenditure. This figure shows that the influence patterns are similar in both groups of countries. The households with the oldest reference persons are those which spend less. The following are the households with youngest reference persons. The households with mid-age reference persons are the ones with higher consumption expenditure.

There are only two small differences between the patterns of household consumption expenditure in the two groups of countries: age seems to be more influential for the consumption expenditure of the EU-15 than for the NMS and the age groups with higher consumption expenditure are different (30-44 years old in the NMS and 45-59 years old in the EU-15).

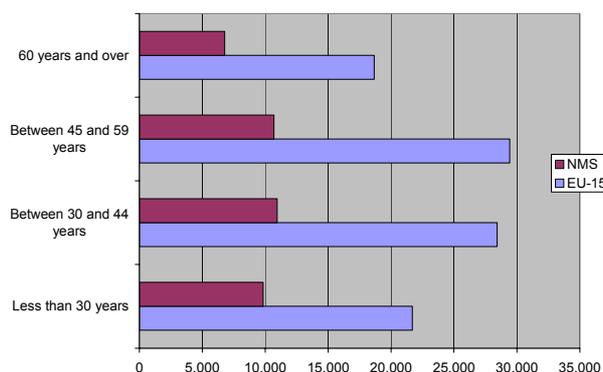


Figure 3: Average household consumption expenditure in 1999 by age of the reference person (PPS)

⁵ See methodological notes.

When looking at household consumption expenditure by employment status of the reference person (see figure 4), we find that households with reference persons who are active always spend much more than households where the reference person is not working. However the categories with highest and lowest consumption expenditure are different for the two groups of countries.

The households that spend more in the NMS are those for which the reference person was a 'non-manual worker', while for the EU-15 the group 'self-employed' spend the most.

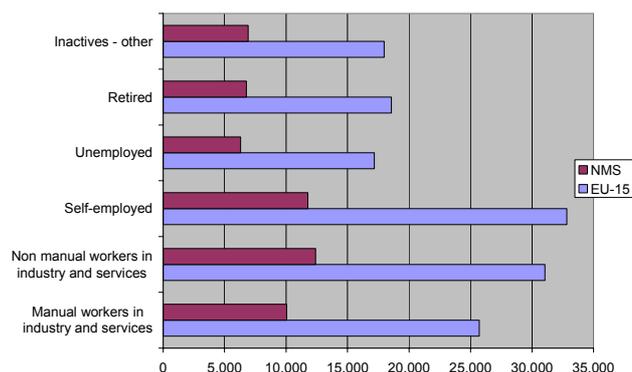


Figure 4: Average household consumption expenditure in 1999 by employment status of the reference person (PPS)⁶

Figure 5 presents the influence of the number of active persons in the household consumption expenditure. This figure shows that the influence patterns are quite similar in both groups of countries: household consumption expenditure rises almost linearly, but not proportionally, with the number of active persons.

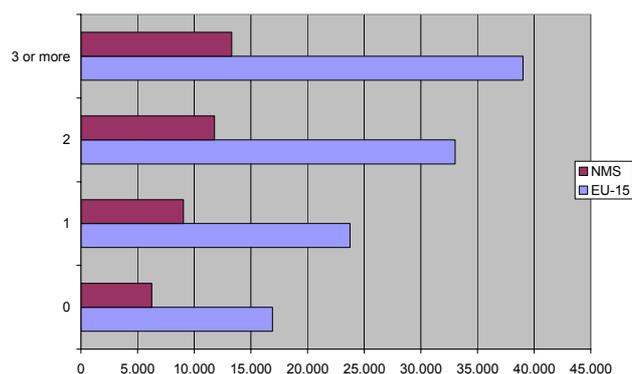


Figure 5: Average household consumption expenditure in 1999 by number of active persons

We may interpret this result to mean that most households have a main income earner, which is the

⁶ A few countries (Denmark, Italy, Lithuania and Malta) did not make any distinction between manual and non-manual workers in 1999 and classified both types within a single category.

household member who contributes most to the household budget. The income of the other members is comparatively less important for the explanation of consumption expenditure.

Finally, figure 6 shows the influence of household type on the household consumption expenditure. As a general rule, households with more members spend more than households with fewer members. However this general comment may be qualified with some interesting results easily observable on figure 5. Households comprising two adults without dependent children spend on average more than households comprising one adult with dependent children. By contrast, households comprising three adults without dependent children spend less than households comprising two adults with dependent children.

The influence pattern of household type on household consumption expenditure is similar for the EU-15 countries and for the NMS.

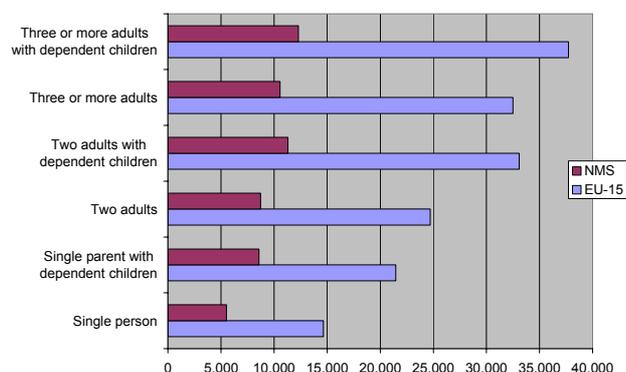


Figure 6: Average household consumption expenditure in 1999 by household type

Big differences on the structure of household final consumption expenditure across Europe reflects a large variety of cultural, geographical and economic circumstances

	Food, beverages and tobacco		Clothing and footwear		Housing, water, electricity, gas and other fuels		Furnishings, household equipment ...		Transport and communication		Leisure and culture		Other goods and services	
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
European Union (15 countries)	16,5	19,5	6,1	7,2	27,8	15,2	6,8	8,0	15,8	18,6	16,0	18,9	10,9	12,8
New Member States (A) (4 countries)	27,5	:	8,6	:	14,3	:	6,9	:	16,7	:	14,0	:	12,0	:
New Member States (B) (6 countries)	:	33,9	:	6,6	:	18,7	:	6,4	:	13,2	:	9,9	:	11,0
Belgium	15,6	18,2	5,4	6,3	26,2	13,9	6,5	7,6	14,7	17,2	16,4	19,1	15,2	17,7
Germany	17,3	19,2	5,5	6,1	28,4	20,5	6,4	7,1	16,2	18,0	15,3	17,0	10,9	12,1
Denmark	13,8	15,9	5,7	6,6	31,3	20,9	7,6	8,8	15,7	18,1	16,8	19,4	9,1	10,5
Greece	20,1	23,0	8,6	9,8	21,9	10,6	7,5	8,6	14,5	16,6	13,3	15,2	14,2	16,2
Spain	21,0	26,0	7,4	9,1	27,5	10,4	5,0	6,2	14,5	17,9	15,4	19,0	9,0	11,1
France	18,0	20,8	5,8	6,7	27,7	16,5	5,5	6,4	16,3	18,8	13,2	15,2	13,6	15,7
Ireland	23,5	29,2	6,3	7,8	27,3	9,7	4,6	5,7	15,8	19,6	14,4	17,9	8,0	9,9
Italy	20,9	24,6	7,5	8,8	24,7	11,5	7,6	8,9	16,2	19,0	10,9	12,8	12,3	14,5
Luxembourg	12,1	14,8	5,9	7,2	27,4	11,2	8,2	10,0	17,6	21,5	18,3	22,4	10,5	12,8
Netherlands	12,6	14,3	6,0	6,8	26,7	17,1	7,2	8,1	12,5	14,1	17,4	19,7	17,6	19,9
Austria	16,0	17,4	6,6	7,2	23,9	17,1	7,2	7,8	17,0	18,5	17,7	19,3	11,6	12,6
Portugal	21,5	24,3	6,6	7,5	19,8	9,4	7,2	8,1	18,3	20,7	14,3	16,2	12,6	14,2
Finland	17,1	20,9	4,6	5,6	28,1	12,0	4,5	5,5	19,8	24,2	14,8	18,1	11,0	13,5
Sweden	18,3	21,6	5,2	6,1	26,8	13,6	5,0	5,9	16,0	18,9	18,4	21,7	10,3	12,2
United Kingdom	13,5	16,6	5,5	6,8	28,3	11,9	7,3	9,0	15,9	19,5	21,3	26,2	8,2	10,1
Cyprus	19,4	:	7,6	:	19,8	:	6,6	:	19,7	:	12,3	:	14,9	:
Malta	23,8	:	8,3	:	9,0	:	10,6	:	19,4	:	17,0	:	11,9	:
Slovenia	26,9	:	8,6	:	10,7	:	7,0	:	20,0	:	14,5	:	12,2	:
Slovakia	33,4	:	9,3	:	15,8	:	6,2	:	11,2	:	13,8	:	10,3	:
Czech Republic	:	26,6	:	7,0	:	17,5	:	7,7	:	13,8	:	16,1	:	11,3
Estonia (*)	:	38,0	:	7,0	:	18,0	:	5,0	:	10,0	:	10,0	:	9,0
Latvia	:	41,5	:	6,7	:	17,7	:	5,0	:	11,9	:	8,0	:	9,2
Lithuania	:	49,9	:	7,7	:	12,9	:	4,7	:	9,9	:	7,7	:	7,2
Hungary	:	30,1	:	6,7	:	20,0	:	5,3	:	16,5	:	9,5	:	11,9
Poland	:	35,6	:	6,3	:	19,1	:	6,5	:	12,5	:	8,4	:	11,1
Bulgaria	:	53,0	:	6,1	:	13,8	:	3,9	:	9,1	:	6,8	:	7,4
Romania	:	58,0	:	6,9	:	13,0	:	3,6	:	8,4	:	3,9	:	6,2

(A) Including imputed rent for dwelling services

(B) Excluding imputed rent for dwelling services

(*) 3% corresponding to non-monetary consumption expenditure on non-foods items could not be broken down by COICOP divisions

: Data not available

Table 1: Structure of household consumption expenditure in 1999 (%)

It is essential to start this section with a short methodological discussion because the data supplied by the NMS are not fully comparable. Some countries have imputed some rents for dwelling services of owner-occupiers and rent-free tenants while others have not⁷. For the EU-15 countries, both sets of figures (with and without imputed rents) are available, but only four NMS have supplied their figures including this imputation. For this reason, the columns of the previous table have been doubled in order to allow comparison of the structure of household final consumption expenditure either including or excluding such imputation. From now on, we will mark with an A the figures calculated including imputed rent for dwelling services and with a B when they are calculated excluding this concept.

At a quick glance, it can be easily appreciated that there are notable differences in the structure of household final consumption expenditure between countries. 'Food, beverages and tobacco' represent the largest

part of household budgets in most NMS (almost one third) in 1999; however in the EU-15, 'housing, water, electricity, gas and other fuels' was the biggest part (27.8%^A of household budgets).

It is well known from micro-economic theory that each component of consumption expenditure has a different elasticity in relation to household income. In general, expenditure on items linked to the satisfaction of basic needs is more inelastic than expenditure linked to other consumption components. Figure 7 presents a statistical indicator of household income by country, which enables a first interpretation of the differences found in the structures of household consumption expenditure:

⁷ See page 6 and methodological notes

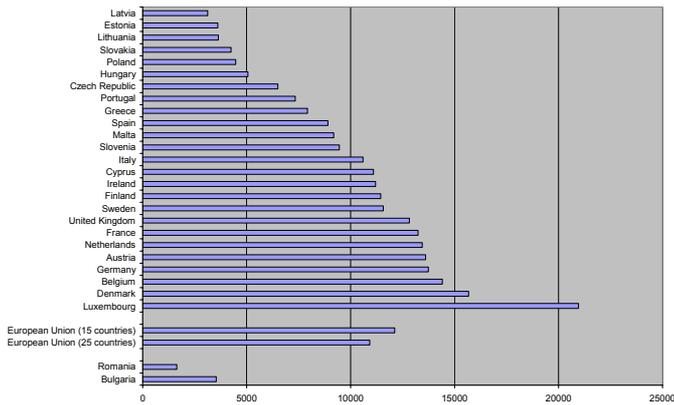


Figure 7: Median household income in 1999 in the EU-25 (PPS) (except Cyprus 1997, Malta 2000, Czech Republic 1996, Hungary 2000 and Slovakia 1996). Source: Eurostat – Income and Living Conditions

The following pie charts show the structure of household final consumption expenditure in the EU-15 and in the NMS.

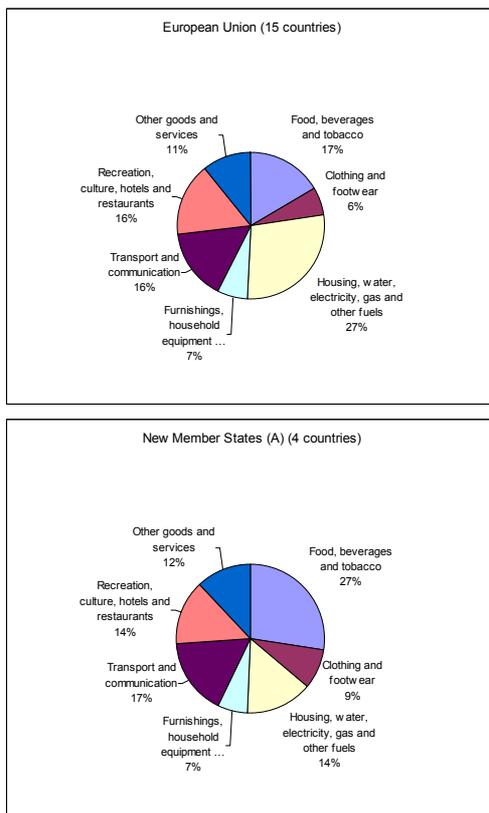


Figure 8: Total consumer expenditure in the EU-15 and in Cyprus, Malta, Slovenia and Slovakia in 1999 by item (including the concept of imputed rent for dwelling services)

Compared to 1994 results for the EU-15 countries, the weight of the categories 'housing' and 'transport and communication' in the budget increased in most countries (variation of the average share from 24.7%^A to 27.8%^A), while the share of the budget devoted to 'food, beverages and tobacco' declined (variation of the average share from 18.9%^A to 16.5%^A).

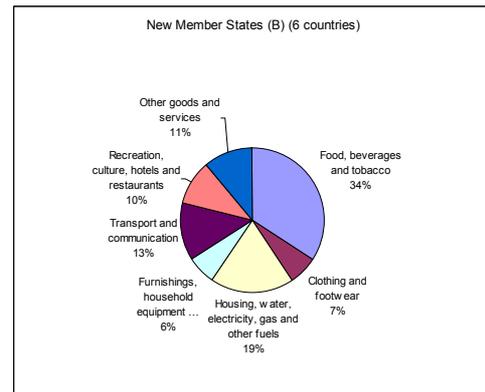
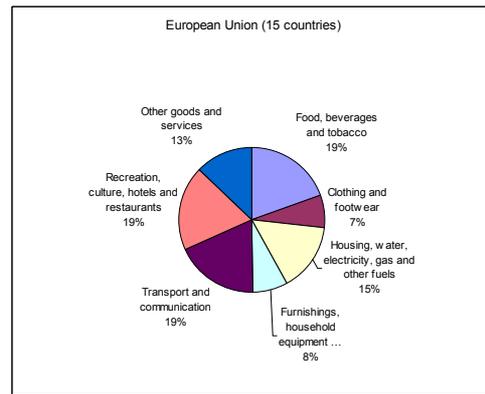


Figure 9: Total consumer expenditure in the EU-15 and in Czech Republic, Estonia, Latvia, Lithuania, Hungary and Poland in 1999 by item (excluding the concept of imputed rent for dwelling services)

'Food, beverages and tobacco' (COICOP 01 and 02) accounts for a much larger part of household budgets in the NMS than in the EU-15

In 1999, consumption expenditure on 'food, beverages and tobacco' was much smaller than on 'housing, water, electricity gas and other fuels' for most EU-15 countries (16.5%^A compared to 27.8%^A). The highest share of these two COICOP divisions are found in the countries on the periphery of the EU-15 (Ireland, Sweden, Spain, Italy and Greece), while the smallest values are found in central Europe (Luxembourg, Netherlands and Germany) and in the United Kingdom.

The share of these COICOP divisions in the household budgets of the NMS still remains relatively high (27%^A in average for the 4 countries with imputed rent and 34%^B for the other 6). The 3 Baltic republics and Slovakia had the highest percentages in 1999 and the smallest are for Cyprus, Malta and Slovenia.

Southern countries spend more on 'clothing and footwear' (COICOP 03)

The share of 'clothing and footwear' in the household budget varies from 4.6%^A in Finland to 9.3%^A in Slovakia. Many countries spend an amount not too far from the EU-15 average (6.1%^A or 7.2%^B).

In general, the households of the Southern countries

devote a bigger part of their budgets to this COICOP division than the countries of Central and Northern Europe.

'Housing, water, electricity, gas and other fuels' (COICOP 04): big differences but no obvious explanations

'Housing, water, electricity, gas and other fuels' has become the biggest part of household budgets for most EU-15 countries and Cyprus. However, the differing treatment of imputed rent⁸ in the NMS makes any comparison among them quite difficult.

Many EU-15 countries have large dwelling rental markets. This fact has allowed most EU-15 countries to develop acceptable imputation models for 'rent-free tenants and owner-occupiers'. However, in many countries of Eastern Europe, most of the dwellings are owned by their occupiers, hence 6 NMS have decided to get rid of this imputation in 1999 and the other 4 have used non-harmonised methods⁹.

The budget share of this COICOP division varies from 20%^A in Portugal up to 31%^A in Denmark in 1999 for the EU-15 zone. This expenditure depends on factors such as population preferences, type of dwellings available in each country, degree of urbanisation, structure of dwelling rental markets, population mobility, local taxes and laws, and so on, which vary widely throughout the EU-15 area. For this reason it is not possible to find clear patterns of geographic influence.

No geographical patterns for the consumption expenditure on 'furnishing, household equipment and routine maintenance of the house' (COICOP 05)

The share of this part of household consumption expenditure is moderate and varies from 4.5%^A in Finland to 10.6%^A in Malta. It is not possible to find clear patterns of geographical distribution. Therefore, the reasons which might explain the differences among the EU countries have another nature: market structure, population preferences...

Expenditure on 'transport and communications' (COICOP 07 and 08) depends on geographic factors

'Transport and communications' is another significant part of household budgets. On average, it amounted to 16.8%^A and 18.6%^B for the EU-15 and 16.7%^A and 13.2%^B for the NMS in 1999. The most important items of this part, which amount for more than three fourths of

the total, are connected to the purchase and operation of private vehicles.

In contrast to other COICOP divisions, there seem to be some geographical factors, such as insularity, which would influence this part of household budget; although there are also other non-negligible factors such as density of population, development of infrastructures, market features, holiday habits, and so forth.

The Scandinavian countries and Luxembourg are the ones which devote the biggest share of their budget to transport and communication whereas the countries which devote least are the Baltic republics and Slovakia.

Expenditure on 'leisure and culture' (COICOP 09 and 11) is highly dependent on household income

This part of household consumption expenditure depends not only on cultural factors but also on household income. These reasons explain the big differences found across the EU-25 in 1999: the EU-15 averages are 16.0%^A and 18.9%^B while the NMS averages are 14.0%^A and 9.9%^B.

The countries which spend the biggest part of their household budget on leisure and culture are United Kingdom, Portugal and Austria. The countries which spend the least are the 3 Baltic republics, Poland and Hungary.

'Other goods and services' (COICOP 06, 10 and 12) is the least comparable part of household budgets

This part of household final consumption expenditure is made up by the COICOP divisions 06 (health), 10 (education) and 12 (miscellaneous goods and services). These divisions are the least comparable of all because of the big differences between countries in their organisation of the national systems, commercial practices or even legal regulations.

⁸ See methodological notes

⁹ The Commission Decision 95/309/EC, Euratom of 18 July 1995 specify the principles for estimating dwelling services for the purpose of compiling gross national product. Eurostat has recommended using the same principles for the determination of imputed rents in the context of the HBS.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

This issue of Statistics in Focus draws from data of the **Household Budget Surveys (HBS)** conducted in all the Member States of the enlarged European Union, Bulgaria and Romania. Eurostat has compiled HBS data from the countries of the European Union approximately every 5 years since 1988. The last collection round was for the reference year 1999 and the next one is planned for 2005. The results presented here are obtained from Eurostat's micro-data base for the EU-15 countries and from a simplified aggregated data collection carried out for the other countries. These data are referred to the reference year 1999. In order to improve their comparability, Eurostat has harmonized EU-15 data in a process of converting national data into a predefined Community format. However the data of the new Member States (NMS), Bulgaria and Romania have been taken without any such harmonisation process. For this reason the data of the EU-15 countries is more comparable. For the assessment of comparability problems, please refer to the methodological publications issued by Eurostat for the HBS round of 1999.

EU-25, EU-15 and NMS figures on household consumption expenditure were computed using the household population size of each country as a weight. EU-25, EU-15 and NMS figures on structure of consumption expenditure are computed using the total household final consumption expenditure of each country as a weight using National Accounts data.

Survey years and sample sizes

	Collection year	Size of sample		Collection year	Size of sample
Belgium	1999	3745	Czech Republic	1999	6256
Denmark	1998	2727	Estonia	1999	2645
Germany	1998	62150	Hungary	1999	8250
Greece	1998 - 1999	6258	Cyprus	1996 - 1997	3650
Spain	1998	9891	Latvia	1999	10191
France	2000 - 2001	25000	Lithuania	1999	3929
Ireland	1999 - 2000	7644	Malta	2000 - 2001	6798
Italy	1999	20930	Poland	1999	31428
Luxembourg	1998	2990	Slovenia	1999	3859
Netherlands	1999	1851	Slovakia	1999	1640
Austria	1999 - 2000	7098	NMS		78646
Portugal	2000 - 2001	9643			
Finland	1998	4359			
Sweden	1999 - 2000	3031			
United Kingdom	1999 - 2000	7100			
EU-15		174417			

	Collection year	Size of sample
Bulgaria	1999	3000
Romania	1999	36072

The survey years do not always coincide with the reference year, 1999, fixed by Eurostat (see table below). When this is the case, the data are deflated using the general consumer price index of the country concerned.

The size of the samples varies substantially according to various factors, including budget constraints and the desired accuracy of the estimate.

Reference person, Adult equivalent and Purchasing Power Standards

The reference person is the adult person who has the biggest total income (main income earner).

To take economies of scale into account, an equivalence scale is applied to adjust consumption expenditure for the varying size and composition of households. A coefficient of 1 is attributed to the first adult, 0.5 to other persons over 13 years old and 0.3 to children aged 13 years or under (OECD modified scale), but these data are not available for all the EU-25 in Eurostat.

Purchasing Power Parities (PPP) convert every national monetary unit into a common reference unit, the "Purchasing Power Standard" (PPS), of which every unit can buy the same amount of goods and services across the countries in a specific year.

Concept of expenditure

The categories of consumption used here correspond to the COICOP-'HBS' (Classification of Individual Consumption by Purpose – Household Budget Survey).

In addition to households' traditional expenditure (purchases in shops, payment of invoices, etc.), "consumption expenditure" in Household Budget Survey includes the own production of households and benefits in kind received. Notional rents are also imputed to owner-occupiers and households accommodated free of charge. All EU-15 countries, Cyprus, Malta, Slovenia and Slovakia have done this imputation in 1999, but the other eight countries have not. This definition of expenditure is close to that of the National Accounts but any comparisons with final household consumption data from National Accounts should take into account that:

Household Budget Surveys cover only national 'private households', excluding institutional households (convents, hospitals, etc.) and foreign tourist consumption expenditure.

Household Budget Surveys collect individual data from a representative sample through individual questionnaires. National Accounts may use other statistical sources (retail sales for instance) to build the final consumption aggregates.

Data collection procedures may affect the comparability of data regarding the main items of consumption such as 'health', 'education' and 'housing'.

Further information:

➤ **Databases**

[EUROSTAT Website/Population and social conditions/Living conditions and welfare/Household Budget Survey](#)

Journalists can contact the media support service:

Bech Building Office A4/017 • L-2920 Luxembourg • Tel. (352) 4301 33408 • Fax (352) 4301 35349 •

E-mail: eurostat-mediasupport@cec.eu.int

European Statistical Data Support:

Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.

Their mission is to provide help and guidance to Internet users of European statistical data.

The complete details concerning this support network can be found on our Internet site: www.europa.eu.int/comm/eurostat/

A list of worldwide sales outlets is available at the:

Office for Official Publications of the European Communities.

2, rue Mercier – L-2985 Luxembourg

URL: <http://publications.eu.int>

E-mail: info-info-opoce@cec.eu.int

BELGIEN/BELGIQUE/BELGIË - DANMARK - DEUTSCHLAND - EESTI – ELLÁDA - ESPAÑA - FRANCE - IRELAND - ITALIA - KYPROS/KIBRIS – LUXEMBOURG - MAGYARORSZÁG – MALTA - NEDERLAND - ÖSTERREICH - POLSKA - PORTUGAL - SLOVENIJA - SLOVENSKO - SUOMI/FINLAND - SVERIGE - UNITED KINGDOM - BALGARIJA - HRVATSKA - ÍSLAND – NORGE - SCHWEIZ/SUISSE/SVIZZERA - AUSTRALIA - BRASIL - CANADA - EGYPT - MALAYSIA - MÉXICO - SOUTH KOREA - SRI LANKA - T'AI-WAN - UNITED STATES OF AMERICA

ORIGINAL TEXT: English