17 July 2017

Household Budget Survey
2015/2016

60% of household expenditures on housing, food and transport

The Inquérito às Despesas das Famílias 2015/2016 (Household Budget Survey/HBS series) definitive data show that the total annual mean consumption expenditure per household living in Portugal was €20,363, €28 less than the one estimated in 2010/2011 (€20,391). Overall, the three main components of household expenditures (housing, food and transport) accounted for about 60.3% of the total annual mean consumption expenditure of households in 2015/2016, i.e. up by 3.3 percentage points (pp) from the beginning of the decade (57.0%).

The total annual mean consumption expenditure of households with dependent children (€25,254) was about 44% higher than that of households without dependent children (€17,494).

By region, only the total annual mean consumption expenditure in the Área Metropolitana de Lisboa (€23,148) exceeded the national average (€20,336). The lowest value was 16 856 €, in the Região Autónoma dos Açores.

According to the HBS 2015/2016 results, the total income[1] based at-risk-of poverty rates for the Região Autónoma dos Açores and for the Região Autónoma da Madeira were higher than 20% in 2014. These two regions, along with the Área Metropolitana de Lisboa, were also those where the inequalities of income distribution were higher than the national average.

Non-monetary incomes in 2014 had an "equalizing" impact, contributing to the mitigation of poverty and social exclusion. This type of incomes, which correspond to self-consumption, owner-occupied housing and income in kind, accounted for 22.2% of household net total income, contributed to a reduction of 3.4 pp in the Gini coefficient and 3.3 pp in the at-risk-of poverty rate in 2014.

It should be noted that data on expenditure are definitive, only reflecting adjustments to the provisional ones, released in December 2016; data on total income, poverty and inequality, and basic comfort indicators are reported for the first time.

Statistics Portugal releases the publication "Inquérito às Despesas das Famílias 2015/2016" (HBS 205/2016), presenting the statistical results regarding the structure of expenditures and income distribution of households living in Portugal, as well as about some basic comfort indicators.

The HBS is carried out by Statistics Portugal every five years in order to periodically update the volume and structure of household expenditures. Therefore, it is an important element to determine the structure of consumption underpinning the Consumer Price Index and to calculate the final household consumption by Portuguese National Accounts.

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[1] The income distribution determined in IDEF 2015/2016 corresponds to total income, which includes monetary and non-monetary incomes. Consequently, the at-risk-of poverty rates and the Gini coefficients calculated in IDEF 2015/2016 are different from the reference figures based on the distribution of monetary incomes in the context of ICOR (EU-SILC).

INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL

Moreover, it provides information on food quantities to the Portuguese Food Balance and is part of the EU compilation of Household Budget Surveys data. HBS 2015/2016 was held between March 2015 and March 2016 with a regional representative sample of households residing in non-collective dwellings in the Portuguese territory.
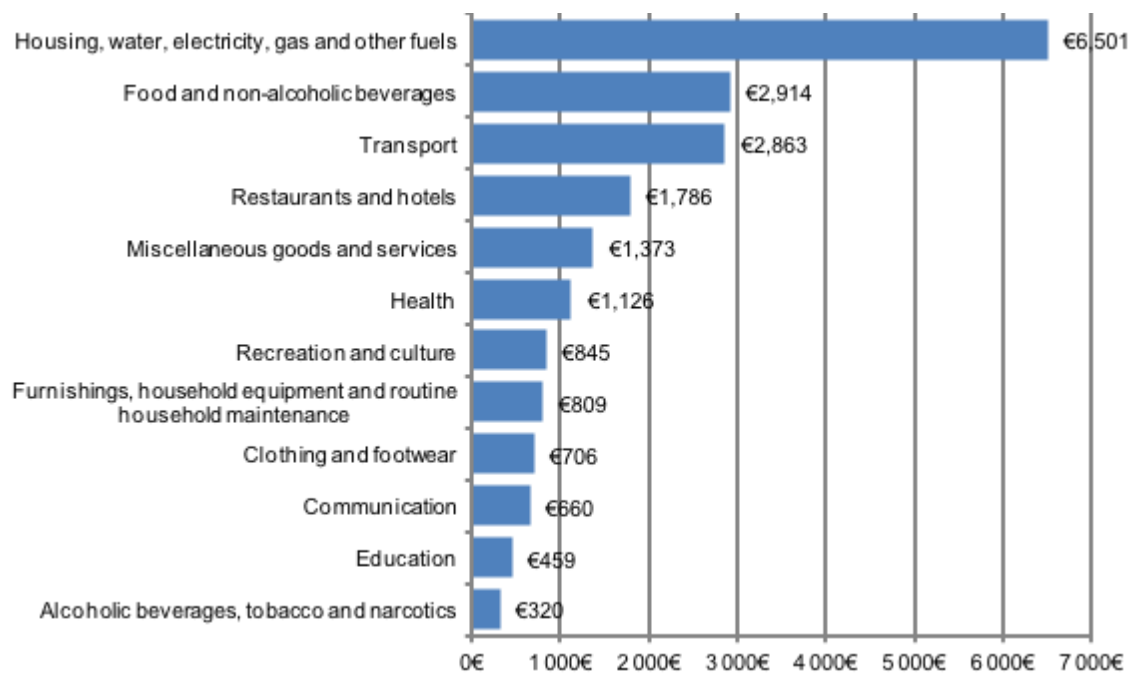
The statistical results which are released now are definitive, in particular those concerning the mean consumption expenditure compared to the provisional data published in December 2016.

This statistical information is organized in five dimensions: the distribution of the number of private households according to several socioeconomic characteristics; the mean annual expenditure by private household; the mean income by private household; the adult equivalent income, poverty and inequality; and a few well-being indicators. The publication also includes a chapter about sampling methodology and estimation.

In 5 years, the weight of food expenditures decreased while that of housing expenditures increased

According to HBS 2015/2016 results, the total annual mean consumption expenditure per household living in Portugal was €20,363, i.e. a decrease of 0.1% vis-à-vis the one estimated in 2010/2011 (€20,391).

Figure 1: Total annual mean consumption expenditure per household and COICOP divisions, Portugal, 2015/2016

COICOP division	Value
Housing, water, electricity, gas and other fuels	€6,501
Food and non-alcoholic beverages	€2,914
Transport	€2,863
Restaurants and hotels	€1,786
Miscellaneous goods and services	€1,373
Health	€1,126
Recreation and culture	€845
Furnishings, household equipment and routine household maintenance	€809
Clothing and footwear	€706
Communication	€660
Education	€459
Alcoholic beverages, tobacco and narcotics	€320

Source: Household Budget Survey 2015/2016

Of total expenditure in 2015/2016, 31.9% corresponded to "Housing, water, electricity, gas and other fuels" (€6,501), 14.3% to expenditures in "Food and non-alcoholic beverages" (€2,914) and 14.1% to "Transport" expenditures (€2,863). Overall, the three main components of household expenditures (housing, food and transport) accounted for about 60% of the total annual mean consumption expenditure of households in 2015/2016, i.e. up by 3.3 pp from the beginning of the decade (57.0%).

Figure 2: Structure of total annual mean consumption expenditure per household, by COICOP divisions, Portugal, 2000, 2005/2006, 2010/2011 and 2015/2016
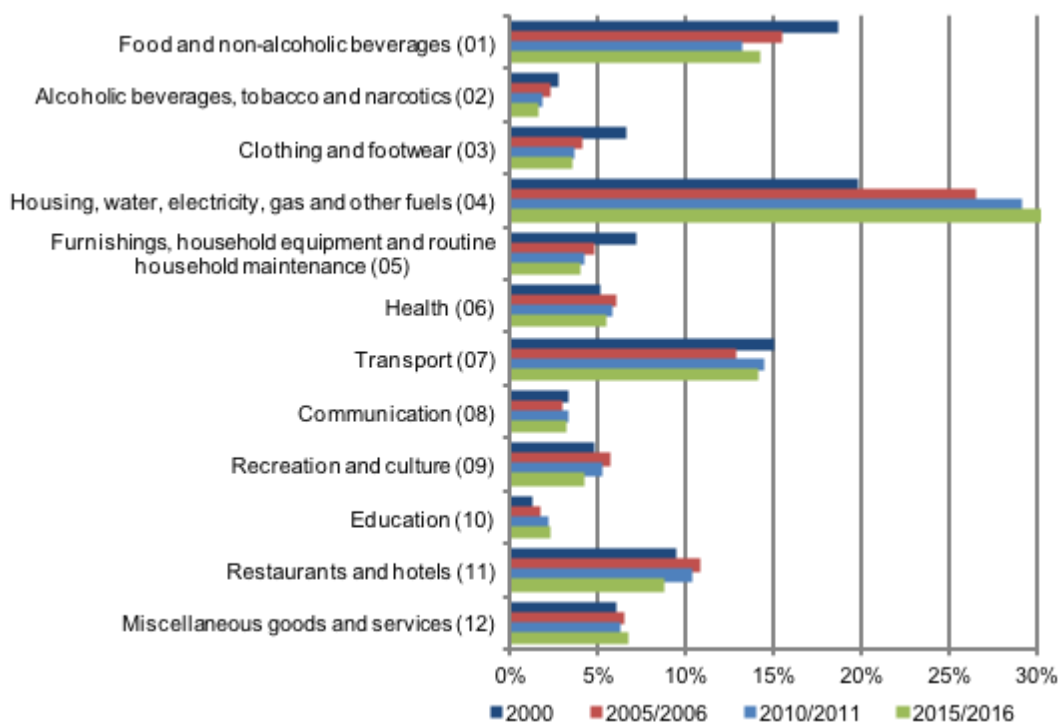
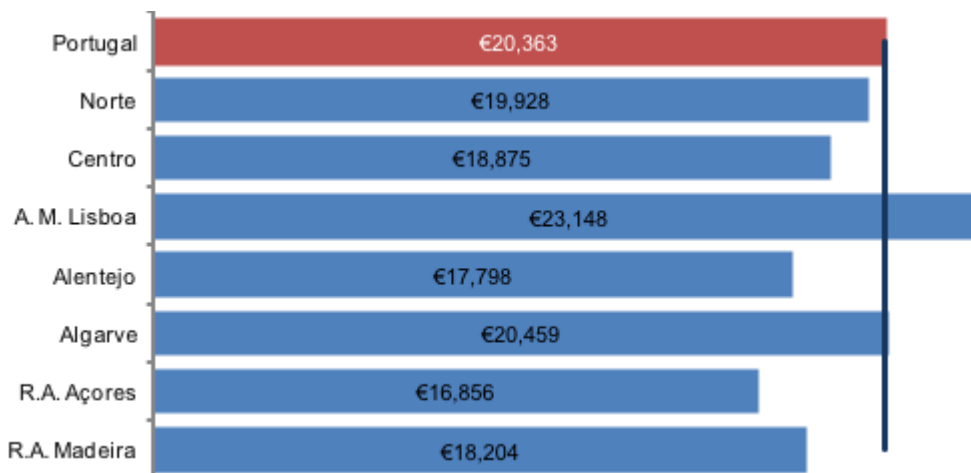**Source:** Household Budget Survey 2015/2016

The concentration of expenditures in these classes continued to maintain the profile of the structure of expenditures of Portuguese households since the beginning of the century, although with a lower share of expenditures on "Food and non-alcoholic beverages". These expenditures accounted for 18.7% in 2000, 15.5% in 2005/2006, 13.3% in 2010/2011 and 14.3% in 2015/2016, i.e., 4.4 pp less than in 2000. Simultaneously, in the same period, there was an increase of 5.3 pp in the weight of expenditures on "Housing, water, electricity, gas and other fuels" from 19.8% in 2000 to 31.9% in 2015/2016.

The remaining structure of total annual mean household's expenditure per COICOP's division remained close to the one observed in 2010/2011, but with a reduction in the importance of "Restaurants and hotels" expenditures (-1.6 pp between 2010/2011 and 2015/2016) and of "Recreation and culture" (-1.1 pp).

INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL

The Área Metropolitana de Lisboa showed the highest mean expenditure in the country, lowest in the Região Autónoma dos Açores

By NUTS 2 regions, the results of HBS 2015/2016 show that households living in the Área Metropolitana de Lisboa registered the highest value (€23,148) for total annual mean consumption expenditure, significantly higher than the national average (€20,363).

Figure 3: Total annual mean consumption expenditure per household, NUTS 2, 2015/2016
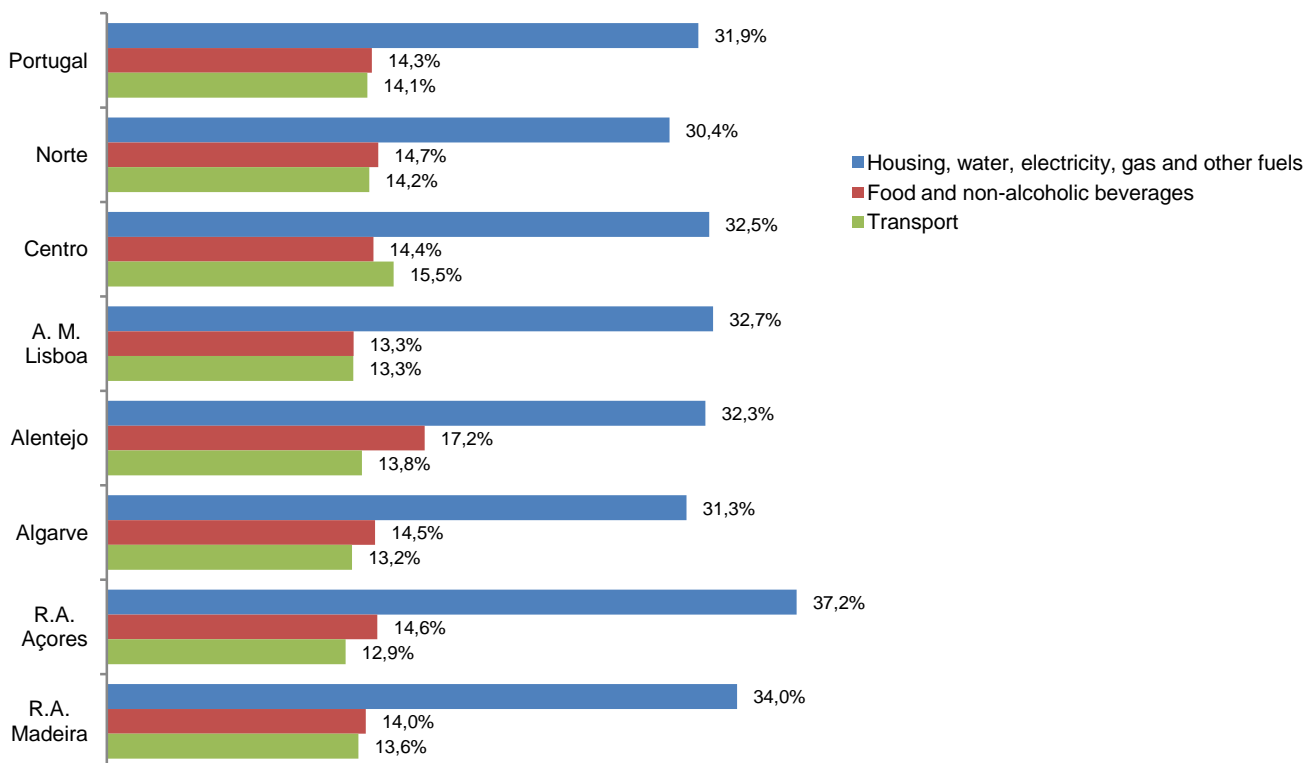

Source: Household Budget Survey 2015/2016

The lowest mean value was €16,856, registered in Região Autónoma dos Açores. In addition, regions of Norte (€19,928), Centro (€18,875), Alentejo (€17,798) and the Região Autónoma da Madeira (€18,204) showed lower mean expenditure figures than the national average.

The allocation of total annual mean consumption expenditure followed an identical pattern in each NUTS 2 region with regard to the three main components: expenditures on housing, on food and on transport. Centro was the only region where the relative weight of transport expenditures was in second position, followed by food expenditures in third position.

Figure 4: Structure of total annual mean consumption expenditure per household, by main expenditure components, NUTS 2, 2015/2016

Source: Household Budget Survey 2015/2016

The cumulative proportion of expenditures in the three main components, accounting for 60.3% in the country as a whole, was more significant in the Região Autónoma dos Açores (64.7%) and in Alentejo (63.2%), while accounting for only 59.0% in Algarve.

The analysis of the structure of expenditures by degree of urbanization reveals that consumption patterns in predominantly urban areas were similar to that of the country as a whole, with the proportion of expenditures on housing (31.9%), food (13.8%) and transport (13.9%) accounting for about 60% of the annual mean consumption expenditure of households living in predominantly urban areas. On the other hand, there was a higher concentration of expenditure in the three main components (divisions 01, 04 and 07) in households living in predominantly rural areas, with about 64% of the annual mean consumption expenditure distributed per housing (32.4%), food (16.4%) and transport (15.0%).

Mean expenditure was higher for households with children and lower for households with elderly

The total annual mean consumption expenditure of households with dependent children (€25,254) was about 44% higher than that of households without dependent children (€17,494).

In absolute values, this trend was observed in all COICOP divisions, with the exception of the "Health" division with an annual mean consumption expenditure for households without dependent children (€1,134) slightly higher (+1.9%) than for households with dependent children.

Expenditures on "Education" showed the greatest disparity between the two types of household under review, with expenditures of households with dependent children (€1,030) about eight times higher than those for households without dependent children (€123). Similarly, expenditures on "Clothing and footwear", "Recreation and culture" and "Transport" by households with dependent children were about twice as high as for households without children.
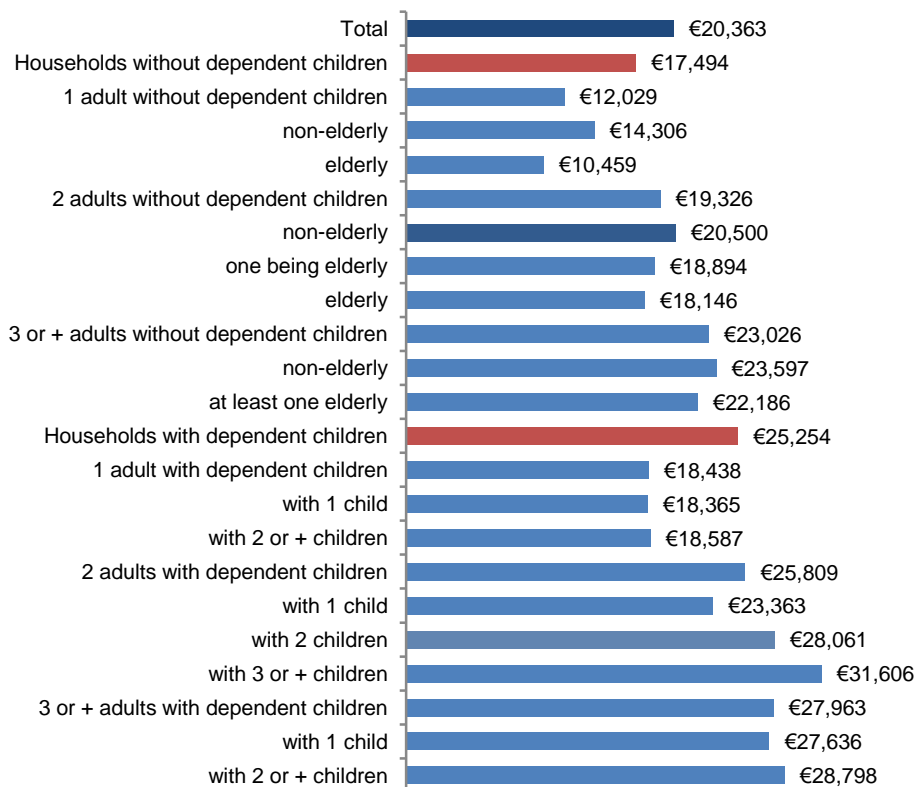
Figure 5: Total annual mean consumption expenditure per household by COICOP divisions and household composition, Portugal, 2015/2016

COICOP division	Households without dependent children	Households with dependent children
Food and non-alcoholic beverages (01)	€2,586	€3,474
Alcoholic beverages, tobacco and narcotics (02)	€,296	€,360
Clothing and footwear (03)	€,512	€1,038
Housing, water, electricity, gas and other fuels (04)	€6,046	€7,278
Furnishings, household equipment and routine household maintenance (05)	€,735	€,936
Health (06)	€1,134	€1,113
Transport (07)	€2,266	€3,882
Communication (08)	€,560	€,829
Recreation and culture (09)	€,642	€1,191
Education (10)	€,123	€1,030
Restaurants and hotels (11)	€1,467	€2,330
Miscellaneous goods and services (12)	€1,127	€1,792

Source: Household Budget Survey 2015/2016

Age conditioned the mean expenditure by households without dependent children. Considering one adult non elderly households, their mean expenditure (€14,306) was 19% higher than the mean expenditure by one adult of any age households (€12,029), while for one elderly households the mean expenditure was €10,459. This feature was observed for two adults or three or more adults households without children with at least one elderly person.

Figure 6: Total annual mean consumption expenditure by household composition, Portugal, 2015/2016

Household composition	Expenditure
Total	€20,363
Households without dependent children	€17,494
1 adult without dependent children	€12,029
non-elderly	€14,306
elderly	€10,459
2 adults without dependent children	€19,326
non-elderly	€20,500
one being elderly	€18,894
elderly	€18,146
3 or + adults without dependent children	€23,026
non-elderly	€23,597
at least one elderly	€22,186
Households with dependent children	€25,254
1 adult with dependent children	€18,438
with 1 child	€18,365
with 2 or + children	€18,587
2 adults with dependent children	€25,809
with 1 child	€23,363
with 2 children	€28,061
with 3 or + children	€31,606
3 or + adults with dependent children	€27,963
with 1 child	€27,636
with 2 or + children	€28,798

Source: Household Budget Survey 2015/2016

Inequality of mean expenditure by income class more significant in Norte

The analysis of mean expenditure patterns per adult equivalent harmonizes data from different households in relation to their size and age composition, enabling the comparison of results based on a standard equivalent of a one-person household.

Considering the mean consumption expenditure of households by equivalent total income quintiles, the mean expenditures by 1st quintile households (20% households with lower incomes), €11,453, was equivalent to 56% of the mean consumption expenditure of the country as a whole (€20,363). At the other extreme, the mean expenditures by 5th quintile households (20% with higher incomes), €32,803, was about 61% higher national mean expenditures.

By region, the inequality of mean annual consumption expenditure between the 1st quintile and the 5th quintile households was more significant in Norte (on average, the 20% of households with higher incomes spent three times more than households with lower incomes), with Região Autónoma da Madeira showing the lower inequality value (2.3) between higher and lower income households.

Figure 7: Total annual mean consumption expenditure per household by equivalent total income quintiles, NUTS 2, 2015/2016

unit: €

	Portugal	Norte	Centro	A. M. Lisboa	Alentejo	Algarve	R.A. Açores	R.A. Madeira
Total annual mean consumption expenditure per household	**20,363**	**19,928**	**18,875**	**23,148**	**17,798**	**20,459**	**16,856**	**18,204**
1st quintile	11,453	11,720	10,546	11,876	11,512	12,187	10,628	12,426
2nd quintile	14,803	15,243	14,846	14,914	12,872	15,137	14,345	13,966
3rd quintile	18,875	18,799	19,894	18,896	17,145	18,445	16,285	17,493
4th quintile	23,475	24,464	24,053	23,049	21,199	23,076	20,304	20,664
5th quintile	32,803	35,019	30,073	33,685	28,322	31,194	27,484	28,867

Source: Household Budget Survey 2015/2016

Total income was higher in predominantly urban areas

The results of the HBS also include data on the annual household net total income. Covering all monetary and non-monetary incomes, every five years these data allows complementing the results on the distribution of the household net monetary income calculated annually in SILC context.

According to the HBS 2015/2016, the mean household net total income in 2014 was 23,635€, i.e., 1,970€ per month.

By region, the highest mean household net total income was €28,101 for the Área Metropolitana de Lisboa, the only region with a value above the national average. Centro showed the lowest total mean income per household, with €21,100.

Figure 8: Mean household net total income, NUTS 2, 2014

Region	Value
Portugal	€23,635
Norte	€22,308
Centro	€21,100
A.M.Lisboa	€28,101
Alentejo	€21,453
Algarve	€22,412
R.A.Açores	€22,874
R.A.Madeira	€22,793

**Source:** Household Budget Survey 2015/2016

In 2014, households living in predominantly urban areas had a mean net total income of €25,334, 7.2% higher than the national figure (€23,635), while the mean net total income of households living in predominantly rural areas was the lowest (€18,397), i.e. 22.2% lower than the national value.

According to the HBS 2015/2016 results, the mean household net monetary income represented 77.8% of the mean household net total income, with 22.2% corresponding to non-monetary income, i.e. self-consumption, owner-occupied housing (subjective rent) and income in kind. The predominance of household net monetary income in net total income was extensive to all regions, with proportions between 74.3% in the Algarve and 79.0% in the Região Autónoma dos Açores.

With regard to non-monetary incomes, those arising from owner-occupied rents (i.e., the estimated value for an hypothetical rent by owners or free beneficiaries of their main residence) represented the main component, accounting for 72.7% of non monetary income and 16.1% of mean household net total income.

The contribution of non-monetary income to the formation of total income was slightly more significant in rural areas (25.2%) and in intermediate areas (25.0%) vis-à-vis predominantly urban areas (21.4%), mainly due to self-consumption (a surplus of 2.0 pp in intermediate areas and a surplus of 2.8 pp in rural areas, when compared to the weight of 0.7% in predominantly urban areas).

Figure 9: Structure of mean household net total income by type of income, NUTS 2, 2014

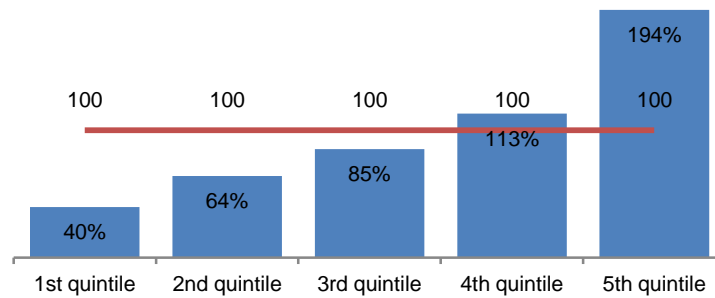Source: Household Budget Survey 2015/2016
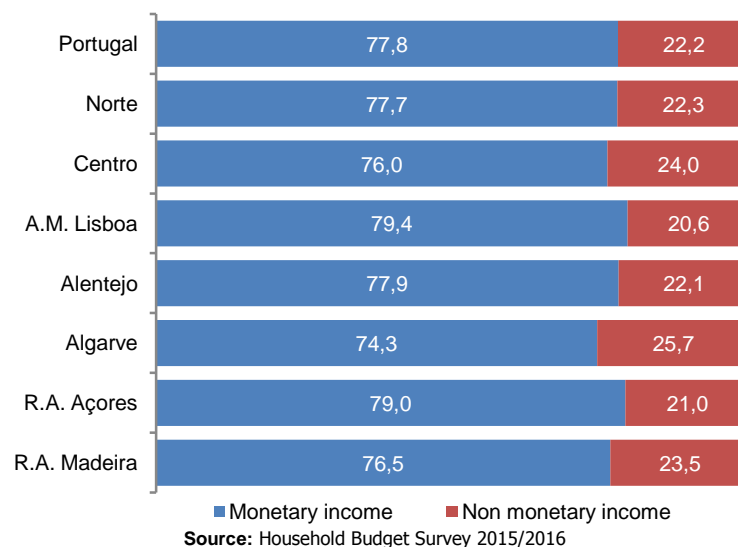
Higher at-risk-of poverty rates in the autonomous regions of Açores and Madeira

Income data already presented relate to households of different typologies, making comparative analysis difficult. The use of an equivalence scale harmonizes data from different households in relation to their size and age composition, enabling the comparison of results based on a standard equivalent of a one-person household.

The distribution of mean net total income by equivalent total income quintiles shows that in 2014 the mean household net total income of households in the 1st quintile, €9,359, was 60% less than the country's mean net total income (€23,635).

The mean total income of households in the 5th equivalent total income quintile, i.e. €45,921, was 1.9 times higher than the country's figure (€23,635).

Figure 10: Distribution of annual mean net total income per equivalent total income quintiles, Portugal, 2014

Source: Household Budget Survey 2015/2016

Equivalent total income was also taken as a reference to estimate regional poverty and inequality in 2014, in particular the at-risk-of poverty rate and the Gini coefficient by NUTS 2, and sowing that poverty and inequality varied significantly between different regions.

The total income based at-risk-of poverty rates for Região Autónoma dos Açores and for Região Autónoma da Madeira were higher than 20% in 2014, with the largest percentages of population living with an equivalent net total income lower than the poverty threshold. Norte also showed a poverty rate above the national figure. For Centro, Alentejo, Algarve, and mainly for the Área Metropolitana de Lisboa, the at-risk-of poverty rates were lower than the national estimate.

Figure 11: Poverty and inequality indicators (total income), NUTS 2, 2014

unit: %

	At-risk-of-poverty rate	Gini coefficient
Norte	17.7	29.8
Centro	15.4	28.0
A. M. Lisboa	12.4	33.9
Alentejo	15.6	28.2
Algarve	15.6	29.4
R.A. Açores	27.5	33.8
R. A. Madeira	21.6	31.7
Portugal	**15.9**	**31.6**

Source: Household Budget Survey 2015/2016

INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL

Regarding the inequality of net total income distribution in each region, the Área Metropolitana de Lisboa and the autonomous regions of Açores and Madeira registered the highest Gini coefficients, with levels of inequality of equivalent total income above the national estimate of 31.6% (respectively, 33,9%, 33,8% and 31,7%).

The survey outcomes also allow for the comparison between equivalent total income and equivalent monetary income, verifying that non-monetary incomes had an "equalizing" impact in 2014, contributing to the mitigation of poverty and social exclusion. Non-monetary incomes, which correspond to self-consumption, owner-occupied housing and income in kind, accounted for 22.2% of household net total income, and contributed to a reduction of 3.4 pp in the Gini coefficient and 3.3 pp in the at-risk-of poverty rate in 2014.

Figure 12: Equivalent total income and equivalent monetary income distribution indicators, Portugal, 2014

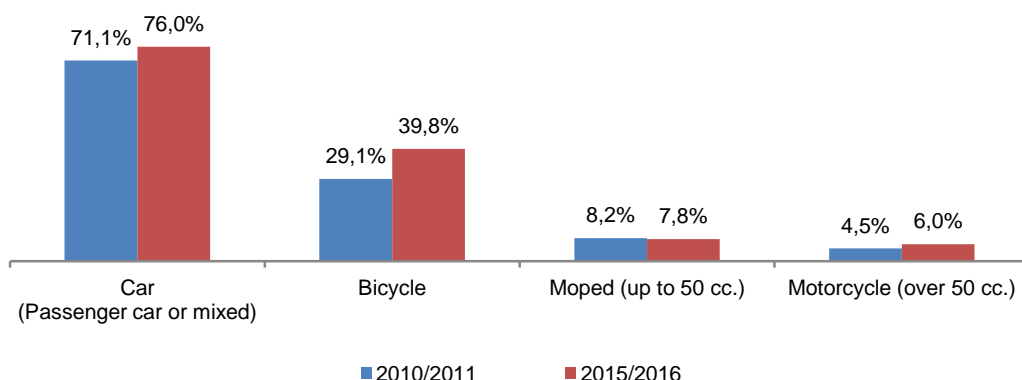|	Total income	Monetary income
Mean equivalent income	13.852 €	10.821 €
S80/S20	5.0	6.1
S90/S10	8.0	10.3
Gini coefficient	31.6%	35.0%
At-risk-of-poverty threshold (60% of the median national equivalent income)	6.951 €	5.070 €
At-risk-of-poverty rate	15.9%	19.1%

Source: Household Budget Survey 2015/2016

There was an increase in the number of households with a bicycle

HBS 2015/2016 also provides some information on household basic equipment, namely some transport equipment.

In 2015/2016, over75% of resident households in Portugal (76.0%) owe a car, an increase of 5 pp compared to 2010/2011. Almost 40% of households had a bicycle, a proportion significantly different vis-à-vis mopeds (7.8%) and motorcycles (6.0%). This last proportion was the one that increased the most (10.7 pp) compared to 2010/2011.

Figure 13: Households with access to some means of transport, Portugal, 2010/2011 e 2015/2016

Car (Passenger car or mixed): 71,1% / 76,0%
Bicycle: 29,1% / 39,8%
Moped (up to 50 cc.): 8,2% / 7,8%
Motorcycle (over 50 cc.): 4,5% / 6,0%

■ 2010/2011 ■ 2015/2016

Source: Household Budget Survey, 2010/2011, 2015/2016

By NUTS 2, Centro was the region with the highest proportions of households owing a car (78.2%) and also having a bicycle (50.7%). In the Região Autónoma da Madeira only 12.3% of households had a bicycle.

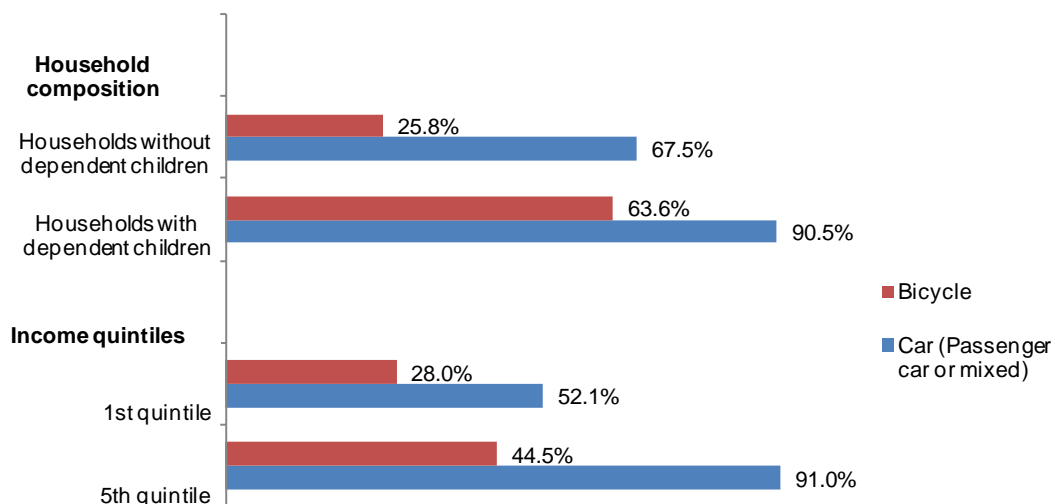**Figure 14: Households with access to some means of transport, NUTS 2, 2015/2016**

unit: %

	Portugal	Norte	Centro	A.M. Lisboa	Alentejo	Algarve	R.A. Açores	R.A. Madeira
Car (Passenger car or mixed)	**76.0**	76.6	78.2	74.7	71.6	77.1	75.5	72.7
Bicycle	**39.8**	37.2	50.7	36.6	42.9	38.0	29.7	12.3
Moped (up to 50 cc.)	**7.8**	9.4	12.3	2.7	7.8	9.0	5.1	1.9 §
Motorcycle (over 50 cc.)	**6.0**	5.5	7.7	5.0	5.7	6.0	7.3	7.8

Source: Household Budget Survey 2015/2016

Having a car was more frequent among households with dependent children (90.5%), and among those with higher incomes (91.0% of households in the 5th income quintile, i.e. 15 pp in plus than the national value).

Bicycles were more frequent among households with dependent children (63.6%), 23.8 pp above the country's percentage.

Figure 15: Households owing one mean of transport, by family type and income group, Portugal, 2015/2016

Household composition

Households without dependent children — 25.8% (Bicycle), 67.5% (Car)

Households with dependent children — 63.6% (Bicycle), 90.5% (Car)

Income quintiles

1st quintile — 28.0% (Bicycle), 52.1% (Car)

5th quintile — 44.5% (Bicycle), 91.0% (Car)

■ Bicycle
■ Car (Passenger car or mixed)

Source: Household Budget Survey 2015/2016

Technical NOTE

The 2015/2016 Household Budget Survey — HBS 2015/2016 — held between March 2015 and March 2016 is the most recent edition of the series of five-yearly surveys on household budgets started in the 1960s.

These surveys were held firstly for a periodical update of the expenditure structure of the country's resident population, which is instrumental to update the basket of goods and services used in the consumer price index. Data were also collected on disposable monetary and non-monetary household income and some basic comfort indicators.

For the HBS 2015/2016 a random stratified and multistage sample was selected, representative of households residing in non-collective dwellings in the Portuguese territory.

Sample sizing used stratification by NUTS 2 and criteria associated with relative a priori sampling errors, whose calculation was based on a set of data on income and monetary expenditure classes collected in 2010/2011. To comply with the pre-established sizing criteria, the national sample incorporated 17,790 dwellings, evenly distributed throughout the 26 fortnights composing the inquiry period.

The sample was randomly selected from the National Dwellings Register. The selection of the sample followed a stratified (NUTS II stratification) and multistage sampling design, in which the primary sampling units, consisting of cells of the INSPIRE grid of 1km^2, were selected with probability proportional to the number of dwellings of usual residence and the secondary sampling units (dwellings) were systematically selected in each primary sampling unit. Information is collected on all households and all individuals residing in the selected dwellings.

The overall response rate corresponds to the quotient between the number of interviews obtained and valid (11 398) and the sample size (17 790), that is 64%. Taking into account only the eligible and contacted households in the denominator (15 665), a specific response rate of 73% is obtained.

Expenditure on goods and services consumption was collected through a daily inventory and subsequent computer recording of all expenses of each selected household over the course of a fortnight. Other data, particularly on flashback expenditures (up to one year previous to the data collection period), income and comfort goods, were collected through a Computer Assisted Personal Interview (CAPI).

The data on expenditure of goods or services whose classification according to COICOP is associated with a fortnightly, monthly or quarterly reference period were annualized by applying a multiplicative factor that takes into account the number of periods in the year: 26 if the periodicity is fortnightly, 12 in the case of monthly periodicity, and 4 in the case of consumptions to which quarterly periodicity is associated.

Estimated results were obtained by applying household weightings. These made it possible to reproduce the conditions reported by respondents for all resident households in Portugal, according to similarity assumptions in terms of region, degree of urbanisation, family size, and characteristics of individual persons (sex, age group, education level) forming households. A factor was introduced in the calculation of these weightings for the correction of non-responses, and the results for the 2011 Census were the information sources used for the calibration variables were, as well as the SILC 2015 results for the structure of the education level classes.

The results presented are based on total expenditure (covering both monetary and non-monetary expenditure) and correspond to annual mean consumption expenditure per household.

Total expenditure is composed of the sum of monetary expenditure and non-monetary expenditure, with the monetary component referring to all purchases of goods and services in the country or abroad, for the household's immediate consumption, offer or storage, covering a retroactive reference period of up to the 12 previous months. Purchases are assessed by their total value regardless of how or when they were paid. Non-monetary expenditure covers self-consumption (food and other goods of own production and goods or services obtained without payment in an establishment run by the household), owner-occupied housing (self-assessment, by owner occupiers or rent-free tenants, of an hypothetical value for house rental), income in kind, namely wages.

Total Income is composed of the sum of Monetary Income and Non-Monetary Income. Net monetary income includes the income obtained by the households through each of its members, from employment (employed and self-employed), property and capital, pensions (national or from foreign), other social transfers (support to family, housing, unemployment, sickness and invalidity, education and training, social inclusion) and other private transfers (from private households and other transfers n.e.), from which were deducted income and social contribution taxes. Non-monetary income coincides with non-monetary expenditure. The data on income collected in HBS 2015/2016 refers to the year 2014.

Income per adult equivalent is obtained by dividing the income of each household by its size in terms of equivalent adults using the OECD Modified Equivalency Scale. The OECD Modified Equivalence Scale assigns, within each household, a weight of 1 to the first adult of an household; 0.5 for the remaining adults (14 and over) and 0.3 for each child.

Gini coefficient: indicator of inequality in the distribution of income that aims to synthesize in a single value the asymmetry of this distribution. It assumes values between 0 (when all individuals have equal income) and 100 (when all income is concentrated in a single individual).

Poverty risk rate: proportion of the population whose equivalent income, after social transfers, is below the poverty line.

The **relative poverty line** is the income threshold below which a family is considered to be at risk of poverty. This value was agreed by the European Commission as being equivalent to 60% of the median income per adult equivalent of each country.

In the context of this survey, individuals aged up to 16 years old, as well as those up to 24 if economically dependent (unemployed or inactive), are considered **dependent children**.