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SURVEY 2015:  
KEY FINDINGS ON THE  
EXPENDITURE PATTERNS  
OF HOUSEHOLDS  
IN MALTA AND GOZO**

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# THE HOUSEHOLD BUDGETARY SURVEY 2015: KEY FINDINGS ON THE EXPENDITURE PATTERNS OF HOUSEHOLDS IN MALTA AND GOZO<sup>1</sup>

Josianne Galea

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## Introduction

Governments, policy makers and researchers need to know how the living standards of households in a country are changing, how these differ among different population groups, and whether they indicate growing equality, or inequality, along the years. Generally, this type of exercise is carried out by analysing the distribution of income among different societal groupings. However, several economists support the use of household consumption as a proxy variable to determine inequality among different sectors, household types and compositions.

The Household Budgetary Survey (HBS) is a crucially important survey for policy makers across Europe. It is carried out by EU national statistical institutes approximately every five years. The latest Household Budgetary Survey was carried out in Malta in 2015, and was recently published by the National Statistics Office. The study revealed interesting consumption and expenditure patterns among different households. When analysing the statistics published in the HBS, one can arrive at various conclusions and identify a number of points that are helpful to understand how consumption and expenditure patterns of Maltese households have evolved. The scope of this article is to identify these patterns, analyse how these can be a good proxy to evaluate living standards in Malta, and how these diverge among households.

## Main findings

The Household Budgetary Survey 2015 revealed that in 2015 each household spent €2,771 more than in 2008, with the largest share of expenditure being recorded in the food and non-alcoholic beverages category (see Table 1). Households with dependent children spent more than households without dependent children in almost all expenditure categories, the only exception being in the alcoholic beverages and tobacco category. The largest discrepancy between these two types of households was recorded in the transport category, whereby households with dependent children spent €2,139 more than those without dependent children (see Table 2).

With regards to savings, HBS 2015 revealed that 'other households without dependent children' saved the most, with an average saving of €12,196 per household.<sup>2</sup> On the other hand, single-parent households with one or more dependent children recorded an average dissaving of €4,777 per household (see Chart 2). The persons who were mostly at-risk-of-poverty (ARP) were those living in households with dependent children, with 17.9% being at-risk-of-poverty. On the other hand, 15.4% of persons living in households without dependent children were at risk-of-poverty. When compared with results on poverty obtained from EU-SILC 2016, another household income survey carried out by the NSO, the two surveys show consistency. EU-SILC results showed that 69,920 persons (16.5%) were at-risk of poverty, while the HBS reported 70,656 persons (16.7%) (see Table 4).

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<sup>1</sup> Prepared by Ms Josianne Galea. Ms Galea is Head of Unit – Living Conditions and Culture Statistics at the National Statistics Office (NSO). Any errors, as well as the views expressed in this article, are the author's sole responsibility.

<sup>2</sup> Such households include at least three adults.

## Household Budgetary Survey 2015: methodology

Although it is not an EU-regulated survey, Eurostat regularly issues recommendations for best practices and for further harmonisation of the survey among Member States. The methodology used in the Maltese HBS is based on such recommendations. The results derived from HBS 2015 data were used for the first time in Malta in January 2017 with the publication of the Retail Price Index (RPI) news release, with the new weighting structure based on these results. A second important scope of the HBS is that this survey offers a unique potential to investigate socio-economic inequality, from a national perspective and comparatively in a European perspective. The HBS highlights the main differences and similarities between different household types and compositions. It also examines the relationship between expenditure and income.

Focusing on the expenditure behaviour of private households residing in a country, the HBS enables the analysis of changes in the trends and level of households' consumption expenditure according to their main social, economic and regional characteristics. These expenditure patterns are then used to calculate the weighting structures for the RPI. In this way the price indices, which are crucial for the calculation of the national inflation rate, are continuously being updated with realistic and updated expenditure on goods and services.

### Data collection method

A sample of households from Malta and Gozo was selected to participate in the HBS. Out of a total population of 164,800 households, a systematic random sample was taken, from which 6,325 households were selected to participate. Data collection was carried out over a one-year period, from April 2015 until April 2016.

In agreement with Eurostat, the survey is based on the harmonised international classification of expenditure to ensure international comparability.<sup>3</sup> This classification, which is made up of 12 major categories, is also used as the coding system for the Harmonised Index of Consumer Prices.

The households sampled list all their expenditures over a two-week period in a diary. The expenditures incurred by resident households must include all purchased goods and services exclusively devoted to household consumption (self-consumption, imputed rentals and presents are included). Every other expenditure for a different purpose, such as payments of fees and business expenditures, is excluded from the data collection. For the purpose of this exercise it is important to note that any goods purchased through bank loans or hire purchase arrangements were recorded in full with total fee incurred by agreement by the household rather than the actual price. Furthermore, the following households' expenditure categories were excluded when computing the household expenditure:

- Business expenses
- Additions to savings, amounts invested (including purchasing of property, which for the purposes of HBS was considered an investment) or loaned
- Gambling losses

<sup>3</sup> See *Classification of Individual Consumption by Purpose – COICOP*, which is accessible at [https://nso.gov.mt/metadata/classifications/COICOP\\_1999.pdf](https://nso.gov.mt/metadata/classifications/COICOP_1999.pdf)

- Goods or services produced as outputs of incorporated enterprises owned by households and retained for consumption by members of the household
- Retail value of home-grown produce (i.e. from own garden or farm) consumed by the household
- Subsistence expenditure incurred while abroad
- Repayments of loans (e.g. mortgage capital repayments)
- Fines
- Trade union, club and other memberships
- Licences
- Donations to non-profit institutions
- Life insurance services.

The households were also provided with a questionnaire in which they were requested to record any spending considered as 'infrequent purchases' over the preceding months. The questionnaire also asked for other aspects pertaining to the household members, including household composition, participation in labour force, housing conditions, mobility, furnishings and household equipment, information on socio-economic status and demography.

### Expenditure levels and compositions: a comparison between HBS 2008 and HBS 2015

HBS 2015 showed that households in Malta and Gozo spent almost €1 billion more when compared with 2008 (see Table 1). In 2015 total expenditure was €3.7 billion, while €2.8 billion were spent in 2008. On average, each household spent €2,771 more in 2015, when compared with 2008. Overall, the largest increase was €151 million on transport, followed by miscellaneous goods and services, and restaurants and hotels, with increases of €143 million and €110 million, respectively.

**Table 1**  
**TOTAL AND AVERAGE EXPENDITURE BY YEAR AND COICOP**

Main Item	2008				2015			
	Margin of error (%)	Average (€)	Sum (€)	% share	Margin of error (%)	Average (€)	Sum (€)	% share
Food and non-alcoholic beverages	1.6	4,399	623,926,200	22.5	1.8	4,417	727,930,138	19.8
Alcoholic beverages and tobacco	5.3	480	68,136,000	2.5	5.5	525	86,553,824	2.4
Clothing and footwear	5.5	1,397	198,146,200	7.1	6.1	1,768	291,435,845	7.9
Housing, water, electricity, gas and other fuels	7.4	1,637	232,223,800	8.4	6.0	1,875	309,012,125	8.4
Furnishing, household equipment and maintenance of the house	8.3	1,735	246,140,400	8.9	6.2	1,655	272,789,682	7.4
Health	8.6	1,250	177,236,700	6.4	9.8	1,252	206,372,617	5.6
Transport	5.3	2,703	383,399,100	13.8	6.0	3,241	534,220,959	14.5
Communication	2.6	788	111,807,700	4	3.4	970	159,831,759	4.3
Recreation and culture	6.7	1,658	235,238,600	8.5	16.2	1,739	286,624,037	7.8
Education	10.8	342	48,579,900	1.7	11.0	624	102,826,341	2.8
Restaurants and hotels	4.8	1,381	195,925,100	7.1	4.7	1,857	306,052,672	8.3
Miscellaneous goods and services	4.7	1,805	256,042,200	9.2	4.9	2,423	399,331,800	10.8
<b>Total</b>	<b>2.4</b>	<b>19,575</b>	<b>2,776,801,900</b>	<b>100</b>	<b>2.9</b>	<b>22,346</b>	<b>3,682,981,799</b>	<b>100</b>

Source: NSO.

The largest share of expenditure was recorded in the food and non-alcoholic beverages category, both in 2015 and in 2008. However, in 2015, 19.8% of households' outlay was on this category, dropping almost three percentage points from 2008. As in 2008, the second highest share of expenditure was on transport. However, this category recorded a slight increase in its percentage share and an annual average increase of €538 per household, when compared with the €18 increase in food from 2008 to 2015.

Although at 8.4%, the percentage share of expenditure on housing and energy remained the same as that in 2008, this category was the sixth largest expenditure share of the households in 2008, while in 2015 it was the fourth largest one. In 2015, on average, a household spent €238 more on this category when compared with 2008. With regard to restaurants and hotels, households in Malta and Gozo spent on average €476 more than in 2008. In 2015, this category had the fifth largest expenditure share, up from eighth in 2008. It is also interesting to note the annual average expenditure increase per household on clothing and footwear (€371) and education (€282).

### Expenditure and consumption by household type: HBS 2015

On the whole, households with dependent children spent more on almost every item when compared with households without dependent children (see Table 2). On average, the categories that recorded the largest discrepancies between the two household types were transport (€2,139), food and non-alcoholic beverages (€1,347), recreation and culture (€1,219), and education (€1,218). On average, in total, households with dependent children spent over €10,000 more annually when compared with households without dependent children.

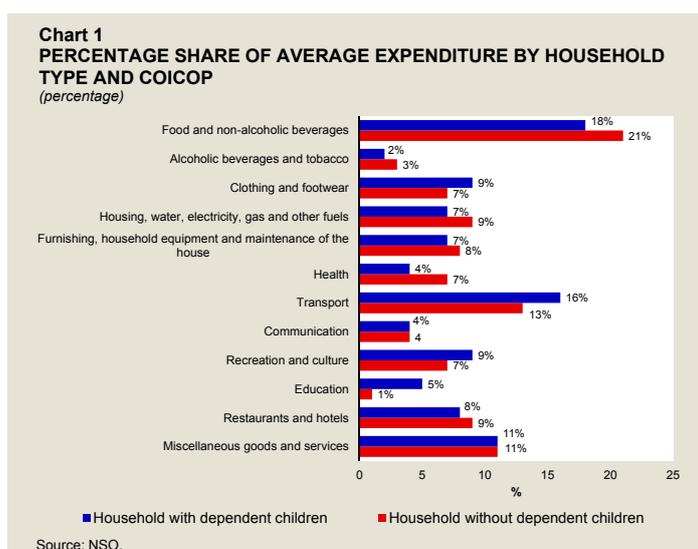
When analysing the percentage share of the average expenditure, one notes that both household types spent most on food and non-alcoholic beverages, followed by transport (see

**Table 2**  
**TOTAL AND AVERAGE EXPENDITURE BY HOUSEHOLD TYPE AND COICOP**

Main Item	Household without dependent children	Household without dependent children	Household with dependent children	Household with dependent children
	Sum (€)	Average (€)	Sum (€)	Average (€)
Food and non-alcoholic beverages	423,068,956	3,946	304,861,182	5,293
Alcoholic beverages and tobacco	56,455,494	527	30,098,331	523
Clothing and footwear	144,196,429	1,345	147,239,416	2,556
Housing, water, electricity, gas and other fuels	190,487,556	1,777	118,524,569	2,058
Furnishing, household equipment and maintenance of the house	155,109,570	1,447	117,680,112	2,043
Health	131,958,057	1,231	74,414,559	1,292
Transport	260,954,671	2,434	263,390,670	4,573
Communication	89,272,264	833	70,559,495	1,225
Recreation and culture	147,175,652	1,373	149,324,003	2,592
Education	21,264,190	198	81,562,151	1,416
Restaurants and hotels	172,187,632	1,606	133,865,041	2,324
Miscellaneous goods and services	216,750,398	2,022	182,581,402	3,170
<b>Total</b>	<b>2,008,880,869</b>	<b>18,737</b>	<b>1,674,100,930</b>	<b>29,064</b>

Source: NSO.

Chart 1). However, households without dependent children spent a higher share of their expenditure on food and non-alcoholic beverages, furnishing, household equipment and maintenance of the house and housing, water, electricity, gas, and other fuels, restaurants and hotels, and alcoholic beverages and tobacco. On the other hand, households with dependent children as a share spent more on education, transport, recreation and culture, and clothing and footwear.



### Income and savings by household composition: HBS 2015

As expected, households with a high net income were the ones with the higher average expenditure. HBS 2015 showed that on average, households with dependent children earned more and spent more than households without dependent children (see Table 3).

When considering the former, households with at least three adults and one or more dependent children earned the most and spent the most, while single-parent households with one or more dependent children earned the least and spent the least. HBS 2015 showed that for two-adult households, the greater the number of children in the household, the lower the average net income and the greater the average expenditure.

**Table 3**

#### HOUSEHOLD NET INCOME AND EXPENDITURE BY HOUSEHOLD COMPOSITION

Household composition	Average net income	Average expenditure	Total net income	Total expenditure
	€	€	€	€
<b>Household without dependent children, of which:</b>	<b>23,124</b>	<b>18,737</b>	<b>2,479,238,936</b>	<b>2,008,880,869</b>
One person household, under 65 years	14,942	13,495	282,665,994	255,288,184
One person household, 65 years and over	11,427	9,697	243,918,645	206,987,902
2 adults, no dependent children, both under 65 years	27,540	24,283	515,972,755	454,961,921
2 adults, no dependent children, at least one adult 65 years or more	18,871	16,416	470,788,150	409,543,025
Other households without dependent children	41,510	29,314	965,893,392	682,099,837
<b>Household with dependent children, of which:</b>	<b>33,097</b>	<b>29,064</b>	<b>1,906,409,467</b>	<b>1,674,100,930</b>
Single parent household, one or more dependent children	15,492	20,269	105,910,531	138,574,533
2 adults, one dependent child	33,516	28,506	635,106,088	540,164,058
2 adults, two dependent children	31,964	28,652	510,755,606	457,841,728
2 adults, three or more dependent children	30,789	30,635	123,469,359	122,854,617
Other households with one or more dependent children	44,915	35,064	531,167,882	414,665,994
<b>Total</b>	<b>26,610</b>	<b>22,346</b>	<b>4,385,648,402</b>	<b>3,682,981,799</b>

Source: NSO.

As regards households without dependent children, in 2015, one-person households where the householder was aged 65 and over earned the least and spent the least, while the households with at least three adults earned the most and spent the most.

In order to obtain a proxy of the amount of annual savings, the difference between the average net income and the average expenditure from HBS 2015 was calculated (see Chart 2).

However, it is important to note

that to calculate this figure a number of assumptions were used, that may limit the quality of the indicator provided. The following are the assumptions used in this computation:

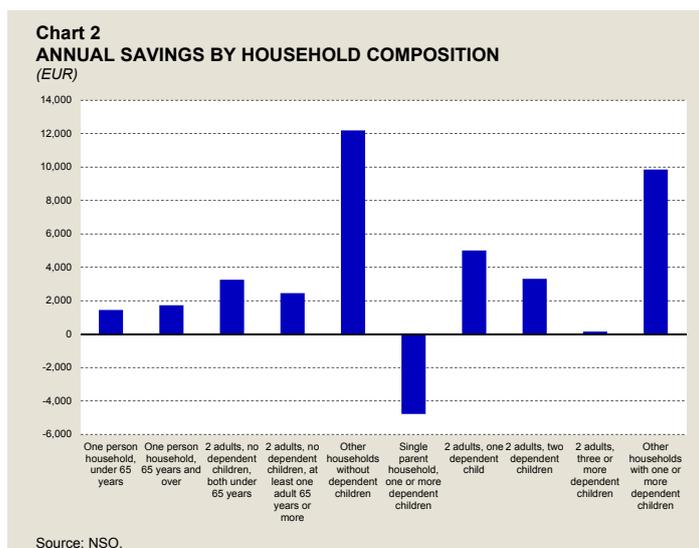
- Disposable income computation did not include any non-regular income such as inheritance for the year 2015;
- Social benefits in kind and any other benefits in kind were not included in the computation of disposable income;
- Purchased goods values were included in full in the expenditure computation, even if these were paid with more than one transaction;
- A number of expenditure components such as fines, donations etc were excluded when calculating expenditure.

The results obtained from the savings proxy show that the only household type that had negative savings is the single-parent household with one or more dependent children, with an average annual dissaving of €4,777. On the other hand, households with at least three adults but without dependent children had the largest amount of savings, while households with two adults and three or more dependent children, had the lowest amount of savings with an annual average of €154.

### The relation between poverty and expenditure patterns from the Household Budgetary Survey 2015

Apart from examining and analysing the expenditure patterns, results obtained from the HBS survey enable one to analyse the living conditions in a country. This is done by observing relative differences among different levels of household income. Based on household disposable income variable, one of the most important indicators that can be calculated from HBS data is the ARP rate. This indicator was calculated from HBS data; however, in this case the same methodology which is applied for the ARP calculation from EU-SILC was used. The EU-SILC methodology is regulated under the European Regulation (EU) NO. 1177/2003.

According to EU-SILC methodology, the ARP rate calculation adhered to the following methodology: the at-risk-of-poverty threshold (ARPT) which is defined as 60% of the median of the net equivalised income (NEI), was calculated from HBS data, after which the ARP was calculated.

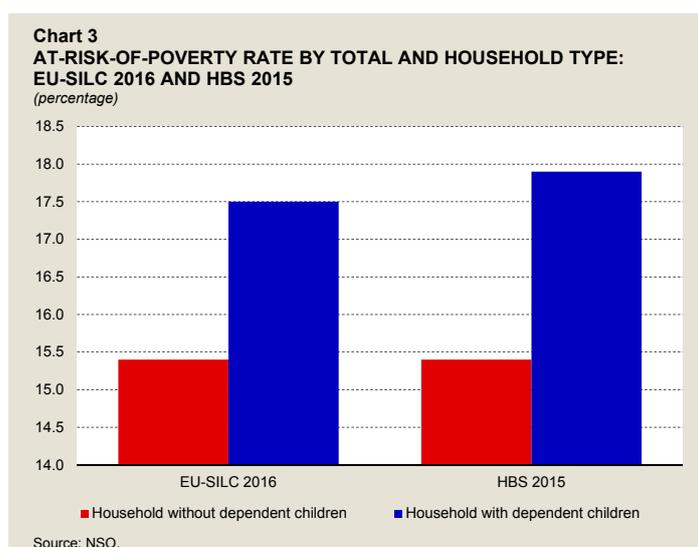


This rate corresponds to the percentage of respondents whose NEI falls below this threshold and eventually are defined to be at-risk-of-poverty. For the purpose of this article the ARP results for the HBS were compared with the results of EU-SILC 2016 (income reference year 2015) (see Chart 3).

### At-risk-of-Poverty rates: A comparison with EU-SILC

When calculating the ARP rate from HBS 2015, it was estimated that 16.7% of the surveyed population were at-risk-of-poverty;

equivalent to 70,656 persons (see Table 4). Persons living in households with dependent children were more likely to be at-risk-of-poverty (17.9%) than those living in households without dependent children (15.4%). When comparing the ARP rate calculated from both HBS 2015 and EU-SILC 2016, with both surveys based on the 2015 income reference year, the similarity in the results is evident. The overall ARP rate for EU-SILC was estimated to be 16.5%, which was equivalent to 69,920 persons (see Table 4). As one can notice, when considering that both surveys have different data collection and data analysis methodologies, both surveys were carried out independently from one another, and income is a secondary variable for HBS, the differences are minimal.



Looking at Table 4, one can notice the positive relationship between the number of dependent children and its effect on monetary poverty and, thus on the APR rate. Looking at the results from

**Table 4**  
**AT-RISK-OF-POVERTY RATE (ARP) BY HOUSEHOLD COMPOSITION: SILC 2016 AND HBS 2015**

Household composition	EU-SILC 2016			HBS 2015		
	Margin of error (%)	% of persons that are at risk of poverty	Number of persons	Margin of error (%)	% of persons that are at risk of poverty	Number of persons
<b>Household without dependent children, of which:</b>	<b>1.8</b>	<b>15.4</b>	<b>32,028</b>	<b>2</b>	<b>15.4</b>	<b>32,007</b>
One person household, under 65 years	5.3	23	4,277	6	25.2	4,761
One person household, 65 years and over	4.4	25.1	5,492	5.5	23.6	5,042
Two adults, no dependent children, both under 65 years	4.4	12.4	5,038	4.9	16.2	6,081
Two adults, no dependent children, at least one adult 65 years or more	3.5	26.5	12,774	3.8	26.4	13,193
Other households without dependent children	3.7	5.7	4,446	3.9	3.6	2,931
<b>Household with dependent children, of which:</b>	<b>2.7</b>	<b>17.5</b>	<b>37,893</b>	<b>2.6</b>	<b>17.9</b>	<b>38,649</b>
Single parent household, one or more dependent children	9.5	41.1	6,659	9.7	47.1	7,854
Two adults, one dependent child	5.2	10.7	5,728	5	11.8	6,732
Two adults, two dependent children	4.9	16.8	11,062	4.6	18.5	11,856
Two adults, three or more dependent children	9.3	35.7	7,081	9.1	43.2	9,518
Other households with one or more dependent children	5.6	12	7,362	5.4	4.8	2,688
<b>Total</b>	<b>1.5</b>	<b>16.5</b>	<b>69,920</b>	<b>1.6</b>	<b>16.7</b>	<b>70,656</b>

Source: NSO.

the HBS, it is very clear that, for households with dependent children, single-parent households were those most at-risk-of-poverty (47.1%). In addition, the same survey shows that almost 12% of the households with two adults and one dependent child were at-risk-of-poverty. This increases to almost 19% for households with two adults and two dependent children and to 43% for households with two adults and two or more dependent children.

When considering households without dependent children, the household compositions that were the most at-risk-of-poverty were the two-adult households with at least one person aged 65 years and over, making up 26.4% of the sampled population. When comparing the results of the ARP rate calculated from EU-SILC 2016 and from the Household Budgetary Survey 2015, which are both based on the 2015 income reference year, one can notice that both surveys show similar results. Both surveys show consistent ARP rates for both types of household compositions. The surveys show that households with dependent children were at a higher risk of poverty than those without dependent children. HBS 2015 showed that 17.9% or 38,649 persons were at-risk-of-poverty. This figure was just 756 persons more than that obtained from EU-SILC which showed that 17.5% of the persons living in households with dependent children were at-risk-of-poverty.

On the other hand the results obtained from both surveys showed that 15.4% of households without dependent children were at-risk-of-poverty. This is translated to 32,007 persons, which is just 21 persons less than the results obtained in EU-SILC.

### At-risk-of-poverty and expenditure patterns: HBS 2015

Comparing expenditure patterns of households that are at-risk-of-poverty with those that are not, one can notice that, on average, on an annual basis, the latter spent €9,377 more (see Table 5). The most significant differences were in transport (+€1,862), miscellaneous goods and services (+€1,370) and restaurants and hotels (+€1,172). This confirms the hypothesis that households which are not at-risk-of-poverty can spend more on both basic needs such as transport, and on luxuries such as restaurants and hotels. On the other hand, it is interesting to note that the only category where both types of households almost had the same average expenditure was that of water and electricity, whereby households that are not at-risk-of-poverty spent just €83 more than those which were at-risk-of-poverty. Further examining percentage shares of expenditure by the

**Table 5**  
**EXPENDITURE PATTERNS BY AT-RISK-OF-POVERTY**

Main Item	Not-At-Risk-of-Poverty			At-Risk-of-Poverty		
	Total expenditure	Average expenditure	% share expenditure	Total expenditure	Average expenditure	% share expenditure
Food and non-alcoholic beverages	€612,256,130	€4,570	19.0	€115,674,008	€3,749	25.5
Alcoholic beverages and tobacco	€73,859,115	€551	2.3	€12,694,709	€411	2.8
Clothing and footwear	€262,063,032	€1,956	8.1	€29,372,813	€952	6.5
Housing, water, electricity, gas and other	€253,265,865	€1,891	7.8	€55,746,260	€1,807	12.3
Furnishing, household equipment and maintenance	€242,483,230	€1,810	7.5	€30,306,452	€982	6.7
Health	€178,742,081	€1,334	5.5	€27,630,535	€896	6.1
Transport	€472,871,143	€3,530	14.6	€51,474,198	€1,668	11.3
Communication	€137,919,072	€1,030	4.3	€21,912,688	€710	4.8
Recreation and culture	€267,432,843	€1,996	8.3	€29,066,812	€942	6.4
Education	€90,654,190	€677	2.8	€12,172,151	€395	2.7
Restaurants and hotels	€278,160,554	€2,076	8.6	€27,892,118	€904	6.1
Miscellaneous goods and services	€358,942,030	€2,679	11.1	€40,389,770	€1,309	8.9
<b>Total</b>	<b>€3,228,649,286</b>	<b>€24,102</b>	<b>100.0</b>	<b>€454,332,513</b>	<b>€14,725</b>	<b>100.0</b>

Source: NSO.

two types of households one notes a 25% expenditure share on food and non-alcoholic beverages and a 12% share on housing costs for households which were at-risk-of-poverty. Households that were not at-risk-of-poverty spent 19% and 8% of their expenditure on these categories, respectively. This reconfirms the conclusion that households which are at-risk-of-poverty spend a significant amount of their expenditure on basic needs and edible goods.

The negative savings of households which are at-risk-of-poverty, as presented in Table 6, are evidence to the much larger weight that dependent children have on the financial situation of households which are at-risk-of-poverty when compared with those that are not at risk. Although both types of households that are at-risk-of-poverty dissave, a household with dependent children has a dissaving that is €2,255 more than households with no dependent children. On the contrary, irrespective of their composition, households which are not at-risk-of-poverty have very similar savings patterns with a difference of just €33.

When one probes into expenditure patterns, Table 6 confirms that the expenditure on housing costs, which includes water and electricity, is the only category which is almost the same for all types of households. On the other hand, as previously stated, a major difference can be noticed in the transport category. In this case the expenditure difference on transport between a household with no dependent children, which is not at-risk-of-poverty, and a household with the same composition but which is at-risk-of-poverty was of €1,662. The disparity increases to €2,170 for households that are at-risk-of-poverty and have dependent children. Significant differences were also recorded in the expenditure patterns on recreation and hotels.

**Table 6**  
**DISPOSABLE INCOME, EXPENDITURE PATTERNS AND SAVINGS BY HOUSEHOLD TYPES AND AT RISK OF POVERTY RATE**

	Not At-Risk-of-Poverty		At-Risk-of-Poverty	
	Household without dependent children Average (€)	Household with dependent children Average (€)	Household without dependent children Average (€)	Household with dependent children Average (€)
<b>Total disposable household income</b>	<b>€26,546</b>	<b>€37,528</b>	<b>€8,545</b>	<b>€13,167</b>
Food and non-alcoholic beverages	€4,077	€5,480	€3,388	€4,452
Alcoholic beverages and tobacco	€554	€547	€410	€414
Clothing and footwear	€1,504	€2,790	€668	€1,505
Housing, water, electricity, gas and other	€1,787	€2,082	€1,733	€1,950
Furnishing, household equipment and maintenance	€1,577	€2,240	€893	€1,156
Health	€1,300	€1,397	€934	€820
Transport	€2,750	€4,967	€1,088	€2,797
Communication	€890	€1,286	€588	€949
Recreation and culture	€1,517	€2,879	€757	€1,302
Education	€240	€1,482	€21	€1,121
Restaurants and hotels	€1,786	€2,611	€837	€1,033
Miscellaneous goods and services	€2,244	€3,481	€1,073	€1,768
<b>Total average expenditure</b>	<b>€20,227</b>	<b>€31,242</b>	<b>€12,390</b>	<b>€19,267</b>
<b>Savings</b>	<b>€6,319</b>	<b>€6,286</b>	<b>-€3,845</b>	<b>-€6,100</b>

Source: NSO.