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# The diversity of the economic situation of households selected EU countries

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**Abstract**: The persistence of regional variation is associated with the accumulation and interaction for economic, political and cultural. According to this theory, areas of high economic growth are developing faster and faster, while the poor drown in stagnation. In the socio-economic development of every country one of the indicators of the economic situation is the income level of residents. This income is designated for expenditures (for consumer goods and services and other expenses) and an increase in savings (unrealized expenses). Income diversity of European households determine different disparities related primarily to the level of living of the population.

**Keywords:** households, disposable income, savings, loans and liabilities.



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#### 1. Introduction

In the classifications of consumption factors there are different types of criteria underlying extract [1]. In shaping the structure of consumption as the main determinant of economic factors play. They are instrumental in shaping consumption models [9], but should not be treated as the only factor to change consumer behavior. Households there are close relationships between income, consumption and savings [6]. In principle, consumption and savings are financed by income. And so the primary goal in the household is not only to meet current consumption needs, but also to meet the needs in the long term [3, 4].

The aim of the presented study is the assessment of the spatial variation of the financial resources of households selected EU countries in 2012. Included in this study features are: revenue at the disposal of the gross savings, loans and liabilities and net financial assets of households.

Secondary data were used for the analysis of collected and published in the Eurostat database. These studies were designed to obtain an answer to the question what was the level of household characteristics analysed selected EU countries (in 2012) and the determination of the distance between Member States as regards the level of savings and debt. Statistical analysis of diversification has been carried out variables tested in terms of one-and multidimensional.

#### 2. Methods, literature overview

The aim of the presented study is the assessment of the spatial variation of the financial resources of households selected EU countries in 2012. Included in this study features are: revenue at the disposal of the gross savings, loans and liabilities and net financial assets of households. Secondary data were used for the analysis of collected and published in the Eurostat database. These studies were designed to obtain an answer to the question what was the level of household characteristics analysed selected EU countries (in 2012) and the determination of the distance between Member States as regards the level of savings and debt. Statistical analysis of diversification has been carried out variables tested in terms of one-and multidimensional.

Deterministic imputation methods based on measurement of similarity can be used as far as the similarities described by Euclidean distance or Mahalanobis distance [7] at work have been used in an attempt to observe the Mahalanobis dipping measure [2]. Measure values dipping belong to the interval from 0 to 1. Member States, which correspond to the higher value of this measure are located more centrally in the data set. It can be assumed that the analyzed features take in these countries typical values. A measure of the dipping of observation in the sample allows you to designate similar States due to numerical values of variables. The State, which corresponds to the highest measurement value dipping is the most centrally in the data set.

An important task of the household is, therefore, to take a decision and to establish a hierarchy of needs and order of their meeting, depending on the multiple determinants that affect both the need for, and on the level and structure of consumption [9].

#### 3. Results

Used later in the analysis of value characteristics (level of gross disposable income, savings, loans and liabilities and net financial assets) in the households of the individual Member States of the EU are presented in tabl. 1.

Table 1. Values in millions of euros (gross saving, gross disposable income, the amount of loans and liabilities and financial assets) of households					
Country	Gross savings <sup>1</sup>	Gross disposable income <sup>2</sup>	Loans and liabilities <sup>3</sup>	Net financial assets <sup>4</sup>	
Belgium	35768,20	234666,20	209898,81	816389,66	
Czech Republic	230346,00	2174514,00	1245943,00	2646609,00	
Denmark	63378,00	959017,00	2545066,00	2229143,00	
Germany	301800,00	1835670,00	1551712,00	3372819,00	
Estonia	422,96	9336,60	7512,60	6321,50	
Ireland	8846,74	87144,19	172331,00	139914,00	
Spain	70666,00	681074,00	:	877844,87	
France	210086,15	1382363,00	837196,09	2832774,00	
Italy	125317,00	1078992,62	1151948,00	2786692,00	
Cyprus	1772,00	12959,40	710318,00	19790,37	
Lithuania	641,68	72364,18	27249,70	54073,86	
Luxembourg	3360,50	17046,70	24359,31	31702,09	
Hungary	1233797,00	16606167,00	8965786,00	18922067,00	
Netherlands	32891,00	306185,00	766506,00	1150632,00	
Austria	24419,80	193439,50	167204,31	360919,40	
Poland	49080,00	1029442,00	554673,00	806977,00	
Portugal	14825,93	123318,80	150946,46	223233,94	
Slovenia	2720,85	22823,92	10740,05	25346,97	
Finland	10415,00	118961,00	125887,00	100173,00	
Sweden	297781,00	2016029,00	2967962,00	5228013,00	
United Kingdom	80168,00	1112873,00	1467970,00	3004054,00	
Norway	183102,00	1359683,00	2451956,00	424571,00	

Source: own calculations

In order to analyze the spatial variation in classic statistical measure used variables tested (Table. 2).

Table 2. Numeric characteristics of variables						
Variable	Gross savings	Gross disposable income	Loans and liabilities	Net financial assets		
The Average	135528	1428821	1186967	2093639		
The Median	42424,1	493629,5	632495,5	811683,3		
The standard deviation of the	264177	3463063	1956340	4029150		
Coefficient of variation	194%	242%	164%	192%		
Skewness	3,728516	4,377047	3,267425	3,777899		

Source: own calculations

<sup>1</sup> Part of disposable income are not intended for consumption. If the savings are positive income is used to purchase assets to repay liabilities. If savings are negative-some assets are liquidated or certain obligations is growing.

<sup>2</sup> The income available to the household sector, gross is obtained as a result of correcting gross primary income by: taxes on income and property, contributions to compulsory social security, social insurance benefits, social assistance benefits and transfers.

<sup>3</sup> Arose from the past events of the obligation to forward in the future to another entity in the form of goods, services, money or other economic benefits.

<sup>4</sup> The total value of the financial assets of the household less the value of its total debt

All of the characteristics analysed are characterized by high volatility. A variable indicating the greatest differentiation is disposable income of households, for which the standard deviation of almost 2.5 times exceeds the value of the average. Positive values of skewness indicates a strong asymmetry of the positive.

In order to obtain an answer, in which Member States analysed the characteristics of typical values take calculated measures dipping Mahalanobis (Table 3).

	or the Mahalanobis dipping characteristics Mahalanobis distance for the variables					
Country	for all variables	gross savings gross disposable income	net financial assets loans and liabilities			
Belgium	0,734653	0,398895	0,713368			
Czech Republic	1,296497	0,779299	0,351678			
Denmark	3,015958	0,722740	2,137248			
Germany	2,736541	2,607927	0,489380			
Estonia	0,850042	0,690127	0,628611			
Ireland	0,724244	0,636695	0,519316			
Spain	1,246012	0,275741	1,075134			
France	1,950768	1,496580	1,154444			
Italy	1,333607	0,322155	0,610250			
Cyprus	1,085625	0,672968	0,945365			
Lithuania	0,891566	0,751555	0,621078			
Luxembourg	0,819756	0,652860	0,618637			
Hungary	4,443389	4,438934	4,176703			
Netherlands	0,844638	0,483171	0,235329			
Austria	0,681007	0,506131	0,562549			
Poland	1,189792	1,091216	0,325532			
Portugal	0,708119	0,581283	0,544531			
Slovenia	0,842431	0,668021	0,629993			
Finland	0,791882	0,643666	0,546565			
Sweden	3,120299	2,275857	0,953279			
United Kingdom	2,158619	0,615355	0,322243			
Norway	3,949050	1,011741	3,382996			

Source: own calculations

Measure for Member States Norway and Sweden dipping reached the lowest values. In Austria, Portugal and Ireland reported the highest level of all the features in the year 2012, while the lowest level occurred in the case of Hungary. These countries can be considered the lowest and highest values of variables. Mahalanobis distance low values for the variables of gross savings gross disposable income has been observed for Spain and Italy. The highest measurement value dipping in 2012 respectively correspond to the countries: Sweden and Germany.

Measure dipping posted in table 4 have helped to make the classification of selected European countries due to the corresponding value of the measurement. For the purposes of analysis defined three measurement value class members have been summarized and dipping into particular classes (tabl. 4).

Table 4. Th	Fable 4. The classification of the measure values dipping				
Class	Dipping measure value	Country			
(A)	< 0.00; 0.22)	Hungary, Norway			
(B)	< 0.22; .44)	Sweden ,Denmark, Germany, United Kingdom, France, Italy, Czech Republic			
(C)	< 0,44; 0.66 >	Spain, Poland, Cyprus, Lithuania, Estonia, Netherlands, Slovenia, Luxembourg, Finland, Belgium, Ireland, Portugal, Austria			

Source: own calculations

#### 4. Discussion

The economic situation of households is the subject of research by many authors. Analyses are related to the structure survey indicators related to the standard of living and economic prosperity in the regions. The results are part of the study. The next step will be to conduct a statistical analysis of other macroeconomic indicators.

## **5.** Conclusion

The calculated values of the measurements have allowed the EU selected order dipping due to the level of the analyzed features. This made it possible to extract groups of Member States, with a similar economic situation of households in 2012.

European countries are characterized by wide variety in terms of the economic situation of households. These differences may result from the level of economic development (e.g. the level of GDP, the public debt) and with different economic structures.

In conclusion, it can be concluded that in terms of the level of financial resources are the State in which the policy should tend towards aligning their chances to better meet the needs of the residents. The phenomenon of such delamination is typical for developed countries economically, but you should hope that in the future this should be reduced.

## **Appendix A. Supplementary material**

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.14254/2223-3822.2016.14-1.5

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