HELLENIC REPUBLIC

HELLENIC STATISTICAL AUTHORITY

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P R E S S   R E L E A S E

## STATISTICS ON INCOME AND LIVING CONDITIONS 2008
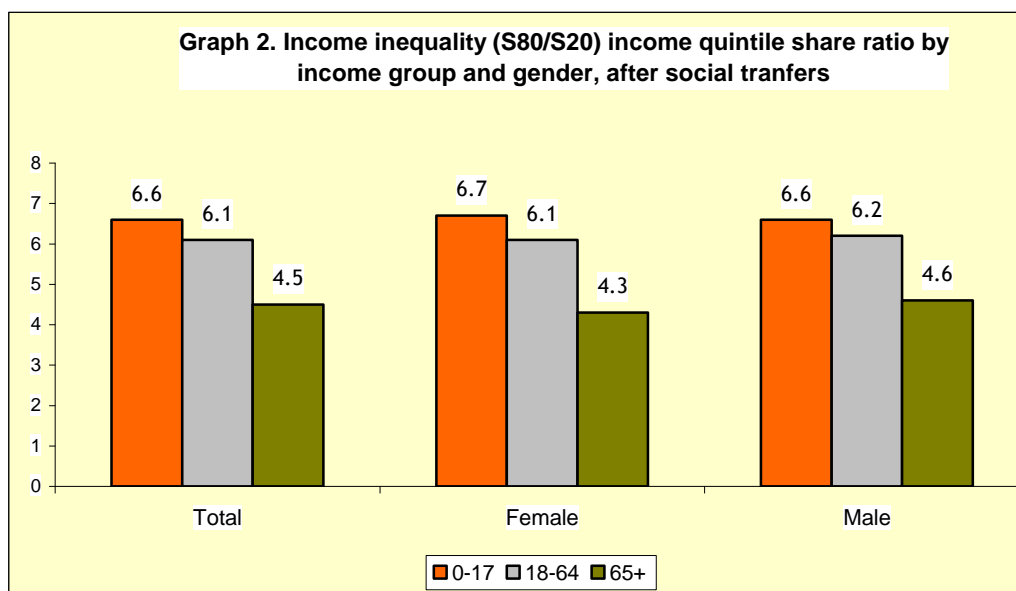
INCOME INEQUALITY

From the Hellenic Statistical Authority (EL.STAT.) is announced data on inequality in income distribution, derived from the available results of the Survey of Income and Living Conditions of Households, year 2008 (European Union - Statistics on Income and Living Conditions) with reference income period the previous calendar year (2007). The inequality is mainly reflected by the indicators S80/S20 (income distribution S80/S20 income quintile share ratio), coefficient Gini (income inequality distribution) and gender pay gap. This survey is the basic source for comparable statistics on income distribution and social exclusion at European level.

A. Inequality of income distribution S80/S20 income quintile share ratio

The 'S80/S20 income quintile share ratio' is the ratio of the sum of equivalised disposable income received by the 20% of the country's population with the highest equivalised disposable income (top inter-quintile interval) to that received by the 20% of the country's population with the lowest equivalised disposable income (lowest inter-quintile interval), although it is easily understandable by the general population by extreme values of the income distribution, is the richest and poorest population.

Graph 1: Inequality of income distribution (S80/S20)

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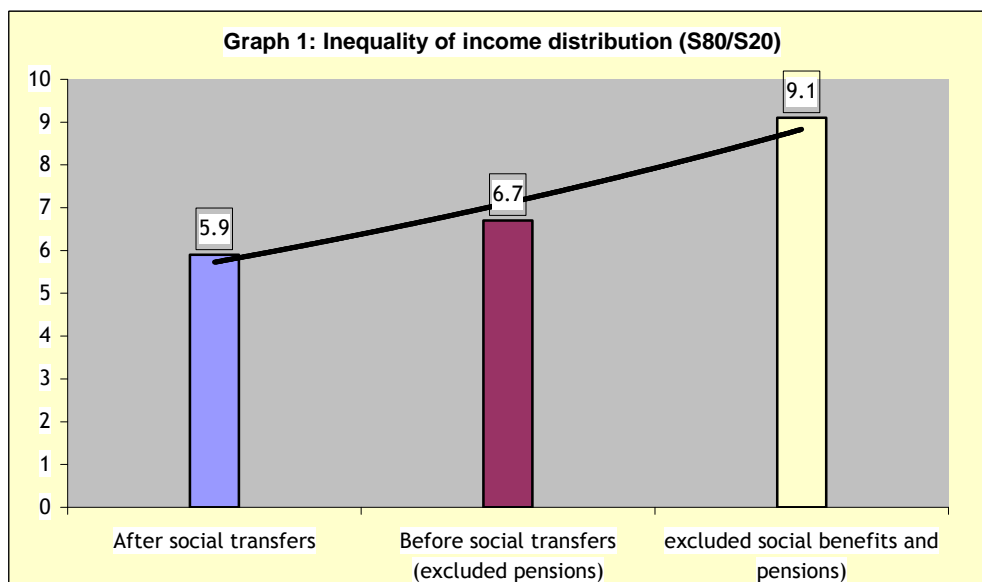
- The 'S80/S20 income quintile share ratio' is risen in 5.9, this means that the share of the income of the wealthiest 20% of the population is 5.9 times higher than the income of the poorest 20% of the population (Graph 1, Table 1a).
- The income inequality that was from 7.6 in 1994, formed in 2008 to 5.9 by reducing the total inequality by 1.7 times.
- Income inequality, where the social benefits included in disposable income, is increased by 0.8, and while not including pensions and social benefits to 9.1, is increased by 3.2 times (Graph 1, Table 1a).

Graph 2. Income inequality (S80/S20) income quintile share ratio by income group and gender, after social tranfers

| Total	Female	Male
0-17: 6.6, 18-64: 6.1, 65+: 4.5	0-17: 6.7, 18-64: 6.1, 65+: 4.3	0-17: 6.6, 18-64: 6.2, 65+: 4.6

☐ 0-17 ☐ 18-64 ☐ 65+

- The same indicator for persons aged 0-64 years old is estimated at 6.2, while for persons 65 years old and over at 4.5 (Graph 2). The higher income inequality observed in the age group 50-64 years (6.9) – (Table 1b).

B. *Inequality of income distribution: Gini coefficient*

For better presentation of income inequality is used to complement the Gini coefficient because as mentioned, the S80/S20 ratio is affected by the extremes values of income distribution.

The Gini coefficient is defined as the relationship of cumulative shares of the population arranged according to the level of equivalised disposable income, to the cumulative share of the equivalised total disposable income received by them. If there was perfect equality (i.e. each person receives the same income) the Gini coefficient would be 0%. A Gini coefficient of 100% would indicate there was total inequality and the entire national income was in the hands of one person. As for example, if Gini coefficient has been calculated equal to 30% this means that if we randomly choose 2 persons, then it is expected that their income to differ by 30% from the mean income.

- The Gini coefficient was calculated in 33.4%. The gini coefficient ranged from 37.4% in 1994 to 33.4% in 2008. This means that if you get 2 random people, then we expect that the income will differ by 33.4% average. So, the change of the overall inequality was raised by 4 percentage points.
- The higher inequality (35,2%) is observed in females aged 50-64 years (Table 2b).
- Our country is estimated that is in the 21st position in the ranking of the 27 European countries in the income inequality. The income inequality was recorded in Slovenia (23%) and the higher in Latvia (38%) (Graph 3, Table 3).

Graph 3. Gini conficient in European Union.%
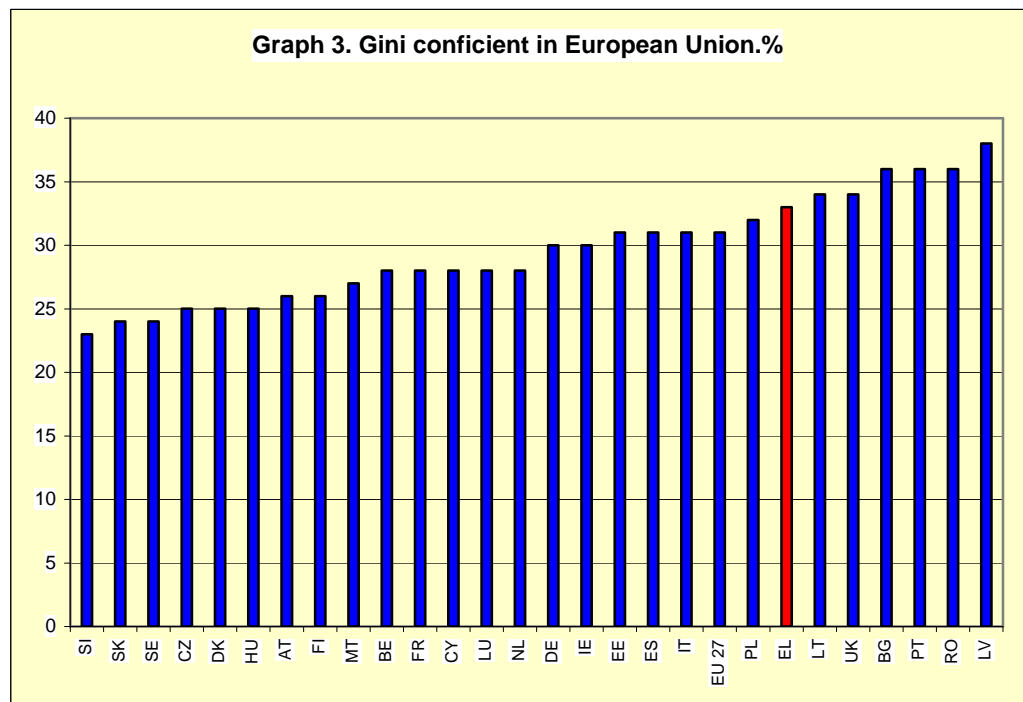
C. Gender pay gap

Another way of calculating income inequality is the gender pay gap. The 'gender pay gap in unadjusted form' is the difference between men's and women's average gross hourly earnings as a percentage of men's average gross hourly earnings. The population consists of all paid employees aged 16 – 64 that are 'at work > 15 hours per week'.

Graph 4..Gender pay gap by employment sector.%
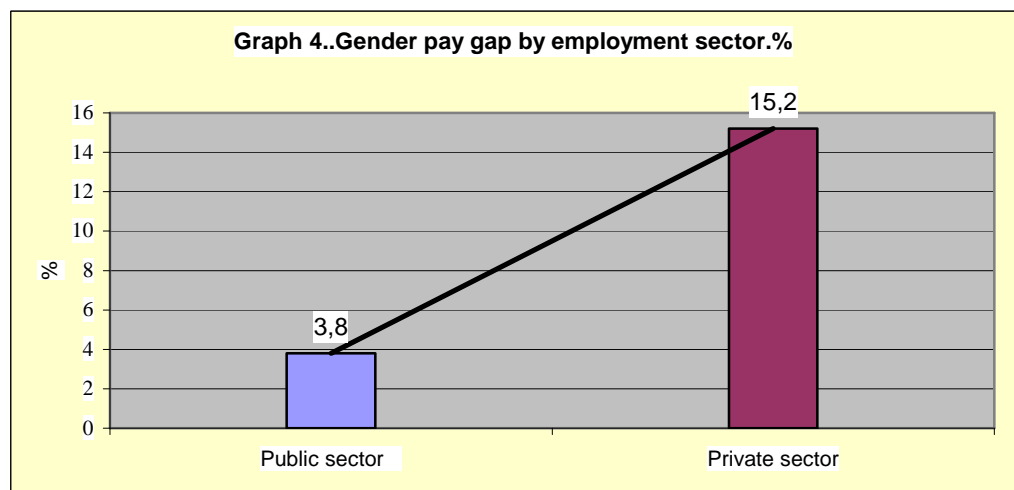
- The difference between men's and women's average gross hourly earnings as a percentage of men's average gross hourly earnings (gender pay gap) is calculated in 10% (Table 4).
- The wages of men employed in the public sector are higher than those for women by 3,8% (Table 4, Graph 4).
- The wages of men employed in the private sector are higher than those for men at 15.2% (Table 4, Graph 4).

Table 1a. Inequality of income distribution S80/S20 income quintile share ratio

Inequality of income distribution S80/S20 income quintile share ratio after social transfers	5.9
Inequality of income distribution S80/S20 income quintile share ratio before social transfers (excluded pensions)	6.7
Inequality of income distribution S80/S20 income quintile share ratio before social transfers (included pensions)	9.1

Πίνακας 1b. Inequality of income distribution S80/S20 income quintile share ratio by age groups and gender

%

Age group	Total	Female	Male
Total	5.9	5.8	5.9
0 - 15	6.4	-	-
0 - 17	6.6	-	-
0 - 64	6.2	6.1	6.2
16 - 24	5.5	5.4	5.6
16 - 64	6.1	6.1	6.2
16+	5.8	5.7	5.8
18 - 64	6.1	6.1	6.2
25 - 49	5.8	5.8	5.9
50 - 64	6.9	7.0	6.9
65+	4.5	4.3	4.6
75+	4.5	4.5	4.5

Table 2a. Gini coefficient

%

Gini coefficient	33.4

Table 2b. Gini coefficient by age groups and gender

%

Age groups	Total	Female	Male
Total	33.4	33.4	33.5
0 - 15	35.4	-	-
0 - 17	35.0	-	-
0 - 64	34.0	34.0	34.0
16 - 24	32.1	31.7	32.4
16 - 64	33.6	33.5	33.7
16+	33.1	32.9	33.2
18 - 64	33.7	33.6	33.7
25 - 49	32.9	32.7	33.1
50 - 64	35.2	35.2	35.1
65+	29.4	28.6	30.0
75+	29.7	29.4	29.9

Table 3. Inequality of income distribution (S80/S20 income quintile share ratio, Gini coefficient) in European Union and other European countries

Countries	S80/S20	Gini coefficient
European Union (27 countries)	5.1	31
European Union (25 countries)	5.0	30
European Union (15 countries)	5.0	30
Νέα Κράτη Μέλη της Ευρωπαϊκής Ένωσης (CZ, EE, CY, LV, LT, HU, MT, PL, SI, SK)	4.8	29
Europe	4.9	30
Eurozone (15 countries)	4.9	30
Eurozone (13 countries)	4.9	30
Eurozone (12 countries)	4.9	30
Belgium	4.2	28
Bulgaria	6.8	36
Czech Republic	3.6	25
Denmark	3.6	25
Germany	4.9	30
Estonia	5.0	31
Ireland	4.5	30
Greece	5.9	33
Spain	5.6	31
France	4.3	28
Italy	5.3	31
Cyprus	3.8	28
Latvia	7.2	38
Lithuania	6.2	34
Luxembourg	4.2	28
Hungary	3.8	25
Malta	4.0	27
Netherlands	4.1	28
Austria	3.7	26
Poland	5.4	32
Portugal	6.2	36
Romania	7.4	36
Slovenia	3.3	23
Slovakia	3.5	24
Finland	3.7	26
Sweden	3.5	24
United Kingdom	5.7	34
Iceland	3.8	27
Norway	3.8	25

Table 4. The gender pay gap

	%
The gender pay gap	10.0
The gender pay gap in public sector	3.8
The gender pay gap in private sector	15.2

European Union - Statistics on Income and Living Conditions - EU-SILC

The Survey on Income and Living Conditions (EU-SILC) consists part of a European Statistical System, to which all Member States participate and replaced, for the year 2003, the European Household Panel Survey, in order to succeed quality improvement of statistical data concerning poverty and social exclusion. Basic aim of the survey is the study, both at national and European level, of households' living conditions mainly in relation to their income. This survey is the basic source for comparable statistics on income distribution and social exclusion at European level. The comparability of data is obtained by using commonly accepted questionnaires, primary target variables and concepts - definitions.

Legal basis

The survey is being conducted upon the decision of the Ministry of Economy and Finance, and according to the contract having been signed among Commission and the National Statistical Service of Greece, in the framework of Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community Statistics on Income and Living Conditions (EU-SILC).

Income reference period used

The income reference period is a fixed twelve-month period, namely the previous calendar year.

Coverage

The survey covered all the private households throughout the country, irrespective of their size or socio-economic characteristics. The following were excluded from the survey:

- Institutional households of all types (boarding houses, elderly homes, hospitals, prisons, rehabilitation centers, camps, etc.)
- Households with more than five lodgers and
- Households with foreigners serving in diplomatic missions.

Methodology

The survey is a *simple rotational design* survey, that was selected as most suitable for single synchronical and longitudinal survey. The final sampling unit is the household. The sampling units are the households and their members.

The sample for any year consists of 4 replications, which have been in the survey for 1-4 years. With the exception of the first three years of survey, any particular replication remains in the survey for 4 years, each year, one of the 4 replications from the previous year is dropped and a new one is added. In order to exist complete sample the first year of survey, the four panels began simultaneously. For the longitudinal component of EU-SILC, people who selected initially are interviewed for a period of four years equal with the duration of each panel.

EU-SILC survey is based on in two stage stratified sampling of households from frame of sampling, that has been created with base the elements of population census of the year 2001 and covers completely the reference population.
There are two levels of area stratification in the sampling design.

i) The first level is the geographical stratification based on the partition of the total country area into thirteen (13) standard administrative regions corresponding to the European NUTS II level. The two major city agglomerations of Greater Athens and Greater Thessalonica constitute separate major geographical strata.

ii) The second level of stratification entails grouping municipalities and communes within each NUTS II administrative region by degree of urbanization, i.e., according to their population size. The scaling of urbanization was finally designed in four groups:

- >= 30.000 inhabitants
- 5.000-29.999 inhabitants
- 1.000-4.999 inhabitants
- 0-999 inhabitants

Sample selection schemes

i) In this stage, from any ultimate stratum (crossing of Region with the degree of urbanization), say stratum h, n_h primary units were drawn (where the number n_h of draws was approximately proportional to the population size X_h of the stratum (number of households according to the last population census of the year 2001).

ii) In this stage from each primary sampling unit (selected area) the sample of ultimate units (households) is selected. Actually, in the second stage we draw a sample of dwellings. However, in most cases, there is one to one relation between household and dwelling. If the selected dwelling constitutes of one or more households then all of them are interviewed.

Sample size	In 2008, the survey is conducted in a final sample of 6,504 households and 16.869 members of those households, 14.123 of them are 16 years and over. The average is calculated in 2,6 members per household.

Weightings

For the estimation of characteristics of survey, the data of each person and household of the sample were multiplied with a reductive factor. The reductive factor results as product of the following three factors (weights):

a. The reverse probability of choice of individual, that coincides with the reverse probability of household.
b. Reverse of percentage of response of households inside the strata.
c. A corrective factor, which is determined at way what:

i) The estimation of persons by gender and age groups that will result by geographic region to coincide with the corresponding number, which was calculated with projection for the period of report of survey and was based on the vital statistics of population (census of population 2001 and births, deaths, immigration).

ii) the estimation of households at order of size (1, 2, 3, 4 or 5+ members) and at tenure status to coincide with the year of report that was calculated with projection that was based on the longitudinal tendency of census of population 1991 and 2001.

Methodology for measuring poverty

According to the methodology for measuring poverty, the poverty line is calculated with its relative concept (poor in relation to others) and it is defined at 60% of the median total equivalized disposable income of the household, using modified OECD equivalised scale.

'Equivalent size' refers to the OECD modified scale which gives a weight of 1.0 to the first adult, 0.5 to other persons aged 14 or over who are living in the household and 0.3 to each child aged under 14. As total equivalized disposable income of the household is considered total net income (that is income after deducting taxes and social contributions) received from all household members.

More specifically the income components included in the survey are:
- Income from work
- Income from property
- Social transfers and pensions
- Monetary transfers from other households and
- Imputed income from the use of company car.

Income components, such as imputed rent from ownership-occupancy, indirect social transfers, income in kind and loan interest are possible to influence significantly the results and are not included.

As equivalent available individual income is considered he total available income of household after its division with the equivalent size of household. The equivalent size of household is calculated according to the modified scale of OECD.

It is pointed out that, in the distribution per person it is considered, that each member of household possesses the same income that corresponds in the equivalised disposable income. This means that each member of household enjoys the same level of living. Consequently in distribution per person, the income that is attributed in each person does not represent wages, but an indicator of level of living.

The total available income of household is calculated as the sum of incomes of members of households, (income from salaried services, from self-employment, pensions, benefits of unemployment, income from motionless fortune, familial benefits, regular pecuniary transfers etc) that is to say total of clean acceptances by the all sources of income afterwards the abstraction of by any chance benefits to other households. In this sum it should is added also the tax that potentially was returned and concerned in the liquidation of incomes of previous year.

Equivalence scale

Equivalent size' refers to the OECD modified scale which gives a weight of 1.0 to the first adult, 0.5 to other persons aged 14 or over who are living in the household and 0.3 to each child aged under 14. Example: The income of household with two adults and two children under 14 years is divided with a weight 1+0,5+2*0,3= 2,1, for household with two adults with 1,5, for household with 2 adults and 2 children of age of 14 years and more with 2,5 etc.

Indicators	1. Inequality of income distribution S80/S20 income quintile share ratio
	2. Inequality of income distribution: Gini coefficient
	3. The gender pay gap

Indicators' definition

1. Inequality of income distribution S80/S20 income quintile share ratio

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Social benefits and pensions

Social benefits include the social assistance (the allowance of social solidarity for pensioners –EKAS, a lump sum amount for assistance to poor households in mountainous and disadvantageous areas, allowances to children under 16 years old who live in poor households, allowances to repatriations, refugees, released from prison, drug-addicts, alcoholics, allowances to long-standings unemployed aged 45-65, benefits to households that faced an earthquake, flood etc.) family, unemployment, sickness, disability/invalidity benefits /allowances, as well as the education allowances.

Pensions include the old age pensions and the survivor's pension and benefits

Συντομογραφίες

Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE), United Kingdom (UK)

References

More information on the survey is available on the web-page of the National Statistical Service of Greece www.statistics.gr, Section: Statistical Themes> Income – Expenditure».

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