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## ON THE GREEK ECONOMIC CRISIS OF 2009–2012: FUNDAMENTAL CAUSES AND EFFECTS; FUTURE PROSPECTS FOR GREECE AND EUROZONE

### INTRODUCTION

The Greek financial crisis has been the most important and agonizing event of the years 2009–2012. For a review of the Greek crisis and a detailed discussion see elsewhere (4, 5). The cause of this crisis is (i) the Greek sovereign debt of 380 billion Euro and a budget deficit of 15% of its annual GDP to levels inconsistent with long-term EMU participation; and (ii) a double shift in markets' expectations, from a regime of credible commitment to future EMU participation under an implicit EMU/German guarantee of Greek fiscal liabilities, to a regime of non-credible EMU commitment without fiscal guarantees, respectively occurring in November 2009 and February/March 2010 as Arghyrou and Tsoukalas,(1) argue. The crisis that started in Greece has been developed into a crisis of the Eurozone as a whole. P. De Grauwe and colleagues (6, 7), argue that the major responsibility of the debt crisis lies with the Greek politicians who mismanaged the economy and were corrupted in every aspect of the public life, tax system, justice system, education, health, defense, sport and local government. At the same time the Greeks were borrowing money from German and French banks and the Eurozone blindly was lending them money, thus making the financial situation of Greece worse year by year (12, 13).

The aim of this paper is to expose the detrimental consequences of the Greek debt crisis. Unemployment, poverty, social exclusion, rising income inequality, illegal immigration, homelessness, rising suicide rate and a possible exit, voluntary or involuntary, of Greece from the Eurozone.

Finally, some lessons are to be learnt from the Greek crisis: The guidelines for the proper economic and social management in every country are the

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following: elimination of corruption in the public and private sectors, elimination of tax evasion, tightening of public expenses, establishment of controls in borrowing money, establishment of financial growth incentives, encouragement of direct foreign investments and strengthening of exports.

## 1. CONSEQUENCES OF THE ECONOMIC CRISIS IN GREECE

The results of the economic, political, social and moral crisis in Greece are the following: (a) Unemployment, (b) Poverty, (c) Rising crime rate, (d) Economic and social exclusion (e) Widening of economic inequalities between the rich and poor, (f) Closure of numerous medium size enterprises, (g) Immigration of Greek business to the Balkans, (h) Polarization of Greek Society with respect to the political affiliations of Greeks, (i) International Humiliation of Greeks, (k) Rising of homeless.

We shall describe in some detail the above in the sequel.

## 2. UNEMPLOYMENT DURING THE YEARS 2009–2012 IN GREECE

Based on the definition recommended by the International Labour Organisation (ILO), Eurostat defines unemployed persons as persons aged 15 to 74 who: (a) are without work; (b) are available to start work within the next two weeks; (c) and have actively sought employment at some time during the previous four weeks (23, 24).

Table 1. Unemployment Rate in Greece from 1980 to 2011

| Year | Unemployment Rate | Year | Unemployment Rate |
|------|------|------|------|
| 1980 | 2.663 | 1996 | 9.804 |
| 1981 | 3.916 | 1997 | 9.767 |
| 1982 | 5.594 | 1998 | 11.2 |
| 1983 | 7.603 | 1999 | 12.125 |
| 1984 | 7.877 | 2000 | 11.35 |
| 1985 | 7.555 | 2001 | 10.75 |
| 1986 | 7.14 | 2002 | 10.325 |
| 1987 | 7.122 | 2004 | 10.492 |
| 1989 | 7.217 | 2005 | 9.9 |
| 1990 | 6.795 | 2006 | 8.892 |
| 1991 | 7.425 | 2007 | 8.292 |
| 1992 | 8.368 | 2008 | 7.683 |
| 1993 | 9.339 | 2009 | 9.375 |
| 1994 | 9.299 | 2010 | 12.458 |
| 1995 | 9.071 | 2011 | 17.7 |

Source: Hellenic National Statistical Office. Labor Force Survey (7,17).
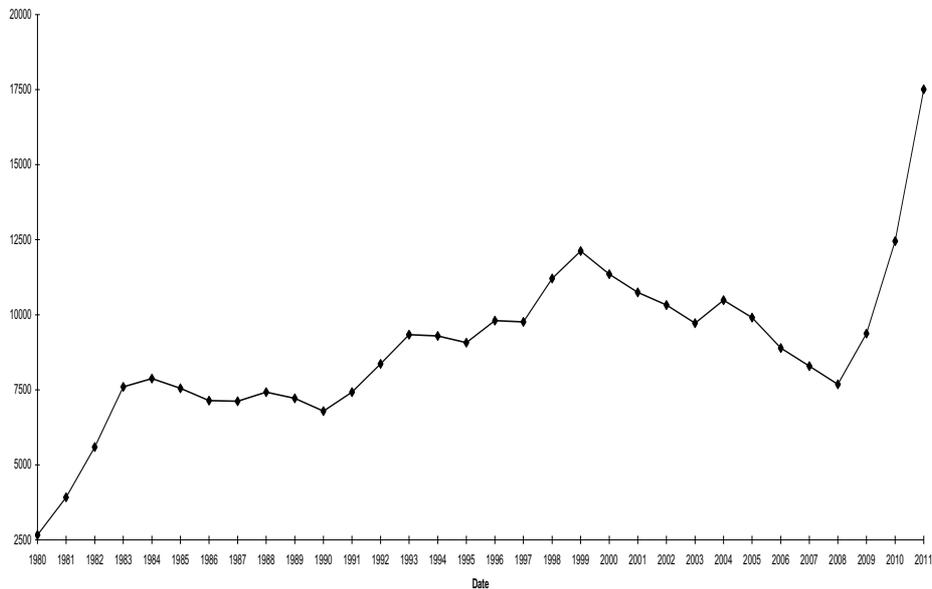
Graph 1.Time series of Unemployment Rate for Greece

Remarks on the Unemployment statistics of Greece (18, 19):

The unemployment rates of women aged 20–24 is greater than the unemployment of men aged 20–24 for the same quarter.

During 2011 nearly one to two women and one to there men aged 20 to 24 was unemployed.

During the second half of 2011, the unemployment rates for men and women aged 20–24 were increasing much more rapidly than in the first half of 2011. This means that the "catastrophy rate" of the sectors of the economy which create jobs, i.e. the small to medium enterprises, continues to rise.

Factors, which create intense unemployment.

Closure of businesses and non-creation of new ones. This is the result of absence of investments, primate or public.

Reduction of the Greek Gross Domestic Product (GDP). This is related with the absence of Foreign Direct Investments (FDI) to Greece, according to a research paper by Georgantopoulos and Tsamis (2011),(14).

The great Economic crisis, which causes the financial ruin of Greek Households.

Pathological inadequacy of the Greek bureaucracy and its inability to use the funds of the European Union, like the program ESPA.(European Funds for creation of Greek Enterprises), (29).

Social and economic inequalities of income in Greece.

The introduction of new methods of automatic production using the new technologies of computers resulting in mass redundances of employees.

Demographic changes in the Greek population (20).

According to figures released by the Greek Statistical Authority (ELSTAT) the rates of unemployment in last months were the following:

Table 2. Present state of Unemployment in Greece

| Month | Rate of unemployment |
|---|---|
| January 2011 | 15,2% |
| January 2012 | 21% |
| February 2012 | 21,3% |

Table 3. Unemployment by age

| Age | Unemployment |
|---|---|
| | 53,8% |
| | 29,1% |
| | 17,6% |
| | 16,2% |
| | 11,2% |
| 65–74 (after pension) | 4,3% |

Table 4. Unemployment by sex

| Month | Men | Women |
|---|---|---|
| February 2011 | 12,5% | 18,8% |
| February 2012 | 18,6% | 25,7% |

Remarks:

Increase of unemployed in two months from middle of December 2011 to middle of February 2012:45.000 or 750 unemployed people per day

Profile of unemployed. Today, the unemployed person in Greece is mainly a woman or a young person aged 15–34.

Additionaly, a characteristic of the unemployed person is low level of education, as we shall describe in the chapter of social exclusion.

### 3. INDICATORS OF POVERTY

In order to be able to understand the extend of poverty in Greece, we must define the following, internationally accepted, indicators of poverty (Poverty Manual, August 8, 2005, EUROSTAT) (41):

*Total equivalised disposable income* of the household is considered the total net income (that is, income after deducting taxes and social contributions) received by all household members.

*Equivalent size of the household* 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.

*Equivalent available individual income* is considered the total available income of household after being divided by the equivalent size of the household. The equivalent size of the household is calculated according to the modified scale of OECD.

*Total available income of the household* is the sum of incomes of the household's members (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, the total of net earnings coming from all the sources of income after the abstraction of by any benefits to other households. To this sum the tax should also be added pertaining to also the tax that what potentially was returned and concerned the liquidation of incomes of the previous year. (Hellenic Statistical Authority,Statistics on income and living conditions 2010, 3/1/2012, Athens, Greece.)

Dependent children Dependent children are considered all the children until the age of 16 years and the children aged 16–24 who are economically inactive (pupils, students, soldiers etc.)

*Main indicators*

1. At-risk-of-poverty rate (after social transfers)
1a. At-risk-of-poverty rate by age and gender
1b. At-risk-of-poverty rate by most frequent activity status and gender
1c. At-risk-of-poverty rate by household type
1d. At-risk-of-poverty rate by accommodation tenure status
1e. At-risk-of-poverty rate by work intensity of the household
1f. At-risk-of-poverty threshold (illustrative values)
2. Relative median at-risk-of-poverty gap, by age and gender

*Secondary indicators*

3. Dispersion around the at-risk-of-poverty threshold
4. At-risk-of-poverty rate anchored at a moment in time
5. At-risk-of-poverty rate before social transfers by age and gender
6. Mean equivalised disposable income

Indicators' definition (41).

1. At-risk-of-poverty rate after social transfers.

The 'at-risk-of poverty rate (after social transfers)" is calculated as the percentage of persons (over the total population) with an equivalised disposable income below the 'at-risk of-poverty threshold' (i.e. the equivalised disposable income of each person is compared with the at-risk-of-poverty threshold).

2. Relative median at-risk-of-poverty gap, by age and gender

The difference between the median equivalised disposable income of persons below the at risk of poverty threshold and the at-risk of poverty threshold itself, expressed as a percentage of the at-risk of-poverty threshold. Gender and age breakdown and total.

3. Dispersion around the at-risk-of-poverty threshold

The percentage of persons, over the total population, with an equivalised disposable income below 40%, 50% and 70% of the national median equivalised disposable income.

4. At-risk-of-poverty rate anchored at a moment in time

For a given year 't', the 'at-risk-of-poverty rate anchored at a moment in time is defined as the percentage of the population whose equivalised total disposable income in that given year is below a risk-of-poverty threshold calculated in the standard way for the earlier year 't-3' and then up-rated for inflation.

5. At-risk-of-poverty rate before social transfers by age and gender

5.1. At-risk-of-poverty rate before social transfers by age and gender (except old-age and survivors benefits)

The 'at-risk-of-poverty rate before social transfers except old-age and survivors' benefits' shows the percentage of persons (over the total population) having an equivalised disposable income before social transfers except old-age and survivors' benefits below the national 'at risk- of-poverty threshold'

5.2. At-risk-of-poverty rate before social transfers by age and gender (including old-age and survivors benefits)

The 'at-risk-of-poverty rate before social transfers including old-age and survivors' benefits' shows the percentage of persons (over the total population) having an equivalised disposable income before social transfers including old-age and survivors' benefits below the national 'at-risk-of-poverty threshold'.

6. Social benefits include the social assistance (i.e. 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.) and allowances such as family, unemployment, sickness, disability/invalidity benefits /allowances, as well as the education allowances.

6.1. Mean equivalised disposable income

The mean equivalised disposable income is defined as the average of the equivalised disposable income of each person.

## 4. STATISTICAL MEASURES OF POVERTY

a. *The income quintile share ratio' or S80/S20*, (41) 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 interquintile interval). The S80/S20 ratio is affected by the extreme values of income distribution.

b. *The Gini coefficient (41)* 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 income equality (i.e. all persons receive the same income) the Gini coefficient would be 0%. A Gini coefficient of 100% indicates that there is total income inequality and the entire national income is in the hands of one person. For example, a Gini coefficient of 30% means that, choosing randomly 2 persons, the difference between their income is at 30% of the mean income. If the mean disposable income of a population of a country is 10.000 Euro, then, the difference of the disposable incomes of the two randomly selected persons in an country with Gini coefficient 30% is 10000x0.30=3.000 Euro.

c. *Poverty line or at-risk-of- poverty threshold* ,(41) is calculated with its relative concept (poor in relation to others) and it is defined at 60% of the median total equivalised disposable income of the household, using modified OECD scale after social transfers. It is often expressed in purchasing power standards (PPS) in order to take account of the differences in the cost of living across countries.

## 5. SOCIAL EXCLUSION

According to the Hellenic Statistical Authority, (Statistics on Income and Living Conditions 2010, p.18, Athens, 3/1/2012), the definition of Social Exclusion is the following (19): *People at risk of poverty or social exclusion (union of the three sub-indicators below)*

(1) *People at-risk-of-poverty after social transfers*

(2) *Severely materially deprived people*

This indicator is defined as the percentage of population with an enforced lack of at least four out of nine material deprivation items in the 'economic strain and durables' dimension.

The nine items considered are: (a) Arrears on mortgage or rent payments or utility bills or hire purchase instalments or other loan payments; (b) Capacity to afford paying for one week's annual holiday away from home, (c) Capacity to

afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day, (d) Capacity to face unexpected financial expenses, (e) Household cannot afford a telephone (including mobile phone), (f) Household cannot afford a colour TV; (g) Household cannot afford a washing machine; (h) Household cannot afford a car and (i) Ability of the household to pay for keeping its home adequately warm.

(3) *People living in households with very low work intensity*

This is defined as the Share of population aged 0–59 living in households where the working age members worked less than 20% of their total work potential during the past year. The work intensity of the household is defined as the ratio between on the one hand, the number of months that all working age household members have been working during the income reference year and on the other hand, the total number of months that could theoretically have been worked by the same household members in the same period. When the respondent declares himself as part-time worker, the number of worked hours per week is taken into account for the months with part-time work, on the basis of the situation for number of worked hours at the time of interview. A working age person is defined as a person aged 18–59, not being a student aged 18–24. The households, which consist only of children, of students aged less then 25 and/or people aged 60 or more are totally excluded from the indicator computation.

## 6. SUMMARY STATISTICS MEASURING THE EXTENT OF POVERTY

There are four reasons to measure poverty (41): First, to keep the poor on the agenda; if poverty were not measured, it would be easy to forget the poor. Second, one needs to be able to identify the poor if one is to be able to target interventions that aim to reduce or alleviate poverty. Third, to monitor and evaluate projects and policy interventions that are geared towards the poor. And finally, to evaluate the effectiveness of institutions whose goal is to help the poor. To help countries think clearly and systematically about how the position of the poor may be improved, and to act in consequence, the World Bank has established the Poverty Reduction Strategy Paper (PRSP) process.

Countries are expected to measure and analyze domestic poverty, and to identify and operationalize actions to reduce poverty. According to the World Bank Institute (2005, Poverty Manual), (41), the following are summary statistics measuring the extend of povery in a country: Poverty is "pronounced deprivation in well-being." The conventional view links well-being primarily to command over commodities, so the poor are those who do not have enough income or consumption to put them above some adequate minimum threshold. This view sees poverty largely in monetary terms.

Poverty may also be tied to a specific type of consumption; thus someone might be house poor or food poor or health poor. These dimensions of poverty

can often be measured directly, for instance by measuring malnutrition or literacy.

The broadest approach to well-being (and poverty) focuses on the "capability" of the individual to function in society. The poor lack key capabilities, and may have inadequate income or education, or be in poor health, or feel powerless, or lack political freedoms.

Assume that information is available on a welfare measure such as income per capita, and a poverty line, for each household or individual.

The *headcount index* (P0) measures the proportion of the population that is poor. It is popular because it is easy to understand and measure. But it does not indicate how poor the poor are.

The *poverty gap index* (P1) measures the extent to which individuals fall below the poverty line (the poverty gaps) as a proportion of the poverty line. The sum of these poverty gaps gives the minimum cost of eliminating poverty, if transfers were perfectly targeted. The measure does not reflect changes in inequality among the poor.

*The squared poverty gap ("poverty severity") index* (P2) averages the squares of the poverty gaps relative to the poverty line. It is one of the Foster-Greer-Thorbecke (FGT) class of poverty measures that may be written as:

$$P_\alpha = \frac{1}{N} \sum_{i=1}^{N} \left( \frac{G_i}{z} \right)^\alpha$$

where $N$ is the size of the sample, $z$ is the poverty line, $G_i$ is the poverty gap and $\alpha$ is a parameter; when $\alpha$ is larger the index puts more weight on the position of the poorest.

The *Sen-Shorrocks-Thon index* is defined as

$$P_{SST} = P_0 P_1^P (1 + \hat{G}^P)$$

where $P_0$ is the headcount index, $P_1$ is the poverty gap index for the poor only, and $G^P$ is the estimated Gini index for the poverty gaps for the whole population. This measure allows one to decompose poverty into three components and to ask: Are there more poor? Are the poor poorer? And is there higher inequality among the poor? Other measures of poverty are available. The *time taken to exit* measures the average time it would take for a poor person to get out of poverty, given an assumption about the economic growth rate; it may be obtained as the Watts Index divided by the growth rate of income (or expenditure) of the poor. (Poverty Manual, World Bank, 2005)

The following three graphs show the extend of property today in Greece, using the above measures of poverty (Hellenic Statistical Authority, 2012)
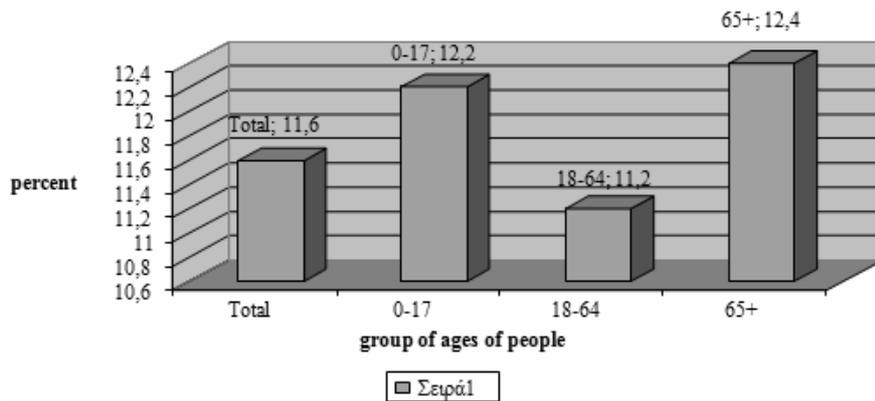


Graph 2. Percentage of population lacking at least 4 items in the economic strain and durables dimension by age and gender: 2010



Graph 3. Lack of capacity to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day 2010

Results of the Survey on living conditions, 2010, of the Hellenic Statistical Authority

The results (19,21,22), are as follows:

The distribution of the population that faces financial burden with an enforced lack of at least 4, out of potencially 9 items, material deprivation items in the 'economic strain and durables' dimension is as follows:

Children under 18 years old (12.2%) – (Graph 2).
Females aged 65 years and over (14.4%) – (Graph 2).
Males aged 65 years and over (9.8%) – (Graph 2).
Children aged 18–24 years having completed primary education (36.1%).
Population aged 18–59 years having completed tertiary education (3.7%).

22.7% of the poor population declares incapacity to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day, while the respective percentage of the non-poor population is estimated at 4.2% (Graph 3).

63.3% of the poor population and 19.3% of the non poor population experience difficulties in facing unexpected financial expenses of approximately 540 Euro.

38.1% of the poor population experience difficulties in dealing with payment arrears such as utility bills for electricity, water, gas, etc. (Graph 4)
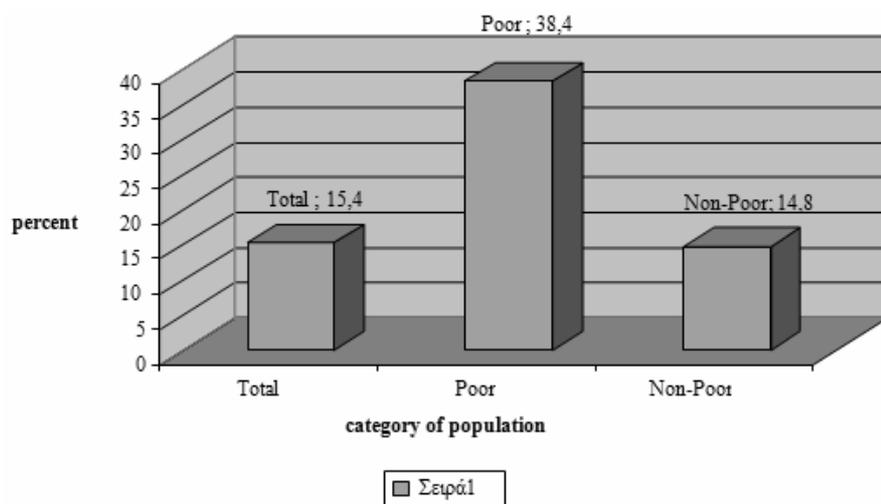


Graph 4. Inability to keep home adequately warm 2010

47.3% of the poor population reports having great difficulty in making ends meet (coping with usual needs) with their total monthly income.

19.5% of poor households, 5.6% of non-poor households and 8.4% of total households do not have a car, while 21.1% of the poor population, 6.1% of the non-poor and 9.1% of total households do not have a personal computer, although they need it, due to lack of financial resources.

Widening of economic inequalities between the rich and poor. Gini Coefficient of Income and S80/S20.

The Statistical definition of Gini Coefficient is given in (Kendall and Stuart, Vol. II, 1992, (Poverty Manual, World Bank, 2005), (F.A. Cowell (2000) 3, 26, 41). Examining Gini coefficient over the last fifty years in Greece, we see some periods where the coefficient followed upward, downward or stable trends for several years. These periods could be divided as follows:

1960–1978: During this period, Gini coefficient varies slightly between 0.302 (1976) and 0.348 (1962). The ratio S80/S20 slight rose following an upward trend from 5.62 in 1960, reaching 7.13 in 1978. Characteristic of this indicator's variation is that the change is due to the gradual reduction of income of the poorest segment of the population, while the richest 20% of the population seems to enjoy stable rates of income during these years.

1979–1992: In 1979 Gini coefficient rose significantly from 0.330 in 1978 to 0.393. There is a slight upward trend in 1980 and then there is a decline reaching the lowest value in 1989. This value (0.29) is the lowest recorded in the whole investigation. In 1992, the value is 0.347. The S80/S20 ratio is on the rise during this period suggesting that the distance between the extreme sections of the population is increasing because of continued contraction in incomes of the poorest.

1993–1997: In 1993, Gini coefficient increases dramatically and reaches 0.42. It follows a steady course in the coming years to close at about the same level in 1997 (0.43), while the ratio S80/S20 continues its upward trend, reaching 22.57.

1998–2009: In 1998 Gini coefficient was 0.495 and the next year it is 0.499. Since then it varies continuously at or above this value. In 2005, it even records its highest value (0.530) and the last four years it has remained stable around 0.520.

In summary, we observe that by 1992, while Gini coefficient values range from 0.30 to 0.40, immediately after, it has continuously recorded higher values with a peak in 2005 when the coefficient reached 0.53. Throughout the course of fifty years, S80/S20 ratio rarely followed a downward trend and this is due predominantly to the constant erosion of the poorest population section's incomes and secondly to an increase of the wealthy population section's income. This signifies an alarming increase in the unequal distribution of income. This result seems to become more significant when we consider that we didn't analyse tax evasion in this uneven distribution, since "the richest households in Greece evade taxes more than the poorest, not only in absolute numbers but in proportion to their income" (Matsaganis and Phlebotomou, 2010),(28)

The following graph 7 shows the movements of Gini Coefficient and S80/S20 from 1960 to 2010.

The main result from the above analysis of Gini Coefficient is that the middle class of citizens in Greece is gradually eliminated. The very rich people are getting richer with their wealth, which they have accumulated with very ques-

tionable ways (mainly, with tax evasion and corruption tactics). On the other hand the very poor people are increasing in numbers with catastrophic canse-quenccies and with the likelihood of a social explosion to appear stronger as the time passes in Greece.
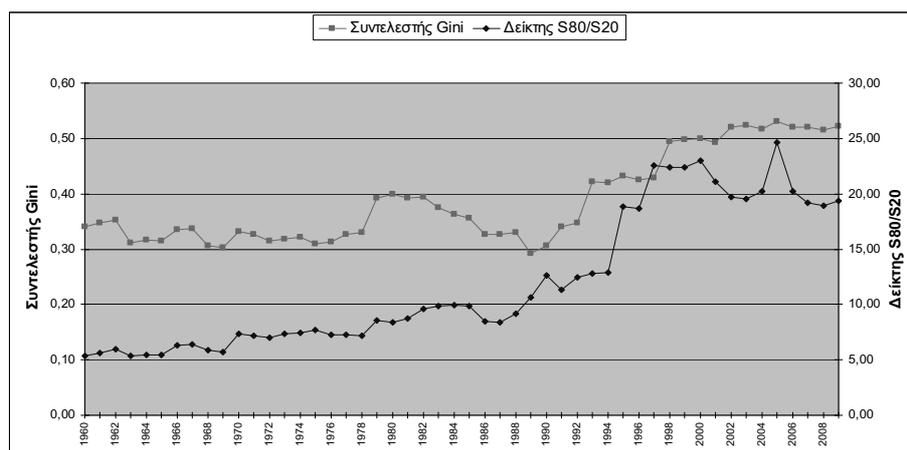


Graph 5. Time Series of Gini Coefficient and S80/S20 from 1960 to 2010

Social Effects of the economic crisis

a. Crime rate. Crime in Greece recorded a dramatically sharp increase during last year 2011 and the statistics data released by the Ministry for Citizens Protection show the brutal reality: Every hour, one robbery, 11 thefts and burglaries occur across the country, while a homicide is being committed every second day. According to the data for the year 2011, the homicides committed out of the motive for robbery have increased at 87% in comparison to 2010. The majority of the victims are elderly people (2,25).

According to specific police data, 184 homicides and 182 attempted homicides were committed during 2011 – in comparison: 176 and 193 respectively in 2010. The police managed to successfully solve at 80% the cases of both crime types.

In 2011 the number of burglaries in Greece exceeded 100,000. In 2011 there were 6,363 robberies nationwide against 6,079 robberies in 2010. In 2011, around 185,000 people were arrested for various crimes, 15,562 of them for armed robbery, robberies at homes, supermarkets, banks and cars.

b. Suicides. The austerity measures imposed by the IMF and EU as a condition of Greece's successive bailouts have seen one in 11 people in greater Athens reduced to using soup kitchens daily, stocks of half the country's most prescribed medicines running out.The crisis has triggered a growing sense of

desperation, guilt, a loss of self-esteem and humiliation for many Greeks. In this climate of great unemployment and lack of any sense of optimism, it is not surprising that 1 Greek person per 36 hours is commiting suicide according to figures announced by the Greek Psychiatric Society and the Union of Medical Doctors in a recent conference (May 2012, Athens).

From 2009 to 2011 ,550 people have commited suicide in Greece because of financial problems. Their ages were as follows:

30–44 years 304
45–59 years 130
60–74 years 116

The Geographic Regions with most suicides in Greece are: Crete, Eastern Macedonia and Ionian Islands.

The numbers of suicides per 100.000 people are as follows (Greek Psychiatric Society, 2012):

Table 5. Rates of suicides in different Regions of Greece

| Year | Crete | Thrace | Sterea Hellas | North Aegean Islands |
|---|---|---|---|---|
| 2002 | 3,65 | 2,02 | 1,39 | 1,28 |
| 2009–2011 | 4,76 | 4,45 | 3,61 | 3,03 |

Homelessness. As Greece's crisis deepens, the social fabric is showing signs of unravelling, raising questions about how much more austerity the country can take. Job losses, along with pension cuts, have created a new class of urban poor. (40).

## 7. CONCLUDING REMARKS

The long-term consequences of the Greek debt crisis are the following:

Unacceptable Unemployment rate. In February 2012 the number of enrolled jobless people on the lists of Organization of Social Security of Labor (OAED) was 1.050.000 people and still rising fast.

Loss of National and Economic sovereignty of the Greek State and transformation of the Hellenic State, the mother of Democracy and Philosophy into a subordinate and tributary of the International Lenders.

Four lessons must be learned from the Greek debt crisis.

The Greeks must elect new uncorrupted politicians to govern them. This is the most difficult and challenging task .

The government must make special laws for reducing the great degree of income inequality and tax evasion that exists in Greece. The rich people and the professionals must pay their taxes the same way as the average Greek citizen pays his own .

As a final remark we believe that the spirit of innovation, hard work and resourcefulness will prevail and will rescue the Greek people from this historic financial, political, social and moral crisis.

## REFERENCES

1. Arghyrou, M. & Tsoukalas, J.D. (2011). The Greek Debt Crisis: Likely Causes, Mechanics and Outcomes, *The World Economy,* Blackwell Publishing, 34(2), pp. 173–191.
2. Bureau of Diplomatic Security (2012). Greece Crime and Safety Report: Athens, U.S.A. Department of State,OSAC.
3. Cowell, F.A. (2000). Handbook of Income Distribution, Elsevier.
4. De Grauwe, P. and W. Moesen (2009). Gains for All: A Proposal for a Common Euro Bond,*Intereconomics*, May/June. http://www.econ.kuleuven.be/ew/academic/intecon/Degrauwe /PDG-papers/Discussion_papers/EuroIntelligence-March-2010.pdf .
5. De Grauwe (2010). The Greek crisis and the future of the Eurozone. *Intereconomics.* www.econ.kuleuven.be/ew/academic/intecon/Degrauwe/PDG-papers/
6. Donadio, R., (2012). The failing State of Greece. The New York Times. http://www.nytimes. com/2012/02/26/sunday-review/
7. Eurostat Commission (2009). Labour Force Survey in the EU, candidate and EFTA countries, ISSN 1977-0375, ISBN: 978-92-79-12174-6. http://epp.eurostat.ec.europa.eu/cache/ ITY_OFFPUB/KS-RA-09-002/EN/KS-RA-09-002-EN.PDF
8. Eurostat (2012a) Population and Social conditions. http://epp.eurostat.ec.europa.eu/cache/ ITY_OFFPUB/KS-SF-12-009/EN/KS-SF-12-009-EN.PDF
9. Eurostat commission (2012b). Statistics explained, Unemployment statistics. http://epp.eurostat. ec.europa.eu/statistics_explained/index.php/Unemployment_statistics,April 2012.
10. Figgou, L., Sapountzis, A., Bozatzis, N., Gardikiotis, A., Pantazis, P. (2011). Constructing the stereotype of immigrants' criminality: Accounts of fear and risk in talk about immigration to Greece. *Journal of Community and applied Social Psychology*, 21,2, pp. 164–177.
11. Financial Times (2012). UK fears sound of a Greek exit, Article, 18 May 2012.
12. Fraile, L. (2009). Lessons from Latin America's neo-liberal experiment: An overview of labour and social policies since the 1980s, *International Labour Review*, 148, (3).
13. Frangos, C.C., Fragkos, Con. C., Sotiropoulos, I., Orfanos, V. and Gika, E. (2012). The effects of Economic crisis of Greece on the way of eating and thinking for the young Greeks: A Sta-tistical analysis of a sample survey among Greek University students. Proceedings of the World Conference on Financial Engineering, London, 4–6, July, 2012.
14. Georgantopoulos, A.G. and Tsamis, A. (2011). The Causal Links Between FDI and Economic Development: Evidence from Greece. *European Journal of Social Sciences*, Vol. 27 No. 1, pp. 12–20.
15. Ghellab, Y. and Papadakis, K. (2010). The politics of economic adjustment: State unilateralism or social dialogue?
16. Gros, D. and T. Mayer (2010), *Towards a Euro(pean) Monetary Fund*, CEPS Policy Brief, No. 202, Centre for European Policy Studies, Brussels. Hellenic Statistical Service(ELSTAT), Monthly Bouletins, October 2009– May 2011.
17. Hellenic Statistical Authority, (ELSTAT) (2011a). Labour Force Survey. http://www.statistics.gr/ portal/page/portal/ESYE.

18. Hellenic Statistical Authority, (ELSTAT). (2011b). Statistics. Employment, Unemployment. http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A0101/Other/A0101_SJO01_TS_QQ_01_1998_04_2011_06_F_GR.xls

19. Hellenic Statistical Authority (ELSTAT) (2012). Statistics on Income and Living Conditions 2010, p. 18, Athens.

20. International Institute for Labour Studies (IILS). (2010a). *World of Work Report* 2009: The Global Jobs Crisis and Beyond. (Geneva, ILO/IILS).

21. International Institute for Labour Studies (IILS). (2010b). *World of Work Report 2010: From one crisis to the next?* (Geneva, ILO/IILS).

22. International Labour Organization. (2011) Report on the High Level Mission to Greece (Athens, 19–23, September 2011). www.ILO.org.

23. International Labour Organization. (2012a). Department of Statistics. Short Term indicators of the labour Market. Greece: Country profile. http://laborsta.ilo.org/sti/sti_E.html.

24. International Labour Organization. (2012b). Global Jobs Crisis Observatory. http://www.ilo.org/dyn/jobcrisis/

25. International Labour Organization (2012c). Global Jobs Crisis Observatory, Feature Story, 31st of May 2012. http://www.ilo.org/dyn/jobcrisis/

26. Kendall and Stuart, (1992). The Advanced Theory of StatisticsVol. II., Griffin, U.K.

27. Kouretas, G.P. & Vlamis, P. (2010). The Greek Crisis: Causes and implications. Panoeconomicous, 57(4), pp. 391–404.

28. Matsaganis, M. and Flevotomou, M. (2010). Distributional Implications of Tax Evasion in Greece, GreeSE Paper No 31, The Hellenic Observatory, London School of Economics.

29. National plan for Strategic growth of Greece 2007–2013 (ΕΣΠΑ), http://www.espa.gr/el/Pages/staticWhatIsESPA.aspx

30. Olga Cantó, Coral del Río, Carlos Gradín, (2007) "What helps households with children in leaving poverty? Evidence from Spain", Research on Economic Inequality, Vol. 14, pp. 1–29. Pallant, J. (2007). SPSS,Survival Manual, Third Edition, McGraw-Hill Publishing.

31. Papadakis*, K. (2010a). "Restructuring enterprises through social dialogue: Socially responsible practices in times of crisis", International Labour Organization (ILO), Geneva, Working Paper No. 19.

32. Papadakis, K. (2010b). *The EU-IMF-ECB structural adjustment programme in Greece and its impact on industrial and employment relations: A preliminary overview and assessment*, Working Paper, (Geneva, ILO).

33. Patras, E. (2010). The impact of the financial crisis in Greece on IR/HRM, paper presented at the IIRA Regional Conference, Copenhagen, 9 July.

34. Rychly, L. (2009). *Social dialogue in times of crisis: Finding better solutions*, Working Paper No.1 (Geneva, ILO).

35. Schuman, M. (2012). Is a Greek Exit from the Euro Inevitable?, Time Magazine, Business Section, 21 May, 2012.

36. Stiglitz, J. (2002). *Globalization and its discontents*, New York, Norton and Company, Inc.

37. Supiot, A. (2010). A legal perspective on the economic crisis of 2008, *International Labour Review*, 149(2). http://business.time.com/2012/05/21/is-a-greek-exit-from-the-euro-inevitable/#ixzz1wkJxFmjL

38. Tilford, S. (2012a). A Greek exit will not be cathartic. Centre for European Reform, 25 May 2012, www.cer.org.uk

39. Tilford, S. (2012b). Greece and the Eurozone: managing the crisis. Centre for European Reform, 29 May 2012, www.cer.org.uk

40. Torres, R. (2010). Incomplete crisis responses: Socio-economic costs and policy implications, *International Labour Review*, Vol. 149, No. 2.
41. World Bank Institute (2005). Poverty Manual, pp. 60–105.

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## ON THE GREEK ECONOMIC CRISIS OF 2009–2012: FUNDAMENTAL CAUSES AND EFFECTS; FUTURE PROSPECTS FOR GREECE AND EUROZONE

The aim of this paper is to present the economic, social, political and moral causes and effects of the Greek debt crisis. The debt and deficit figures for Greece are presented. The causes of the crisis are: (a) corruption, (b) tax evasion and deposit of the stolen money in tax heavens (c) inefficiency of the public sector, (d) absence of transparency practices in the system of justice, in the areas of health, education, defense and labor, (e) excessive consumption habits of the Greeks, (f) lack of entrepreneurial and innovative spirit among the Greeks, (g) excessive debt and non-permissible budget deficit. The consequences are: (a) unemployment, (b) poverty, (c) social exclusion, (d) rising inequalities as it is shown by original research on Gini coefficient, (e) homelessness, (f) health problems, (g) rising suicide rate. Future prospects are: possible exclusion of Greece from Eurozone because of inability to repay debt and to reduce deficit.