

## Brief communication Σύντομο άρθρο

### Financial crisis and criminality in Greece: 2008 vs 2011

G. Tsouvelas,<sup>1</sup> V. Kontaxakis,<sup>2</sup> O. Giotakos,<sup>1</sup> G. Konstantakopoulos,<sup>2</sup>  
M-I. Kontaxaki,<sup>2</sup> Th. Papaslanis<sup>2</sup>

<sup>1</sup>414 Military Hospital, Athens,

<sup>2</sup>1st Department of Psychiatry, University of Athens, Eginition Hospital, Athens, Greece

Psychiatriki 2016, 27:54–57

**T**he current financial crisis has an ongoing impact on public mental health and quality of life. The aim of the current study was to investigate the potential impact of the financial crisis on criminality in Greece, verifying differences in crime rates between the years 2008 and 2011. Data on crime in Greece for the years 2008 and 2011 were provided by the Crime Analysis Section of the Public Security Department of the Hellenic Police Headquarters. The overall and the specific crude crime rates were calculated per 100.000 residents and per police region of Greece. A significant increase in the overall crime rate between 2008 and 2011 was found ( $t=5.01$ ,  $p=0.001$ ). Moreover, between 2008 and 2011 there was a significant increase in the following specific criminality rates: homicide ( $t=2.41$ ,  $p=0.03$ ), fraud ( $t=7.35$ ,  $p=0.001$ ), extortion ( $t=3.22$ ,  $p=0.009$ ), illegal weapon possession ( $t=5.27$ ,  $p=0.001$ ), theft/burglary ( $t=4.62$ ,  $p=0.001$ ) and robbery ( $t=3.23$ ,  $p=0.007$ ). There were not statistically differences in the specific rates of sex-related crimes (rape, sexual exploitation) and drug-related crimes were not observed. According to the results of our study, criminality in Greece shows significant increase during the current financial crisis as reflected by many crime indicators.

**Key words:** Financial crisis, criminality, Greece.

## Introduction

The financial crisis that began in 2008 affecting many European countries has an ongoing impact on public mental health and quality of life. There is evidence that economic downturn has many attributes which can occur simultaneously, including premature deaths from intentional violence, suicides and homicides.<sup>1,2</sup> There has been a significant increase of suicide, attempted suicide and suicidal ideation during the financial crisis in Greece.<sup>3-6</sup> The aim of the current study was to investigate the potential impact of the financial crisis on criminality in Greece, verifying differences in crime rates between the years 2008 and 2011.

## Material and Methods

Data on crime in Greece for the years 2008 and 2011 were provided by the Crime Analysis Section of the Public Security Department of the Hellenic Police Headquarters. In order to create a comprehensive global index of criminality, we calculated an overall crime rate including the following crimes committed: homicides, financial crimes (fraud, extortion), drug-related crimes, illegal weapon possession, sex-related crimes (rape, sexual exploitation), thefts/burglaries, and robberies. The overall and the aforementioned specific crude crime rates were calculated per 100.000 residents and per police region of Greece. T test for paired samples has been used to control the differences in the rates between 2008 and 2011. For the statistical analysis the SPSS package was used.

## Results

A significant increase in the overall crime rate between 2008 and 2011 was found ( $t=5.01$ ,  $p=0.001$ ). Moreover, between 2008 and 2011 there was a significant increase to the specific rates of homicide ( $t=2.41$ ,  $p=0.03$ ), fraud ( $t=7.35$ ,  $p=0.001$ ), extortion ( $t=3.22$ ,  $p=0.009$ ), illegal weapon possession ( $t=5.27$ ,  $p=0.001$ ), theft/burglary ( $t=4.62$ ,  $p=0.001$ ) and robbery ( $t=3.23$ ,  $p=0.007$ ). Statistic

differences in the specific rates of sex-related crimes (rapes, sexual exploitation) and drug-related crimes were not observed. Table 1 shows the total and the specific crime rates for the years 2008 and 2011 in different police regions of Greece.

## Comments

In times of economic stress an increase in both property crimes and violent crimes is expected.<sup>7</sup> A study exploring the impact of economic crisis on crime indicators for the years 2008–2009, at country level, showed that in 7 out of 11 countries in which there was an observed significant impact of the economic crisis, there was an increase in at least one criminality rate. The largest increase was noted in robberies followed by homicides. Specifically homicides appeared to be related to economic changes in countries that already presented high levels of violence.<sup>8</sup>

According to the results of this preliminary study there is a significant increase of criminality in Greece during the crisis and between the years 2008 and 2011. In particular, an increase is revealed as much in crime against property (fraud, theft/burglary) as in most indicators of violent crimes (homicides). However, it is worth noting that the main limitation of this preliminary report is that the study covers only two years (before the crisis and during the crisis). Further data including more years during the crisis are needed in order to establish the effect of the Greek financial crisis on the criminality of the country.

## Acknowledgements

Acknowledgements to the Hellenic Statistical Authority (ELSTAT) and the Crime Analysis Section of the Public Security Department of the Hellenic Police Headquarters for the data that shared with us. The first author is supported by a grant from "Alexander S. Onassis" Public Benefit Foundation for doctoral studies.

**Table 1.** Total and Specific crime rates (per 100,000 residents) for the years 2008 and 2011 in different police regions of Greece

Police Regions of Greece	A		B		C		D		E		F		G		H		I		J		
	2008	2011	2008	2011	2008	2011	2008	2011	2008	2011	2008	2011	2008	2011	2008	2011	2008	2011	2008	2011	
West Greece	355.77	1126.37	0.27	1.21	2.44	20.97	1.35	0.81	1.22	0.81	71.99	96.52	15.97	37.64	0.95	0.81	253.87	938.84	7.71	17.74	
Peloponnese	407.19	1029.23	0.93	3.23	3.17	17.33	1.72	1.36	0.26	0.85	74.94	95.13	21.28	40.09	1.19	1.36	296.84	835.92	6.87	32.10	
Epirus	197.28	337.74	0.28	0.85	1.42	7.61	0.28	0.56	0.28	0.85	73.34	81.41	14.5	31.27	0.28	0.28	104.61	203.66	2.27	10.42	
Central Greece	397.77	626.34	1.18	1.26	4.22	11.19	0.51	1.08	0.34	0.72	126.63	63.88	14.86	20.21	1.01	0.36	241.26	509.05	7.77	16.96	
West Macedonia	138.32	254.68	0.34	0.34	3.07	10.27	1.7	0.34	0.34	1.03	71.55	72.57	11.92	19.51	1.36	0.34	46.33	141.37	1.7	3.77	
East Macedonia and Thrace	185.72	339.23	0.56	1.65	2.79	5.62	0.56	1.49	-	0.50	70.36	85.38	16.16	18.99	1.81	0.33	87.78	205.12	5.71	11.73	
South Aegean	345.46	581.65	1.31	0.96	2.94	9.95	7.84	5.14	-	2.89	165.38	79.61	22.88	29.21	1.96	1.93	137.6	431.42	5.56	9.95	
Ionian Islands	298.37	720.42	0.87	1.28	1.75	6.83	5.69	3.84	0.44	2.14	78.75	116.58	32.37	42.70	0.44	0.85	173.69	514.16	4.37	18.79	
Central Macedonia	204.73	537.95	0.8	1.39	2.62	10.65	1.48	0.89	0.91	0.51	88	102.57	22.57	27.26	1.6	2.03	84.58	373.63	2.17	7.61	
Thessaly	183.81	286.21	0.41	1.09	1.22	6.80	0.82	0.41	0.27	1.22	69.83	51.99	13.31	22.73	1.36	0.41	93.47	177.74	3.12	14.56	
Crete	497.96	925.63	2.31	2.44	4.62	9.60	3.63	3.09	1.15	2.93	102.26	101.09	100.94	104.84	4.12	0.98	270.17	667.28	8.74	18.23	
North Aegean	146.62	208.73	0.5	1.51	0.5	9.03	3.99	-	0.5	-	67.82	88.31	15.46	20.07	2.99	3.01	53.86	81.28	1	5.02	
Attica	1349.09	1671.08	1.7	2.09	25.14	35.56	2.41	1.70	2.51	3.11	114.49	85.03	24.62	25.25	4.92	4.43	1111.26	1382.74	62.02	124.87	
Thessaloniki	1246.8	1317.17	1.49	0.51	14.25	28.55	1.05	1.37	1.22	2.92	108.39	132.73	27.62	40.38	5.16	6.09	1049.08	1020.93	38.55	51.79	
Pared samples t-test	$t(13)=5.01$ $p=0.001$	$t(13)=2.41$ $p=0.031$	$t(13)=7.35$ $p=0.001$	$t(12)=-1.93$ $p=0.077$	$t(10)=3.22$ $p=0.009$	$t(13)=-0.23$ $p=0.819$	$t(13)=5.27$ $p=0.001$	$t(13)=-1.57$ $p=0.141$	$t(13)=4.62$ $p=0.001$	$t(13)=3.23$ $p=0.007$											

A=Total crime rate

B=homicides

C=frauds, D=rapes

E=extortions, F=narcotics

G=weapons, H=sexual exploitation

I=thefts/burglaries

J=robberies

# Οικονομική κρίση και εγκληματικότητα στην Ελλάδα: 2008 vs 2011

Γ. Τσουβέλας,<sup>1</sup> Β. Κονταξάκης,<sup>2</sup> Ο. Γιωτάκος,<sup>1</sup> Γ. Κωνσταντακόπουλος,<sup>2</sup>  
Μ-Ι. Κονταξάκη,<sup>2</sup> Θ. Παπασλάνης<sup>2</sup>

<sup>1</sup>414 Στρατιωτικό Νοσοκομείο, Αθήνα

<sup>2</sup>1η Ψυχιατρική Κλινική, Πανεπιστημίου Αθηνών, Αιγινήτειο Νοσοκομείο, Αθήνα

Ψυχιατρική 2016, 27:54–57

Η παρούσα οικονομική κρίση έχει μια συνεχιζόμενη επίδραση στην ψυχική υγεία και την ποιότητα ζωής των πολιτών. Ο σκοπός της παρούσας μελέτης ήταν να διερευνήσει την πιθανή επίδραση της οικονομικής κρίσης στην εγκληματικότητα στην Ελλάδα εντοπίζοντας διαφορές στους δείκτες εγκληματικότητας ανάμεσα στα έτη 2008 και 2011. Πληροφορίες για τις εγκληματικές ενέργειες στην Ελλάδα τα έτη 2008 και 2011 προήλθαν από το τμήμα καταγραφής και ανάλυσης εγκλημάτων του τμήματος ασφαλείας του αρχηγείου της Ελληνικής Αστυνομίας. Ο συνολικός δείκτης εγκληματικότητας και οι αδροί ειδικοί δείκτες υπολογίστηκαν ανά 100.000 κατοίκους και ανά αστυνομική περιφέρεια της Ελλάδος. Εντοπίστηκε μια σημαντική αύξηση του συνολικού δείκτη εγκληματικότητας μεταξύ των ετών 2008 και 2011 ( $t=5,01$ ,  $p=0,001$ ). Επιπρόσθετα, μεταξύ των ετών 2008 και 2011 εντοπίστηκε σημαντική αύξηση των παρακάτω ειδικών δεικτών εγκληματικότητας: ανθρωποκτονία ( $t=2,41$ ,  $p=0,03$ ), απάτη ( $t=7,35$ ,  $p=0,01$ ), εκβιασμός ( $t=3,22$ ,  $p=0,009$ ), παράνομη οπλοκατοχή ( $t=5,27$ ,  $p=0,001$ ), κλοπή/διάρρηξη ( $t=4,62$ ,  $p=0,001$ ) και ληστεία ( $t=3,23$ ,  $p=0,007$ ). Δεν εντοπίστηκαν στατιστικά σημαντικές διαφορές σε σχέση με εγκλήματα σχετιζόμενα με το σεξ (βιασμός, σεξουαλική εκμετάλλευση) και τα εγκλήματα που σχετίζονται με παράνομες ουσίες. Σύμφωνα με τα αποτελέσματα της μελέτης μας, η εγκληματικότητα παρουσίασε σημαντική αύξηση κατά τη διάρκεια της παρούσας οικονομικής κρίσης, όπως αυτή καταδεικνύεται με πολλούς ειδικούς δείκτες εγκληματικότητας.

**Λέξεις ευρετηρίου:** Οικονομική κρίση, εγκληματικότητα, Ελλάς.

## References

- Kentikelenis A, Karanikolos M, Papanicolas I, Basu S, McKee M, Stuckler D. Health effects of financial crisis: omens of a Greek tragedy. *Lancet* 2011, 378:1457–1458
- Falaras ME, Vouloumanou EK, Mavros NN, Karageorgopoulos DE. Economic crises and mortality: A review of the literature. *Int J Clin Pract* 2009, 63:1128–1135
- Kontaxakis V, Papaslanis T, Havaki-Kontaxaki B, Tsouvelas G, Giotakos O, Papadimitiou GN. Suicide in Greece: 2001–2011. *Psychiatriki* 2013, 26:170–174
- Economou M, Madianos M, Theleritis C, Peppou LE, Stefanis CN. Increased suicidality amid economic crisis in Greece. *Lancet* 2011, 378:1459
- Stavrianakos K, Kontaxakis V, Moussas G, Paplos K, Papaslanis T, Havaki-Kontaxaki B et al. Attempted suicide during the financial crisis in Athens. *Psychiatriki* 2014, 25:104–110
- Madianos M, Alexiou T, Patelakis A, Economou M. Suicide unemployment and other socioeconomic factors: evidence from the economic crisis in Greece. *European J Psychiatry* 2014, 28:39–49
- Rodriguez J, Larrauri, E. Economic crisis, crime, and prison in Spain. *Newsletter of the European Society of Criminology* 2012, 11:10–12
- United Nations Office on Drugs and Crime (UNODC) Monitoring the Impact of economic crisis on crime (2012). (Cited 7 February 2012) Available from [www.unodc.org/documents/data-and-analysis/statistics/crime/GIVAS\\_Final\\_Report.pdf](http://www.unodc.org/documents/data-and-analysis/statistics/crime/GIVAS_Final_Report.pdf)

Corresponding author: G. Tsouvelas, Psychologist, 414 Military Hospital, Athens, Greece  
Tel.: (+30) 694 434584  
e-mail: tsouvelasgiorgos@gmail.com