The British Journal of Psychiatry

Relationship of suicide rates to economic variables in Europe: 2000-2011

Konstantinos N. Fountoulakis, Wolfram Kawohl, Pavlos N. Theodorakis, Ad J. F. M. Kerkhof, Alvydas Navickas, Cyril Höschl, Dusica Lecic-Tosevski, Eliot Sorel, Elmars Rancans, Eva Palova, Georg Juckel, Goran Isacsson, Helena Korosec Jagodic, Ileana Botezat-Antonescu, Ingeborg Warnke, Janusz Rybakowski, Jean Michel Azorin, John Cookson, John Waddington, Peter Pregelj, Koen Demyttenaere, Luchezar G. Hranov, Lidija Injac Stevovic, Lucas Pezawas, Marc Adida, Maria Luisa Figuera, Maurizio Pompili, Miro Jakovljevic, Monica Vichi, Giulio Perugi, Ole Andrasen, Olivera Vukovic, Paraskevi Mavrogiorgou, Peeter Varnik, Per Bech, Peter Dome, Petr Winkler, Raimo K. R. Salokangas, Tiina From, Vita Danileviciute, Xenia Gonda, Zoltan Rihmer, Jonas Forsman Benhalima, Anne Grady, Anne Katrine Kloster Leadholm, Susan Soendergaard, Carlos Nordt and Juan Lopez-Ibor

BJP published online October 30, 2014 Access the most recent version at DOI: 10.1192/bjp.bp.114.147454

BJPsych The British Journal of Psychiatry
1–11. doi: 10.1192/bjp.bp.114.147454

Relationship of suicide rates to economic variables in Europe: 2000–2011

Konstantinos N. Fountoulakis, Wolfram Kawohl, Pavlos N. Theodorakis, Ad J. F. M. Kerkhof, Alvydas Navickas, Cyril Höschl, Dusica Lecic-Tosevski, Eliot Sorel, Elmars Rancans, Eva Palova, Georg Juckel, Goran Isacsson, Helena Korosec Jagodic, Ileana Botezat-Antonescu, Ingeborg Warnke, Janusz Rybakowski, Jean Michel Azorin, John Cookson, John Waddington, Peter Pregelj, Koen Demyttenaere, Luchezar G. Hranov, Lidija Injac Stevovic, Lucas Pezawas, Marc Adida, Maria Luisa Figuera, Maurizio Pompili, Miro Jakovljević, Monica Vichi, Giulio Perugi, Ole Andrasen, Olivera Vukovic, Paraskevi Mavrogiorgou, Peeter Varnik, Per Bech, Peter Dome, Petr Winkler, Raimo K. R. Salokangas, Tiina From, Vita Danileviciute, Xenia Gonda, Zoltan Rihmer, Jonas Forsman Benhalima, Anne Grady, Anne Katrine Kloster Leadholm, Susan Soendergaard, Carlos Nordt and Juan Lopez-Ibor

Background
It is unclear whether there is a direct link between economic crises and changes in suicide rates.

Aims
The Lopez-Ibor Foundation launched an initiative to study the possible impact of the economic crisis on European suicide rates.

Method
Data was gathered and analysed from 29 European countries and included the number of deaths by suicide in men and women, the unemployment rate, the gross domestic product (GDP) per capita, the annual economic growth rate and inflation.

Results
There was a strong correlation between suicide rates and all economic indices except GPD per capita in men but only a correlation with unemployment in women. However, the increase in suicide rates occurred several months before the economic crisis emerged.

Conclusions
Overall, this study confirms a general relationship between the economic environment and suicide rates; however, it does not support there being a clear causal relationship between the current economic crisis and an increase in the suicide rate.

Declaration of interest
None.

In 2008 a global economic crisis affected Europe as well as the rest of the world. The crisis caused problems in the banking sector and downturns in stock markets, bankruptcies, house repossessions and there were rises in unemployment.[1] There was concern expressed about the effect of austerity on healthcare[2–15] and the World Health Organization (WHO) published its concerns regarding the impact of the crisis on global health, although at least some points were proven exaggerated and unsupported by data and withdrawn later.[16–20] Mental health is believed to be at a greater risk of being affected by such a crisis, since people with mental disorders (particularly mood disorders) constitute a particularly vulnerable population. Among all adverse effects, the most striking would be an effect on suicidality. It is widely believed that crises of this kind increase suicides,[10,16,21–25] and this seems to be the conclusion of studies on the Asian economic crisis of the 1990s, with a particular emphasis on the effect of rising unemployment.[26,27] Thus, it is supposed that the greatest impact is on men of working age. There are several studies suggesting a similar pattern concerning the impact of the recent economic crisis in European countries[8,10,28–37] and the USA[34] although different interpretations also exist.[19,20,38,39] An important limitation of most of these studies on European rates is that they analyse the suicide rates from 2007 on and not before, although they do report a nadir for suicide rates during 2007, and they focus almost exclusively on the possible effect of unemployment, thus neglecting other factors.

The Lopez-Ibor Foundation launched an initiative to study the possible impact of the economic crisis on European suicide rates. A group of experts were gathered from participating countries and data concerning suicide rates since 2000, along with economic indices, were gathered and analysed. The hypothesis was that suicide rates correlate with unemployment, growth rate and inflation, which are aspects of the economic situation that have a direct impact on the everyday life of the population and especially of vulnerable groups.

Method

Data acquisition

Data were gathered from 29 European countries (see online Table DS1). The data included number of men and women in the population, number of deaths by suicide in men and women, unemployment rate, gross domestic product (GDP) per capita, annual economic growth rate and inflation. All data were collected strictly from the official national statistical agencies of countries. The economic variables used were defined according to the World Bank definitions. Some discrepancies between the data obtained from national agencies and those of Eurostat were detected (for example Poland). The data from the national agencies were used in all instances.

The suicide rates were calculated as number of suicides per 100 000 inhabitants without adjusting for age, since European countries do not differ significantly in terms of age composition of their populations. Adjusting for age and gender on the basis of a standardised population was not feasible since data of this kind were not readily available for all countries and all years.

The unemployment rate refers to the share of the labour force that is without work but available for and seeking employment.

Definitions of labour force and unemployment differ by country, but among European countries differences are not large. Typically, the total labour force comprises people ages 15 and older who meet the International Labour Organization definition of the economically active population: all people who supply labour for the production of goods and services during a specified period. It includes both the employed and the unemployed. Although national practices vary in the treatment of such groups as the armed forces and seasonal or part-time workers, in general the labour force includes the armed forces, the unemployed and first-time job-seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector.

Gross domestic product is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

The annual GDP growth was defined as the annual percentage growth rate of GDP at market prices based on constant local currency. The GDP per capita was defined as GDP divided by mid-year population.

Inflation, as measured by the consumer price index, reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used.

All the raw data are shown in online Table DS1, and online Fig. DS1 shows the total suicide rates for each country.

Data analysis

Three sets of data were obtained concerning suicides: the total rate and the rates in men and women. The total and the rates in men followed a loglinear distribution whereas the rate in women followed a normal distribution (Fig. 1).

To allow different time trends of suicide rates between countries a random coefficient regression model was applied. Specifically, we used the procedure NLMIXED in SAS 9.3 for Windows with log as link function. The model error term as well as the two random coefficients (country and country × time) were assumed to be normally distributed. Calendar year was rescaled to be zero in 2000 and GDP per capita was divided by 1000 to enhance estimation of the model as well as interpretation of effects.

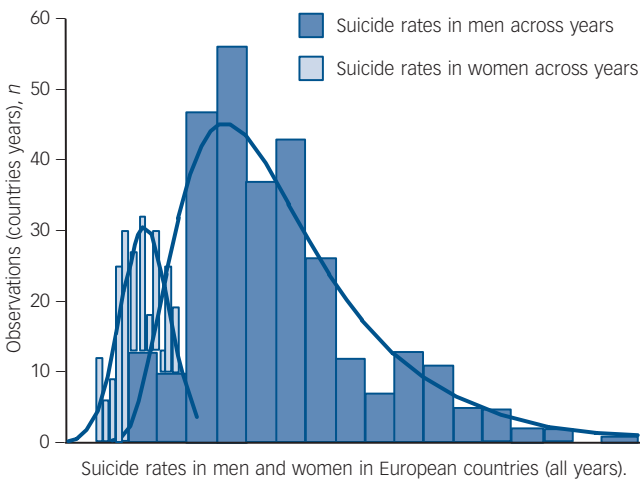


Fig. 1 Histogram of suicide rates: pooled data for all countries and all years.

The dependent variables were total suicide rate and rate in men for the first two and rate in women for the third. Country was used as a categorical predictor and the economic variables (unemployment, growth rate, GDP, GDP per capita and inflation) and year as continuous predictors. We chose to use rates rather than numbers as dependent variables for two reasons. First, the use of rates would put all countries at a similar level and would not give any advantage to the big ones, thus preserving the 'qualitative' differences between countries. Second, the absolute number of suicides did not fit any of the basic distributions and the models derived had poor goodness-of-fit. Countries with more than 1 year of missing data were not included in the models (Bulgaria, Montenegro, Belgium, Italy).

Following the above multifactorial analyses, several exploratory analyses were applied to the data for each country separately using the non-parametric Spearman correlation coefficient. The calculation of the coefficients was done for the total time span (years 2000–2011) and also for two separate periods (2000–2005 and 2006–2011) since it was obvious that after 2006 a change in suicide trends was evident. The correlations between total suicide rates and rates in men and women with the economic variables mentioned above were calculated for each country separately.

Non-parametric Kruskal–Wallis ANOVA was used to test numerical differences between groups.

Results

The combined data of European countries for the years 2000–2010 are shown in Table 1 and the evolution of suicides in Europe across the years in Fig. 2. Pooled data from only those countries with 2011 data as well and separately for Eurozone, European Union (EU) and the rest of the European countries can be found in online Table DS1. Online Fig. DS1 shows suicide *v.* time for individual countries. Overall the data from the 29 countries show a decreasing trend from year 2000 to 2011 for suicide rates both for men and for women (Table 1, Fig. 2, online Table DS1 and online Fig. DS1).

The results of the regression analyses are shown in Table 2 for total suicide rates and in Table 3 for men and women separately. They suggest that total suicides rates and rates for men were related to all economic variables except GDP per capita. Rates for women were only related to unemployment. As expected, year and country also had a significant effect.

The inspection of data revealed there was a clear increasing trend in Slovakia. In Greece the maximum rate emerged in 2012 and a stabilising trend seems to be in place. Stable rates across the years were observed in the Netherlands, Romania, Norway, Montenegro and Sweden, whereas the rates for Portugal fluctuated greatly. In the other 21 countries the trend was towards lower overall suicide rates for 2010–2011 in comparison with 2000, however only in 4 of these countries (Bulgaria, Estonia, Finland and Switzerland) was this decrease continuous and un-intermittent (online Table DS1 and online Fig. DS1). With the exception of these 4 countries (Bulgaria, Estonia, Finland and Switzerland), for the other 25 countries the rate of suicides reached a nadir during the years 2006–2009 (Table 4, online Table DS1 and online Fig. DS1). In the countries that manifested this nadir, the rates were unstable for the next year; for some a trend to increase was clear (such as the Netherlands), in others the rates increased for 1–2 years only to further decrease afterwards (such as Spain), whereas in others the rates were more or less stable (such as France). In Spain the 2012 data suggest a 10% decrease, thus further perplexing the picture.

There are no common features, in terms of economy, characterising the four countries with an un-intermittent fall in

their suicide rates. Estonia experienced significant recession, Bulgaria and Finland experienced recession to a lesser extent and Switzerland only marginal recession. Slovakia, which is the only country with increasing suicide rates, experienced recession only for 1 year and its unemployment and GPD growth rates have been steadily improving since 2000. It is important to note that Slovenia did not experience any recession after 2005, however, it manifested a nadir of suicide rates in 2008 followed by an increase. Nonetheless, in the same country, in spite of significant recession during the years 2000–2005, at that time the suicide rates were dropping. Montenegro is another interesting example. In that country, the suicide rate remained unchanged throughout 2000–2010, in spite of a high growth rate. In that country the unemployment rate remained high and unchanged as well. Portugal is an exception. It experienced a recession with an increase in the suicide rate in 2003. It is the only country without a clear reduction in the suicide rates during 2000–2011. Its 2011 rate is almost double of that of 2000.

Although the data are complex, three major patterns could be identified (Fig. 3). Pattern A is followed by 13 countries, pattern B by 3 and pattern C by 11 countries (Table 4, online Fig. DS1). Montenegro and Switzerland did not follow any of these patterns. The comparison of pattern A *v.* pattern C countries suggested there was a tendency for pattern C countries to have better economic indices and lower suicide rates but this difference was not significant. There was also no correlation of unemployment rate at the year of nadir suicide rates and the rate of suicide increase afterwards.

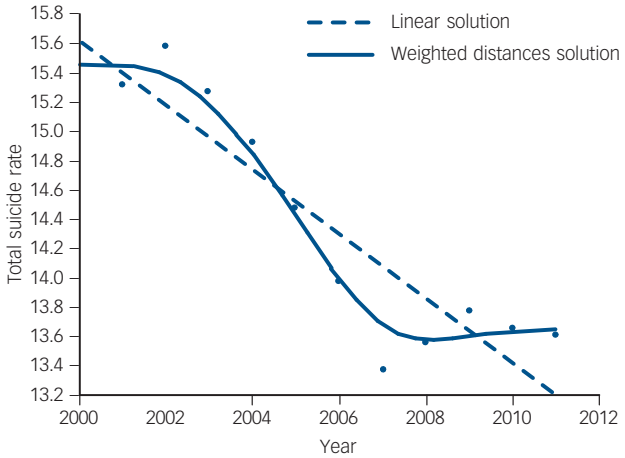


Fig. 2 Change in suicide rates in Europe 2000–2010: pooled data.

From the above it is evident that the great majority of countries manifested a halt in their decreasing suicide rates with a nadir in rates during the years 2006–2008, followed by an increase, which in half of them was temporary. The temporal relationship of this nadir in the decreasing rates to the onset of recession for each country is shown in Table 4. Onset of recession could be defined here as either a negative sign of growth rate or an increase in unemployment (see online Table DS1). The duration of this recession for each country is also shown in Table 4. In 23 countries the nadir in suicides occurred clearly before and in only 2 it occurred after the recession had started.

The mean occurrence of nadir was early 2007 whereas the mean onset of recession was mid-2008. The average latency time from suicide nadir to recession onset was 1.44 years (17.3 months, s.d. = 0.82 years). The average latency time to recession according to GDP was 1.44 years (17.3 months, s.d. = 0.84 years) and to recession according to the unemployment increase was 1.72 years (20.6 months, s.d. = 0.98 years). There were no differences between rates in men and women for this issue. All latency times were greater than 1 year, suggesting that clearly the change in slope of the suicide line occurred some months before the respected change in the slope of economic indices.

The Spearman correlation coefficients separately for each country, for total suicide rates and rates for men and women and economic indices, are shown in Table 5. The coefficients are also shown in online Table DS1 together with the coefficients calculated separately for the years 2000–2005 and 2006–2011. The coefficients with values over 0.5 (arbitrary chosen) are shown in Table 4. Some countries kept the same coefficients in this sub-analysis but others did not. This sub-analysis should be considered to be purely exploratory.

The correlation coefficient results suggest that the suicide rates are strongly correlated with GDP per capita and its changes and to a lesser extent with unemployment, which is in sharp contrast to the regression analysis results. Some countries (Greece, Spain, Portugal, Montenegro, Norway and Serbia) show very weak correlations of the suicide rates with economic indices.

In Table 6 the correlation coefficients between suicide rates and economic variables across countries for the same year are shown. Overall correlations are weak, with GDP per capita and unemployment showing some stronger tendencies.

Discussion

Main findings

Suicide rates have increased dramatically over the past 45 years despite prevention efforts.[40] There is marked geographic variability

Table 1 Pooled data of European countries for the years 2000–2010 (Italy, Montenegro and Bulgaria excluded because of incomplete data)

	Population			Suicides, *n*			Suicide rate		
Year	Total	Men	Women	Total	Men	Women	Total	Men	Women
2000	430 147 247	209 459 316	220 669 932	59 873	45 153	14 720	13.92	21.56	6.67
2001	431 483 804	210 282 349	221 201 455	58 624	44 520	14 104	13.59	21.17	6.38
2002	432 729 703	210 978 947	221 750 756	59 592	45 072	14 520	13.77	21.36	6.55
2003	434 540 344	211 934 885	222 605 459	58 583	44 478	14 105	13.48	20.99	6.34
2004	435 941 409	212 670 297	223 271 112	57 963	43 821	14 122	13.30	20.61	6.33
2005	437 969 462	213 759 938	224 209 524	56 325	42 515	13 810	12.86	19.89	6.16
2006	439 537 845	214 600 383	224 936 462	53 895	40 872	13 011	12.26	19.05	5.78
2007	441 202 320	215 434 814	225 687 506	51 615	39 140	12 485	11.70	18.17	5.53
2008	443 251 055	216 648 416	226 603 639	53 376	40 684	12 692	12.04	18.78	5.60
2009	444 825 169	217 452 639	227 373 530	54 437	42 154	12 012	12.24	19.39	5.28
2010	446 575 604	218 367 743	228 207 924	53 504	41 221	12 283	11.98	18.88	5.38

Table 2 Results of the regression analyses for total suicide rates[a]

Total suicide rates	Estimate	s.e.	*t*-value	*P*
Intercept	1.8898	0.1033	18.3	<0.0001
GDP per capita /1000	−0.00256	0.001492	−1.72	0.0921
National unemployment rate	0.005579	0.00106	5.26	<0.0001
National growth rate	−0.00401	0.000639	−6.28	<0.0001
Inflation	−0.00327	0.001195	−2.74	0.0086
Year – 2000	−0.0189	0.00363	−5.21	<0.0001
Men	1.3839	0.1171	11.82	<0.0001
D11[b]	0.3202	0.06805	4.71	<0.0001
D21[c]	−0.00871	0.002457	−3.54	0.0009
D22[d]	0.000408	0.000112	3.64	0.0007
Error	1.482	0.09553	15.51	<0.0001
−2 Log-likelihood	2258.8			

GDP, gross domestic product.
a. With country and country year as random effects. Total suicide rates are related to all economic variables. As expected, year and country also had a significant effect, except for Romania and Switzerland.
b. D11 is the estimated random variance of the country-specific intercepts.
c. D21 is the covariance of D1 and D2. It is a very common finding in longitudinal regression analysis that there is a negative covariance between intercept and slope.
d. D22 is the estimated random variance of the country-specific time trends.

Table 3 Results of the regression analyses for suicide rates in men and women[a]

	Estimate	s.e.	*t*-value	*P*
Rates in men				
Intercept	3.2261	0.1167	27.64	<0.0001
GDP per capita /1000	−0.00387	0.001876	−2.06	0.0506
National unemployment rate	0.005096	0.001369	3.72	0.0011
National growth rate	−0.00412	0.000831	−4.96	<0.0001
Inflation	−0.00347	0.001527	−2.27	0.0328
Year – 2000	−0.01405	0.004467	−3.14	0.0045
D11[b]	0.3096	0.08933	3.47	0.0021
D21[c]	−0.00852	0.002999	−2.84	0.0093
D22[d]	0.00035	0.000124	2.83	0.0094
Error	2.3952	0.2185	10.96	<0.0001
−2 Log-likelihood	1293.1			
Rates in women				
Intercept	1.8225	0.1265	14.41	<0.0001
GDP per capita /1000	0.004294	0.002657	1.62	0.1197
National unemployment rate	0.008235	0.002745	3	0.0064
National growth rate	−0.0024	0.001814	−1.33	0.1981
Inflation	0.000872	0.00309	0.28	0.7804
Year – 2000	−0.03169	0.005815	−5.45	<0.0001
D11[b]	0.3209	0.09687	3.31	0.003
D21[c]	−0.00695	0.003761	−1.85	0.0775
D22[d]	0.000448	0.000171	2.62	0.0154
Error	0.5432	0.04908	11.07	<0.0001
−2 Log-likelihood	829.6			

GDP, gross domestic product.
a. With country and country year as random effects. Rates in men are related to all economic variables. Rates in women are not related to the national growth rate. As expected, year and country also had a significant effect, except for Poland for rates in men.
b. D11 is the estimated random variance of the country-specific intercepts.
c. D21 is the covariance of D1 and D2. It is a very common finding in longitudinal regression analysis that there is a negative covariance between intercept and slope.
d. D22 is the estimated random variance of the country-specific time trends.

in suicide rates, with the highest rates being found in Eastern Europe and some US states and the lowest in Muslim and Latin American countries.[40,41] So far, this variability in suicide rates has not been satisfactorily explained. This variability is particularly true for the continent of Europe. Reasons for these great differences between national/regional suicide rates have not been fully explained yet. Geographic (latitude, longitude, altitude) climatic, dietary, genetic, economic, religious and other sociocultural differences can be taken into account. However, differences in psychiatric morbidity, the accuracy of the registration of suicide, the stigma associated with mental illness and suicide (possibly influencing help-seeking behaviour and reporting rates), the availability of lethal methods, and the availability of the social and healthcare systems should be considered.[40,42]

The current study analysed the correlation between suicide rates in 29 European countries and economic indices. Although a correlation is evident, the temporal relationships do not support a direct link between the economic crisis and any change in the suicide rates. It also found the following results.

(a) There was a nadir for suicide rates across Europe around the year 2007. This synchronisation cannot be considered to be random; instead some common aetiology should have influenced the rates across the continent.

Table 4 Year of nadir in suicide rates and onset of recession according to two indices (growth rate and unemployment and duration of recession according to each one) as well as pattern of suicide rates evolution and correlations between suicide rates and economic indices in European countries

	Year of suicide rate nadir			Recession indices, start year (duration in years)			Timing of nadir in suicide rates		Correlations between total suicide rate and economic indices			
	Total	Men	Women	Growth rate	Unemploy-ment	Pattern	Before recession started	After recession started	National unemployment rate	National growth rate	GDP (per capita)	Inflation
Eurozone countries												
Austria	2010	2010	2010	2009 (1)	2009 (3)	A		+			−0.90	
Belgium	2007	2007	2007	2009 (1)	2009 (2)	B	+				−0.81	
Estonia	–	–	–	2008 (2)	2009 (3)	A					−0.90	
Finland	–	–	–	2009 (1)	2010 (3)	A			0.72		−0.89	
France	2007	2007	2011	2008(2)	2009 (3)	A	+				−0.85	
Germany	2007	2007	2006	2009 (1)	2011 (1)	C	+				−0.77	
Greece	2007	2007	2010	2009 (3)	2009 (3)	A	+					
Italy	2006	2006	2006	2008 (2)	2008 (2)	C	+		0.86		−0.83	
Ireland	2007	2007	2006	2008 (3)	2008 (4)	C	+		−0.56		−0.71	
Netherlands	2007	2007	2007	2009 (1)	2009 (3)	C	+					
Portugal	2006	2006	2006	2008 (2)	2009 (3)	C	+					
Slovakia	2006	2006	2006	2009 (1)	2009 (2)	C	+		−0.58		0.73	−0.58
Slovenia	2008	2008	2010	–	2009 (3)	C	+		0.56	−0.82	−0.94	0.63
Spain	2007	2007	2006	2009 (2)	2008 (3)	B	+					
European Union, non-Eurozone countries												
Bulgaria	2009	2010	2009	2009 (1)	2009 (2)	A		+		0.81	−0.66	
Croatia	2007	2007	2009	2009 (2)	2009 (3)	C	+		0.76		−0.79	
Czech Rep	2008	2008	2007	2009 (1)	2009 (2)	C	+		0.59		−0.82	
Denmark	2007	2007	2005	2008 (2)	2009 (3)	A	+				−0.92	
Hungary	2007	2006	2010	2009 (1)	2009 (3)	A	+		−0.79	0.63	−0.87	0.52
Latvia	2007	2007	2006	2008 (3)	2008 (4)	A	+				−0.84	
Lithuania	2007	2006	2007	2009 (1)	2009 (3)	A	+				−0.86	−0.78
Poland	2007	2007	2007	–	2009 (2)	C	+		0.79	−0.62	−0.74	
Romania	2007	2007	2007	2009 (2)	2009 (3)	A	+		0.59		−0.63	0.57
Sweden	2007	2007	2008	2008 (2)	2009 (3)	B	+				−0.57	
UK	2007	2007	2007	2008 (2)	2009 (2)	A	+					−0.80
Non-European union countries												
Montenegro	–	–	–	–	2009 (1)	–						
Norway	2007	2007	2006	2008 (4)	2009 (3)	C	+					
Serbia	2008	2008	2010	2009 (1)	2009 (3)	A	+					
Switzerland	–	–	–	2009 (1)	2009 (2)	–			−0.52		0.61	

GDP, gross domestic product.

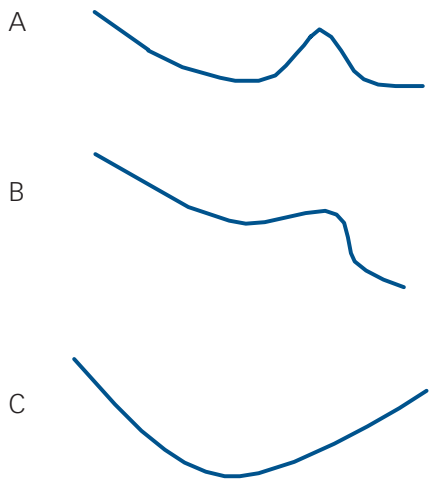


Fig. 3 Patterns of change in suicide data in European countries in relation to the 2007 nadir.

Pattern A: the declining suicide rate is followed by a temporal increase after 2007 and then stabilises; in pattern B the declining suicide rate is interrupted by a temporal increase after 2007 and then the decline continues; in pattern C the declining suicide rate is reversed after 2007.

(b) Even in countries with more or less stable rates, the specific nadir was evident.

(c) The nadir occurred more than a year before the onset of the economic crisis and the subsequent increase in suicide rates also occurred several months before the crisis.

(d) There was a strong correlation of suicide rates with all economic indices except GDP per capita in men but only with unemployment in females. For the vast majority of countries the suicide rates correlated strongly with GDP per capita and rather weakly with unemployment and the other indices. This correlation was strong within each country and less strong across countries.

(e) In Eurozone countries the correlation with GDP per capita was the dominant pattern. In the rest of EU countries the correlation with unemployment was also strong. In countries outside the EU, the correlation of suicide rates with economic variables was weak.

(f) The combined data from European countries for the years 2000–2010 (Table 1 and online Table DS1 and online Fig. DS1) suggest that the average suicide rate in the European region is similar to that reported for the USA.

Table 5 Correlation coefficients between suicide rates and economic indices for each European country

	Total suicide rate				Suicide rate in men				Suicide rate in women			
Year	National unemployment rate	National growth rate	GDP (per capita)	Inflation	National unemployment rate	National growth rate	GDP (per capita)	Inflation	National unemployment rate	National growth rate	GDP (per capita)	Inflation
Eurozone countries												
Austria	−0.31	0.05	−0.90	−0.09	−0.29	0.01	−0.89	−0.11	−0.41	−0.12	−0.80	0.07
Belgium	0.26	−0.33	−0.81	0.00	0.26	−0.33	−0.81	0.00	0.32	−0.48	−0.86	−0.38
Estonia	0.17	0.11	−0.90	−0.22	0.19	0.01	−0.87	−0.27	0.03	0.24	−0.85	−0.05
Finland	0.72	−0.08	−0.89	0.07	0.68	−0.05	−0.86	0.10	0.77	0.00	−0.90	−0.16
France	−0.25	0.26	−0.85	0.29	−0.22	0.19	−0.80	0.32	−0.47	0.36	−0.82	0.27
Germany	0.10	0.00	−0.80	−0.24	0.03	−0.00	−0.75	−0.24	0.26	0.01	−0.87	−0.22
Greece	0.23	−0.07	0.04	−0.08	0.24	−0.36	0.38	0.12	0.17	0.33	−0.38	−0.15
Italy	0.94	0.22	−0.91	0.38	0.89	0.06	−0.84	0.28	0.90	0.47	−0.91	0.49
Ireland	−0.56	0.14	−0.71	0.25	−0.46	0.10	−0.73	0.11	−0.16	−0.09	−0.07	0.09
Netherlands	0.27	0.12	0.00	0.07	0.17	−0.08	0.17	0.00	0.08	0.11	−0.51	0.35
Portugal	0.13	−0.39	0.16	−0.05	0.19	−0.45	0.14	−0.08	0.23	−0.19	0.23	−0.22
Slovakia	−0.58	−0.25	0.73	−0.58	−0.62	−0.31	0.74	−0.66	0.14	−0.24	−0.03	0.34
Slovenia	0.56	−0.82	−0.94	0.63	0.60	−0.83	−0.90	0.58	0.39	−0.73	−0.85	0.59
Spain	0.06	0.34	−0.41	0.12	0.14	0.25	−0.35	0.04	−0.17	0.48	−0.31	0.55
European union, non-Eurozone countries												
Bulgaria	0.14	0.81	−0.66	0.43	−0.11	0.64	−0.43	0.37	−0.11	0.55	−0.37	0.60
Croatia	0.76	0.26	−0.79	0.12	0.59	0.18	−0.73	0.10	0.69	0.33	−0.73	0.23
Czech Rep	0.59	0.01	−0.82	−0.17	0.61	−0.01	−0.81	−0.16	0.43	0.05	−0.85	0.04
Denmark	−0.36	0.26	−0.94	0.01	−0.10	0.11	−0.91	0.14	−0.59	0.44	−0.65	0.17
Hungary	−0.79	0.63	−0.87	0.52	−0.77	0.57	−0.88	0.57	−0.81	0.79	−0.72	0.45
Latvia	0.11	0.04	−0.84	−0.37	0.13	0.02	−0.87	−0.43	0.00	0.11	−0.81	−0.32
Lithuania	0.39	−0.01	−0.86	−0.78	0.30	0.08	−0.82	−0.77	0.39	0.17	−0.82	−0.56
Poland	0.79	−0.62	−0.74	−0.06	0.78	−0.66	−0.71	−0.04	0.72	−0.46	−0.83	−0.01
Romania	0.59	0.04	−0.63	0.57	0.63	0.10	−0.49	0.42	0.25	0.27	−0.45	0.54
Sweden	−0.15	−0.41	−0.57	−0.38	−0.22	−0.51	−0.41	−0.17	−0.11	−0.24	−0.52	−0.42
UK	−0.39	0.46	−0.34	−0.80	−0.31	0.48	−0.40	−0.78	−0.54	0.42	−0.16	−0.67
Non-European union countries												
Montenegro	0.25	0.11	−0.07	0.36	0.61	0.18	−0.18	0.18	−0.07	−0.47	−0.33	0.53
Norway	0.17	0.17	−0.26	0.22	0.03	−0.03	−0.42	0.39	0.02	0.04	0.54	−0.23
Serbia	−0.46	0.19	−0.10	0.29	−0.43	0.16	−0.23	0.36	−0.55	0.33	0.08	0.28
Switzerland	−0.52	−0.04	0.61	0.23	−0.51	0.09	0.56	0.37	−0.51	0.03	0.64	0.31

GDP, gross domestic product.

Several conclusions can be made on the basis of the above. First, these data clearly dispute the assumption that specifically changes in unemployment have a direct effect on suicide rates. The temporal sequence and correlation of events (suicide rise first, economic recession follows, synchronisation of suicide rate changes across the continent) suggests there is a close relationship between the economic environment and suicide rates; however this relationship is not that of a direct cause and effect. The findings reported by the present study concerning Europe are similar to those reported for the USA. In spite of claims that the rise in unemployment caused a rise in the suicide rate in the USA,[34] a closer look at the data revealed that suicides rose first and unemployment followed.[39] One could argue that those people who are going to lose their jobs are stressed months before this happens, but 'fear' of unemployment is quite different from unemployment *per se*, especially since such an assumption suggests that employed people take their own life before they become unemployed.

Second, it is certain that an 'event' occurred in the European continent after 2005 and had a profound effect on suicide rates, probably by halting the ongoing reduction in suicide rates. The strong correlation of these rates with GDP per capita and the weaker but still important correlation with the other economic indices suggest that this event was probably the prodromal phase of the economic crisis. Unfortunately, no data concerning this 'prodrome' can be found in the literature.

It is important however to place a question mark on the nature of the 2007 nadir in the suicide rates. This nadir was evident as a sharp decline from previous year even in countries with otherwise low and stable suicide rates until that time (such as Greece) or in countries with a robust increasing trend (such as Slovakia).

Third, an important and robust finding of the current study was the strong correlation of suicide rates with GDP per capita, although such an effect was not detected by the regression analysis. This correlation was of the magnitude of 0.80 and was found in the vast majority of countries with independent calculations. The correlation was strong within countries and weaker across countries (and also in the regression models) suggesting that the GDP is related to fluctuations in the suicide rates but may not be with the absolute baseline value. Unemployment was more important for countries outside the Eurozone area. This pattern is rather difficult to interpret.

The GDP was first developed in 1934 by Simon Kuznets[43] and the danger of using it as a measure of welfare was pointed out by the author. It was established as the main tool to measure a country's economy in 1944 after the Bretton Woods conference. In spite of the early warnings, the GDP per capita is often used as a measurement of the standard of living. This is based on the assumption that all citizens would benefit from the economic growth of their country. However, essentially it is not such an

Table 6 Correlation between suicide rates and economic variables across countries during the same year

Suicide rate	National unemployment rate	National growth rate	GDP (per capita)	Inflation
2000				
Total	0.28	−0.04	−0.32	0.03
Men	0.31	−0.02	−0.36	0.09
Women	0.17	−0.04	−0.22	−0.12
2001				
Total	0.29	0.14	−0.34	−0.09
Men	0.37	0.20	−0.43	0.00
Women	0.23	0.01	−0.28	−0.12
2002				
Total	0.26	0.30	−0.44	−0.13
Men	0.29	0.32	−0.46	−0.13
Women	0.10	0.12	−0.25	−0.21
2003				
Total	0.24	0.24	−0.39	−0.20
Men	0.33	0.31	−0.48	−0.20
Women	0.13	0.03	−0.22	−0.26
2004				
Total	0.23	0.29	−0.42	0.12
Men	0.29	0.41	−0.51	0.26
Women	0.06	0.06	−0.20	−0.18
2005				
Total	0.25	0.28	−0.38	0.08
Men	0.30	0.35	−0.47	0.15
Women	0.12	0.02	−0.17	−0.15
2006				
Total	0.13	0.23	−0.34	−0.02
Men	0.21	0.31	−0.45	0.07
Women	0.07	−0.05	−0.14	−0.27
2007				
Total	0.00	0.19	−0.33	0.37
Men	0.06	0.30	−0.43	0.46
Women	−0.01	−0.03	−0.15	0.11
2008				
Total	0.13	0.09	−0.39	0.42
Men	0.20	0.14	−0.46	0.45
Women	0.03	−0.04	−0.20	0.18
2009				
Total	0.35	−0.36	−0.30	0.00
Men	0.42	−0.35	−0.42	0.05
Women	0.17	−0.27	−0.13	−0.03
2010				
Total	0.22	−0.11	−0.41	−0.09
Men	0.34	−0.04	−0.49	−0.08
Women	−0.09	−0.02	0.01	0.00
2011				
Total	0.50	0.32	−0.46	0.13
Men	0.51	0.39	−0.54	0.28
Women	0.41	0.18	−0.20	−0.10

indicator and it is not a measure of personal income, since it does not take into consideration the inequalities within a given country. Nevertheless, a similar index, the gross national income (GNI) per capita is included as a significant contributor to the Human Development Index (HDI).[44] In this paper, all the economic indices checked by the authors (Gini index, private debt % of GDP, HDI) did not manifest any pattern that would relate them to the change in the suicide rates trends after 2007.

One previous study reported that cross-sectionally the GDP per capita had a tendency to correlate with suicide rates in males ($r = 0.3$, $P = 0.06$) but not in females ($r = 0.2$, $P = 0.9$).[45] Our results are in accord with this. However, the relationship of GDP with suicidality seems to be more complex and it might follow an inverted U-shaped curve, with suicide trends declining after peaking at a certain threshold of economic development.[46] At low GDP levels, increases in GDP are associated with increases in suicide rates, but once a given threshold of economic development is reached, further increases in GDP do not correlate with further increases in suicide rates.[47]

Overall, there was a worldwide increase in the purchasing power parity-adjusted GDP per capita over the past 3 decades, and during the same time period the suicide rates have increased in developing Latin American and Caribbean countries and in several high-income Asian countries (such as Japan and South Korea), and have decreased in the majority of European countries and Canada.[48] Suicide rates in India were also positively correlated with GDP rates although the quality of the data is low and should be interpreted with caution.[49–53] Concerning Japan and South Korea, they are both high-income countries with universal health coverage but with the private health sector prevailing over public health resources. In South Korea, although life expectancy has rapidly increased, mortality as a result of suicide increased, particularly among men aged 30 years or older.[54]

It seems that economic growth is not invariably followed by a decrease in suicide rates, especially because income inequality causes them to increase.[55] Also if economic growth is not accompanied by adequate infrastructures for mental health services, suicide rates might trend up.[53]

Suicide rates and mental illness

When studying the possible causes of suicide, one should have in mind that suicide is probably the end result of an interaction between many different risk factors with mental disorders being the decisive one.[40,56] It is solidly proven that over 90% of people who die from suicide have a mental illness. Mood disorders are found in 80–85%[40,42,57] and schizophrenia in 9–13% of people dying each year because of suicide.[58] The significance of mental disorders may be much smaller in low- and middle-income countries.[59] Other risk factors in the field of psychiatry also exist, including personality disorders and substance and alcohol dependence,[60,61] and a family history of suicide.[60,62,63] Ethnic group,[64] problematic coping skills[65] and environmental variables such as recent psychosocial stress[66,67] and occupational problems or interpersonal problems with spouses or romantic partners[68] also constitute risk factors. The availability and access to lethal means (such as firearms) might be of importance.[42] Theoretically, any intervention that helps reducing these risk factors could ultimately reduce the suicide rate; however this has not been solidly proven for most of these variables.[40] Unfortunately, research on suicide is limited by the fact that the majority of suicide victims die at the first attempt.[69,70]

The first to suggest that the suicide rate depends on socio-economic driving forces was Enrico Agostino Morselli in 1882.[71] Since then, suicide has usually been considered a social problem, and several risk factors have been related to suicidal behaviour, both at the subject level (microsocioeconomic factors) and at the state level (macrosocioeconomic level).[56,72]

Suicide prevention

An example of a successful programme aiming to reduce suicide rates is the National Service Framework target set in the UK in 1999, which aimed to reduce suicides by at least 20% by 2010. This target was achieved. The interventions included awareness campaigns and encouragement particularly to general

practitioners to recognise depression and treat it early, especially with the use of selective serotonin reuptake inhibitors. However, in the USA and the Netherlands the official warning in 2003–4 was against prescribing selective serotonin reuptake inhibitors for young people, and this was followed by a reduction in prescribing and a detected increase in suicides in that age group.[73] In Slovenia an increase in antidepressant use lead to a decrease in the suicide rate[74] and this seems to be true for Sweden,[75,76] Hungary,[77] Europe as a whole[78] and all Organisation for Economic Co-operation and Development countries.[79,80] It seems that in spite of potential problems, the use of antidepressants overall decreases suicide rates.[81]

Most of the risk factors are likely to be dependent on the victim's behaviour and thus do not constitute independent factors,[82] however the recent economic crisis constitutes a stress factor that is independent of the behaviour of the person, although people with specific behaviours (such as great risk-taking entrepreneurs) are likely to be more vulnerable to the crisis. On the other hand, specific cultures (such as Hispanic people in the USA) seem to have some kind of protective effects against suicidal behaviour.[83] Additional support for this comes from the conclusion of a recent review that only the creation of social support networks reduces suicidality and that other interventions are of unproven effectiveness.[84–87] Although it has been suggested that a reduction in unemployment through governmental action should lead to a reduction in suicidality,[88] this remains an unproven theoretical suggestion, and is not supported by the results of the current study.

Findings from other studies

In his seminal work in 1979, Brenner reported that for every 10% increase in unemployment there is an increase of 1.2% in total mortality, including an increase by 1.7% in suicidality.[89] Suicide rates are lower in Western high-income countries in comparison with low- and middle-income countries.[90] The relationship of suicide rates with GDP suggests that suicide rates drop in times of economic expansion and increase in times of recession.[91] It has been argued that business cycles affect suicide rates in the USA with the overall suicide rate usually rising during recessions and falling during expansions.[25] In the past, economic crises have been correlated with increases in suicides, such as the Great depression,[21,23,92,93] the Russian crisis in the early 1990s[33] (although the data are not published reliably) and the Asian economic crisis in the late 1990s.[26,27] On the contrary, other authors suggested that actually recessions improve several health indicators.[94–96] Concerning the present economic crisis, it has been calculated that close to 5000 excess suicides occurred in the year 2009, with the increase consisting mainly of men of working age and with unemployment a direct causal factor.[33] A deterioration in mental health with increasing depression and anxiety rates has been reported after the economic crisis in Hong Kong,[97] south Australia,[98] Greece,[99] UK[15] and Spain,[30] and the effect seemed more severe in population groups who experienced unstable employment or financial problems.[30,97,98] However, the methodology of these studies cannot differentiate between general distress and clinical mood disorders and thus any link of these results with the suicide rates is problematic.

Variations between countries in suicide rates

There are considerable variations in the effect of the crisis on the suicide rate across countries and it is unclear whether these variations relate to the severity of the recession as well as to varying social support and labour market protections in different countries, as it has been previously suggested.[12,33,88] We were also unable to reproduce the finding that there are stronger associations between increases in national suicide rates and unemployment rates in countries with low baseline unemployment rates than in countries with high unemployment rates.[33] On the contrary, we found that the baseline suicide rate was correlated with the overall pattern of the curve of suicide rates after the nadir year.

Social capital

One area that deserves further research is that of the so called 'social capital'. Overall, the results of the current study imply that there were profound changes within the society of all European countries that preceded the economic crisis, however they were probably related to it or they might even constitute part of its aetiopathogenesis. The 'social capital' theory refers to the importance for the community of building generalised trust and, at the same time, the importance of individual free choice, in order to create a more cohesive society. It could be defined as 'the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition'.[100–102] A decline in social capital is considered to be at the core of modern socioeconomic problems.[103–105] Social cohesion has already been recognised as a factor influencing the suicide rate.[106]

Limitations

The current study has a number of limitations. It is an observational analysis based on aggregate data collected from national statistical agencies. Probably there are differences between countries both in the quality of the data as well as in the level of misclassification of suicide, and these could lead to potential bias between countries,[107] but it is not expected they had a significant impact on the results of the current study.

Cross-level bias and aggregation bias are typical of studies similar to the current one.[108] The effects observed at the aggregate level might be modulated by the ecological context at the level of the individual.[109] Also time series data are frequently non-stationary and vulnerable to random findings.[109] Another source of bias is possible registration bias concerning suicides between countries and over time, and also concerning the quality of the economical statistics.

Finally, an important fundamental problem is that it is probably too early to arrive at conclusions concerning the impact of the current economic crisis on health, mental health and the suicide rate in particular. It seems necessary to wait until data up to at least 2020 are gathered in order to have a complete picture.

The authors chose to publish the full data-set their analysis was based on in an online table as they strongly believe that this database should be publicly available. One of the major obstacles of the current study was the difficulty of gathering statistical data from the various countries, although these data should had been easily accessible to every citizen. The authors believe that the publication of this data-set so that anyone can perform further analysis is one of the major contributions of the current study.

Funding

P.D. and X.G. are recipients of the Janos Bolyai Fellowship of the Hungarian Academy of Sciences.

Konstantinos N. Fountoulakis, MD, Associate Professor of Psychiatry, 3rd Department of Psychiatry, School of Medicine, Aristotle University of Thessaloniki, Greece; **Wolfram Kawohl**, MD, Center for Social Psychiatry, Department of Psychiatry, Psychotherapy and Psychosomatics, Psychiatric Hospital, University of Zurich, Zurich, Switzerland; **Pavlos N. Theodorakis**, MD, Mental Health Hospitals Trust of Attica 'Dafni & Dromokaiteio' and WHO National Counterpart for Mental Health, Athens, Greece; **Ad J. F. M. Kerkhof**, MD, Faculty of Psychology and Education, Department of Clinical Psychology, VU University Amsterdam, Amsterdam, The Netherlands; **Alvydas Navickas**, MD, PhD, Associate Professor, Psychiatric Clinic, Vilnius University Medical Faculty, Vilnius, Lithuania; **Cyril Höschl**, MD, Prague Psychiatric Center/NIMH, Czech Republic; **Dusica Lecic-Tosevski**, MD, Professor of Psychiatry, Belgrade University School of Medicine and Institute of Mental Health, WHO Collaborating Centre, Belgrade, Serbia; **Eliot Sorel**, MD, The George Washington University, School of Medicine & School of Public Health, Washington DC, USA; **Elmars Rancans**, MD, PhD, Chair of the Department of Psychiatry and Narcology, Riga Stradins University, Latvia; **Eva Palova**, MD, Department of Psychiatry, University Hospital, Slovakia; **Georg Juckel**, MD, PhD, Department of Psychiatry, Ruhr University Bochum, LWL-University Hospital, Bochum, Germany; **Goran Isacsson**, MD, Associate Professor, Department of Clinical Neuroscience, Karolinska Institutet, Sweden; **Helena Korosec Jagodic,** Psychiatric Hospital Vojnik, Vojnik, Slovenia; **Ileana Botezat-Antonescu**, MD, Associate Professor, National Mental Health Center and Anti-drug, Bucharest, Romania; **Ingeborg Warnke**, PhD, Center for Social Psychiatry, Department of Psychiatry, Psychotherapy and Psychosomatics, Psychiatric Hospital, University of Zurich, Zurich, Switzerland; **Janusz Rybakowski**, Department of Adult Psychiatry, Poznan University of Medical Sciences, Poznan, Poland; **Jean Michel Azorin**, MD, Department of Psychiatry, Sainte Marguerite Hospital, Marseille, France; **John Cookson**, FRCP, FRCPsych, DPhil, East London NHS Trust, London, UK; **John Waddington**, PhD, Dsc, Molecular & Cellular Therapeutics, Royal College of Surgeons in Ireland, Dublin, Ireland; **Peter Pregelj**, University Psychiatric Hospital, Ljubljana, Slovenia; **Koen Demyttenaere**, University Psychiatric Center KU Leuven, Leuven, Belgium; **Luchezar G. Hranov**, MD, PhD, Associate Professor, Second Psychiatric Clinic, University Hospital for Active Treatment in Neurology and Psychiatry 'Sveti Naum', Sofia, Bulgaria; **Lidija Injac Stevovic**, Associate Professor of Psychiatry, Psychiatric Clinic, Clinical Center of Montenegro, School of Medicine in Podgorica, University of Montenegro, Montenegro; **Lucas Pezawas**, MD, Associate Professor, Division of Biological Psychiatry, Department of Psychiatry and Psychotherapy, Medical University of Vienna, Vienna, Austria; **Marc Adida**, MD, PhD, Department of Psychiatry, Sainte Marguerite Hospital, Marseille, France; **Maria Luisa Figuera**, MD, Full Professor of Psychiatry and Mental Health, University Psychiatric Clinic and University of Lisbon, Lisbon, Portugal; **Maurizio Pompili**, MD, PhD, Department of Neurosciences, Mental Health and Sensory Organs, Suicide Prevention Center, Sant'Andrea Hospital, Sapienza University of Rome, Rome, Italy; **Miro Jakovljević**, Department of Psychiatry, University Hospital Center Zagreb, Croatia; **Monica Vichi**, MSc, Centre for Epidemiology, Surveillance and Health Promotion (CNESPS), National Institute of Health (ISS), Rome, Italy; **Giulio Perugi**, MD, Professor, Department of Clinical and Experimental Medicine, Psychiatry Unit, University of Pisa and Institute of Behavioral Sciences 'G. De Lisio', Pisa, Italy; **Ole Andrasen**, NORMENT, KG Jebsen Centre for Psychosis Research, Division of Mental Health and Addiction, Oslo University Hospital and Institute of Clinical Medicine, University of Oslo, Oslo, Norway; **Olivera Vukovic**, School of Medicine, University of Belgrade, Institute of Mental Health, Belgrade, Serbia; **Paraskevi Mavrogiorgou**, MD, Department of Psychiatry, Ruhr University Bochum, LWL-University Hospital, Bochum, Germany; **Peeter Varnik**, Estonian-Swedish Mental Health and Suicidology Institute, Tallinn, Estonia; **Per Bech**, Psychiatric Research Unit, Mental Health Centre North Zealand, University of Copenhagen, Hillerød, Denmark; **Peter Dome**, Department of Clinical and Theoretical Mental Health, Semmelweis University, Faculty of Medicine and National Institute of Psychiatry and Addictions, Laboratory for Suicide Research and Prevention, Budapest, Hungary; **Petr Winkler**, MD, Prague Psychiatric Center/NIMH, Czech Republic; **Raimo K. R. Salokangas**, MD, Professor of Psychiatry, Department of Psychiatry, University of Turku, Finland; **Tiina From**, Department of Psychiatry, University of Turku, Turku, Finland; **Vita Danileviciute**, MD, Professor and Head of the Vilnius University Medical Faculty Psychiatric Clinic, Vilnius, Lithuania; **Xenia Gonda**, PhD, Department of Clinical and Theoretical Mental Health, Semmelweis University, Budapest and Department of Pharmacodynamics, Semmelweis University, MTA-SE Neuropsychopharmacology and Neurochemistry Research Group, Hungarian Academy of Sciences, Semmelweis University, Budapest and National Institute of Psychiatry and Addictions, Laboratory for Suicide Research and Prevention, Budapest, Hungary; **Zoltan Rihmer**, MD, Department of Clinical and Theoretical Mental Health, Semmelweis University, Faculty of Medicine and National Institute of Psychiatry and Addictions, Laboratory for Suicide Research and Prevention, Budapest, Hungary; **Jonas Forsman Benhalima**, Department of Clinical Neuroscience, Karolinska Institutet, Sweden; **Anne Grady**, Cert Business, Molecular & Cellular Therapeutics, Royal College of Surgeons in Ireland, Dublin, Ireland; **Anne Katrine Kloster Leadholm**, NORMENT, KG Jebsen Centre for Psychosis Research, Division of Mental Health and Addiction and University Hospital & Institute of Clinical Medicine, University of Oslo, Oslo, Norway; **Susan Soendergaard**, Psychiatric Research Unit, Mental Health Centre North Zealand, University of Copenhagen, Hillerød, Denmark; **Carlos Nordt**, PhD, Center for Social Psychiatry, Department of Psychiatry, Psychotherapy and Psychosomatics, Psychiatric Hospital, University of Zurich, Zurich, Switzerland; **Juan Lopez-Ibor**, MD, Emeritus Professor, Juan José López-Ibor Foundation and Department of Psychiatry and Clinical Psychology, School of Medicine, Universidad Complutense de Madrid, Spain

Correspondence: Konstantinos N. Fountoulakis, 3rd Department of Psychiatry, School of Medicine, Aristotle University of Thessaloniki, 6 Odysseos Street (1st Parodos, Ampelonon Street), 55535 Pournari Pylaia, Thessaloniki, Greece. Email: kfount@med.auth.gr

First received 25 Feb 2014, final revision 17 Jun 2014, accepted 27 Jun 2014

References

1 International Labour Organization. *ILO Global Employment Trends 2010-Unemployment reaches Highest Level on Record in 2009*. ILO, 2010 (http://www.ilo.org/manila/info/public/pr/WCMS_124768/lang–en/index.htm).

2 Reeves A, McKee M, Basu S, Stuckler D. The political economy of austerity and healthcare: cross-national analysis of expenditure changes in 27 European nations 1995-2011. *Health Policy* 2014; **115**: 1–8.

3 Reeves A, Basu S, McKee M, Marmot M, Stuckler D. Austere or not? UK coalition government budgets and health inequalities. *J R Soc Med* 2013; **106**: 432–6.

4 McKee M, Balabanova D, Basu S, Ricciardi W, Stuckler D. Universal health coverage: a quest for all countries but under threat in some. *Value Health* 2013; **16** (suppl 1): S39–45.

5 Karanikolos M, Mladovsky P, Cylus J, Thomson S, Basu S, Stuckler D, et al. Financial crisis, austerity, and health in Europe. *Lancet* 2013; **381**: 1323–31.

6 Suhrcke M, Stuckler D. Will the recession be bad for our health? It depends. *Soc Sci Med* 2012; **74**: 647–53.

7 Kentikelenis A, Karanikolos M, Papanicolas I, Basu S, McKee M, Stuckler D. Effects of Greek economic crisis on health are real. *BMJ* 2012; **345**: e8602.

8 Stuckler D, Basu S, Suhrcke M, Coutts A, McKee M. Effects of the 2008 recession on health: a first look at European data. *Lancet* 2011; **378**: 124–5.

9 McKee M, Stuckler D. The assault on universalism: how to destroy the welfare state. *BMJ* 2011; **343**: d7973.

10 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**: 1457–8.

11 Stuckler D, Basu S, McKee M, Suhrcke M. Responding to the economic crisis: a primer for public health professionals. *J Public Health* 2010; **32**: 298–306.

12 Stuckler D, Basu S, McKee M. Budget crises, health, and social welfare programmes. *BMJ* 2010; **340**: c3311.

13 Biggs B, King L, Basu S, Stuckler D. Is wealthier always healthier? The impact of national income level, inequality, and poverty on public health in Latin America. *Soc Sci Med* 2010; **71**: 266–73.

14 Stuckler D, Basu S, Suhrcke M, McKee M. The health implications of financial crisis: a review of the evidence. *Ulster Med J* 2009; **78**: 142–5.

15 Katikireddi SV, Niedzwiedz CL, Popham F. Trends in population mental health before and after the 2008 recession: a repeat cross-sectional analysis of the 1991-2010 Health Surveys of England. *BMJ Open* 2012; **2**: 5.

16 World Health Organization. *Financial Crisis and Global Health: Report of a High-Level Consultation*. WHO, 2009 (http://www.who.int/topics/financial_crisis/financialcrisis_report_200902.pdf).

17 Smith H. WHO apologises for claiming half of Greek HIV infections are self-inflicted. *Guardian* 2013, 26 November (http://www.theguardian.com/world/2013/nov/26/who-apologises-hiv-infections-greece-self-inflicted).

18 World Health Organization. *Review of Social Determinants and the Health Divide in the WHO European Region: Final Report*. WHO, 2014. Available from: (http://www.euro.who.int/__data/assets/pdf_file/0004/251878/Review-of-social-determinants-and-the-health-divide-in-the-WHO-European-Region-FINAL-REPORT.pdf?ua=1).

19 Fountoulakis KN, Grammatikopoulos IA, Koupidis SA, Siamouli M, Theodorakis PN. Health and the financial crisis in Greece. *Lancet* 2012; **379**: 1001–2.

20 Fountoulakis KN, Savopoulos C, Siamouli M, Zaggelidou E, Mageiria S, Iacovides A, et al. Trends in suicidality amid the economic crisis in Greece. *Eur Arch Psychiatry Clin Neurosci* 2013; **263**: 441–4.

21 Swinscow D. Some suicide statistics. *BMJ* 1951; **1**: 1417–23.

22 Milner A, Page A, LaMontagne AD. Duration of unemployment and suicide in Australia over the period 1985-2006: an ecological investigation by sex and age during rising versus declining national unemployment rates. *J Epidemiol Community Health* 2013; **67**: 237–44.

23 Morrell S, Taylor R, Quine S, Kerr C. Suicide and unemployment in Australia 1907–1990. *Soc Sci Med* 1993; **36**: 749–56.

24 Lester D, Yang B. The relationship between divorce, unemployment and female participation in the labour force and suicide rates in Australia and America. *Aust N Z J Psychiatry* 1991; **25**: 519–23.

25 Luo F, Florence CS, Quispe-Agnoli M, Ouyang L, Crosby AE. Impact of business cycles on US suicide rates, 1928-2007. *Am J Public Health* 2011; **101**: 1139–46.

26 Chang SS, Gunnell D, Sterne JA, Lu TH, Cheng AT. Was the economic crisis 1997-1998 responsible for rising suicide rates in East/Southeast Asia? A time-trend analysis for Japan, Hong Kong, South Korea, Taiwan, Singapore and Thailand. *Soc Sci Med* 2009; **68**: 1322–31.

27 Chang SS, Sterne JA, Huang WC, Chuang HL, Gunnell D. Association of secular trends in unemployment with suicide in Taiwan, 1959-2007: a time-series analysis. *Public Health* 2010; **124**: 49–54.

28 Anonymous. Sharp rise in suicides amid crisis. *ekathimerini.com* 2011; 30 June (http://www.ekathimerini.com/4dcgi/_w_articles_wsite1_1_30/06/2011_396649).

29 Economou M, Madianos M, Theleritis C, Peppou LE, Stefanis CN. Increased suicidality amid economic crisis in Greece. *Lancet* 2011; **378**: 1459.

30 Gili M, Roca M, Basu S, McKee M, Stuckler D. The mental health risks of economic crisis in Spain: evidence from primary care centres, 2006 and 2010. *Eur J Public Health* 2013; **23**: 103–8.

31 De Vogli R, Marmot M, Stuckler D. Excess suicides and attempted suicides in Italy attributable to the great recession. *J Epidemiol Community Health* 2013; **67**: 378–9.

32 De Vogli R, Marmot M, Stuckler D. Strong evidence that the economic crisis caused a rise in suicides in Europe: the need for social protection. *J Epidemiol Community Health* 2013; **67**: 298.

33 Chang SS, Stuckler D, Yip P, Gunnell D. Impact of 2008 global economic crisis on suicide: time trend study in 54 countries. *BMJ* 2013; **347**: f5239.

34 Reeves A, Stuckler D, McKee M, Gunnell D, Chang SS, Basu S. Increase in state suicide rates in the USA during economic recession. *Lancet* 2012; **380**: 1813–4.

35 Barr B, Taylor-Robinson D, Scott-Samuel A, McKee M, Stuckler D. Suicides associated with the 2008-10 economic recession in England: time trend analysis. *BMJ* 2012; **345**: e5142.

36 Fountoulakis KN, Koupidis SA, Grammatikopoulos IA, Theodorakis PN. First reliable data suggest a possible increase in suicides in Greece. *BMJ* 2013; **347**: f4900.

37 Economou M, Madianos M, Peppou LE, Theleritis C, Patelakis A, Stefanis C. Suicidal ideation and reported suicide attempts in Greece during the economic crisis. *World Psychiatry* 2013; **12**: 53–9.

38 Fountoulakis KN, Siamouli M, Grammatikopoulos IA, Koupidis SA, Siapera M, Theodorakis PN. Economic crisis-related increased suicidality in Greece and Italy: a premature overinterpretation. *J Epidemiol Community Health* 2013; **67**: 379–80.

39 Fountoulakis KN, Koupidis SA, Siamouli M, Grammatikopoulos IA, Theodorakis PN. Suicide, recession, and unemployment. *Lancet* 2013; **381**: 721–2.

40 Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, Haas A, et al. Suicide prevention strategies: a systematic review. *JAMA* 2005; **294**: 2064–74.

41 Tondo L, Albert MJ, Baldessarini RJ. Suicide rates in relation to health care access in the United States: an ecological study. *J Clin Psychiatry* 2006; **67**: 517–23.

42 Rihmer Z, Kantor Z, Rihmer A, Seregi K. Suicide prevention strategies – a brief review. *Neuropsychopharmacol Hung* 2004; **6**: 195–9.

43 Kuznets S. National income, 1929-1932. *National Bureau of Economic Research Bull* 1934; **49**: 7 June (http://www.nber.org/chapters/c2258.pdf).

44 United Nations. *Human Developing Reports*. UN, 2014 (http://hdr.undp.org/en).

45 Sher L. Per capita income is related to suicide rates in men but not in women. *J Mens Health Gend* 2006; **3**: 39–42.

46 Moniruzzaman S, Andersson R. Economic development as a determinant of injury mortality - a longitudinal approach. *Soc Sci Med* 2008; **66**: 1699–708.

47 Voracek M. Suicide rates, national intelligence estimates, and differential K theory. *Percept Mot Skills* 2009; **109**: 733–6.

48 Blasco-Fontecilla H, Perez-Rodriguez MM, Garcia-Nieto R, Fernandez-Navarro P, Galfalvy H, de Leon J, et al. Worldwide impact of economic cycles on suicide trends over 3 decades: differences according to level of development. A mixed effect model study. *BMJ Open* 2012; **2**: 3.

49 Soman CR, Safraj S, Kutty VR, Vijayakumar K, Ajayan K. Suicide in South India: a community-based study in Kerala. *Indian J Psychiatry* 2009; **51**: 261–4.

50 Gajalakshmi V, Peto R. Suicide rates in rural Tamil Nadu, South India: verbal autopsy of 39 000 deaths in 1997-98. *Int J Epidemiol* 2007; **36**: 203–7.

51 Prasad J, Abraham VJ, Minz S, Abraham S, Joseph A, Muliyil JP, et al. Rates and factors associated with suicide in Kaniyambadi Block, Tamil Nadu, South India, 2000-2002. *Int J Soc Psychiatry* 2006; **52**: 65–71.

52 Abraham VJ, Abraham S, Jacob KS. Suicide in the elderly in Kaniyambadi block, Tamil Nadu, South India. *Int J Geriatr Psychiatry* 2005; **20**: 953–5.

53 Jacob KS, Sharan P, Mirza I, Garrido-Cumbrera M, Seedat S, Mari JJ, et al. Mental health systems in countries: where are we now? *Lancet* 2007; **370**: 1061–77.

54 Yang S, Khang YH, Harper S, Davey Smith G, Leon DA, Lynch J. Understanding the rapid increase in life expectancy in South Korea. *Am J Public Health* 2010; **100**: 896–903.

55 Chen J, Choi Y, Sawada YH. How is suicide different in Japan? *Japan World Econ* 2009; **21**: 140–50.

56 Qin P, Agerbo E, Mortensen PB. Suicide risk in relation to socioeconomic, demographic, psychiatric, and familial factors: a national register-based study of all suicides in Denmark, 1981-1997. *Am J Psychiatry* 2003; **160**: 765–72.

57 Gray SM, Otto MW. Psychosocial approaches to suicide prevention: applications to patients with bipolar disorder. *J Clin Psychiatry* 2001; **62** (suppl 25): 56–64.

58 Meltzer HY. Suicide and schizophrenia: clozapine and the InterSePT study. International Clozaril/Leponex Suicide Prevention Trial. *J Clin Psychiatry* 1999; **60** (suppl 12): 47–50.

59 Manoranjitham SD, Rajkumar AP, Thangadurai P, Prasad J, Jayakaran R, Jacob KS. Risk factors for suicide in rural south India. *Br J Psychiatry* 2010; **196**: 26–30.

60 Oquendo MA, Bongiovi-Garcia ME, Galfalvy H, Goldberg PH, Grunebaum MF, Burke AK, et al. Sex differences in clinical predictors of suicidal acts after major depression: a prospective study. *Am J Psychiatry* 2007; **164**: 134–41.

61 Comtois KA, Russo JE, Roy-Byrne P, Ries RK. Clinicians' assessments of bipolar disorder and substance abuse as predictors of suicidal behavior in acutely hospitalized psychiatric inpatients. *Biol Psychiatry* 2004; **56**: 757–63.

62 Cavazzoni P, Grof P, Duffy A, Grof E, Muller-Oerlinghausen B, Berghofer A, et al. Heterogeneity of the risk of suicidal behavior in bipolar-spectrum disorders. *Bipolar Disord* 2007; **9**: 377–85.

63 Hawton K, Sutton L, Haw C, Sinclair J, Harriss L. Suicide and attempted suicide in bipolar disorder: a systematic review of risk factors. *J Clin Psychiatry* 2005; **66**: 693–704.

64 Kupfer DJ, Frank E, Grochocinski VJ, Houck PR, Brown C. African-American participants in a bipolar disorder registry: clinical and treatment characteristics. *Bipolar Disord* 2005; **7**: 82–8.

65 Johnson MR, Lydiard RB, Morton WA, Laird LK, Steele TE, Kellner CH, et al. Effect of fluvoxamine, imipramine and placebo on catecholamine function in depressed outpatients. *J Psychiatr Res* 1993; **27**: 161–72.

66 Leverich GS, Altshuler LL, Frye MA, Suppes T, Keck PE Jr, McElroy SL, et al. Factors associated with suicide attempts in 648 patients with bipolar disorder in the Stanley Foundation Bipolar Network. *J Clin Psychiatry* 2003; **64**: 506–15.

67 Leverich GS, McElroy SL, Suppes T, Keck PE Jr, Denicoff KD, Nolen WA, et al. Early physical and sexual abuse associated with an adverse course of bipolar illness. *Biol Psychiatry* 2002; **51**: 288–97.

68 Tsai SY, Lee JC, Chen CC. Characteristics and psychosocial problems of patients with bipolar disorder at high risk for suicide attempt. *J Affect Disord* 1999; **52**: 145–52.

69 Rihmer Z, Belso N, Kiss K. Strategies for suicide prevention. *Curr Opin Psychiatry* 2002; **15**: 83–7.

70 Isometsa E, Henriksson M, Aro H, Heikkinen M, Kuoppasalmi K, Lonnqvist J. Suicide in psychotic major depression. *J Affect Disord* 1994; **31**: 187–91.

71 Morselli E. *Suicide: Essay on Comparative Moral Statistics*. Appleton & Co, 1882.

72 Lester D, Yang BJ. Microsocionomics versus macrosocionomics as a model for examining suicide. *Psychol Rep* 1991; **69**: 735–8.

73 Gibbons RD, Brown CH, Hur K, Marcus SM, Bhaumik DK, Erkens JA, et al. Early evidence on the effects of regulators' suicidality warnings on SSRI prescriptions and suicide in children and adolescents. *Am J Psychiatry* 2007; **164**: 1356–63.

74 Korosec Jagodic H, Rokavec T, Agius M, Pregelj P. Availability of mental health service providers and suicide rates in Slovenia: a nationwide ecological study. *Croat Med J* 2013; **54**: 444–52.

75 Isacsson G, Holmgren A, Osby U, Ahlner J. Decrease in suicide among the individuals treated with antidepressants: a controlled study of antidepressants in suicide, Sweden 1995-2005. *Acta Psychiatr Scand* 2009; **120**: 37–44.

76 Isacsson G, Ahlner J. Antidepressants and the risk of suicide in young persons – prescription trends and toxicological analyses. *Acta Psychiatr Scand* 2014; **129**: 296–302.

77 Dome P, Kapitany B, Ignits G, Porkolab L, Rihmer Z. Tobacco consumption and antidepressant use are associated with the rate of completed suicide in Hungary: an ecological study. *J Psychiatr Res* 2011; **45**: 488–94.

78 Gusmao R, Quintao S, McDaid D, Arensman E, Van Audenhove C, Coffey C, et al. Antidepressant utilization and suicide in europe: an ecological multi-national study. *PLoS One* 2013; **8**: e66455.

79 Kamat MA, Edgar L, Niblock P, McDowell C, Kelly CB. Association between antidepressant prescribing and suicide rates in oecd countries: an ecological study. *Pharmacopsychiatry* 2014; **47**: 18–21.

80 Ludwig J, Marcotte DE, Norberg K. Anti-depressants and suicide. *J Health Econ* 2009; **28**: 659–76.

81 Ludwig J, Marcotte DE. Anti-depressants, suicide, and drug regulation. *J Policy Anal Manage* 2005; **24**: 249–72.

82 Isometsa E, Heikkinen M, Henriksson M, Aro H, Lonnqvist J. Recent life events and completed suicide in bipolar affective disorder. A comparison with major depressive suicides. *J Affect Disord* 1995; **33**: 99–106.

83 Oquendo MA, Dragatsi D, Harkavy-Friedman J, Dervic K, Currier D, Burke AK, et al. Protective factors against suicidal behavior in Latinos. *J Nerv Ment Dis* 2005; **193**: 438–43.

84 Fountoulakis KN, Gonda X, Rihmer Z. Suicide prevention programs through community intervention. *J Affect Disord* 2011; **130**: 10–6.

85 Rihmer Z, Gonda X, Fountoulakis KN. Suicide prevention programs through education in the frame of healthcare. *Psychiatr Hung* 2009; **24**: 382–7.

86 Fountoulakis KN, Gonda X, Siamouli M, Rihmer Z. Psychotherapeutic intervention and suicide risk reduction in bipolar disorder: a review of the evidence. *J Affect Disord* 2009; **113**: 21–9.

87 Gonda X, Fountoulakis KN, Kaprinis G, Rihmer Z. Prediction and prevention of suicide in patients with unipolar depression and anxiety. *Ann Gen Psychiatry* 2007; **6**: 23.

88 Stuckler D, Basu S, Suhrcke M, Coutts A, McKee M. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. *Lancet* 2009; **374**: 315–23.

89 Brenner M. Influence of the social environment on psychology: the historical perspective. In *Stress and Mental Disorder* (ed JE Barrett). Raven Press, 1979.

90 Jacob KS. The prevention of suicide in India and the developing world: the need for population-based strategies. *Crisis* 2008; **29**: 102–6.

91 Tapia Granados JA. Increasing mortality during the expansions of the US economy, 1900–1996. *Int J Epidemiol* 2005; **34**: 1194–202.

92 Stuckler D, Meissner C, Fishback P, Basu S, McKee M. Was the Great Depression a cause or correlate of significant mortality declines? An epidemiological response to Granados. *J Epidemiol Community Health* 2013; **67**: 467.

93 Tapia Granados JA, Diez Roux AV. Life and death during the Great Depression. *Proc Natl Acad Sci U S A* 2009; **106**: 17290–5.

94 Why are recessions good for your health? *Natl Bur Econ Res Bull Aging Health* 2012; **1**: 1–2.

95 Ariizumi H, Schirle T. Are recessions really good for your health? Evidence from Canada. *Soc Sci Med* 2012; **74**: 1224–31.

96 Ruhm CJ. Economic conditions and health behaviors: are recessions good for your health? *N C Med J* 2009; **70**: 328–9.

97 Lee S, Guo WJ, Tsang A, Mak AD, Wu J, Ng KL, et al. Evidence for the 2008 economic crisis exacerbating depression in Hong Kong. *J Affect Disord* 2010; **126**: 125–33.

98 Shi Z, Taylor AW, Goldney R, Winefield H, Gill TK, Tuckerman J, et al. The use of a surveillance system to measure changes in mental health in Australian adults during the global financial crisis. *Int J Public Health* 2011; **56**: 367–72.

99 Economou M, Madianos M, Peppou LE, Patelakis A, Stefanis CN. Major depression in the era of economic crisis: a replication of a cross-sectional study across Greece. *J Affect Disord* 2013; **145**: 308–14.

100 Portes A. Social capital: its origins and applications in modern sociology. *Ann Rev Socio* 1998; **24**: 1–24.

101 Bourdieu P. The forms of capital. In *Handbook of Theory and Research for the Sociology of Education* (ed J Richardson): 241–58. Greenwood, 1986.

102 Ferragina E. *Social Capital in Europe: A Comparative Regional Analysis*. Edward Elgar Publishing, 2012.

103 Jain SH, Goyal R, Fox S, Shrank WH. Bowling alone, healing together: the role of social capital in delivery reform. *Am J Manag Care* 2012; **18**: e209–11.

104 Evans CH. Bowling alone: implications for academic medicine. *Acad Med* 1997; **72**: 163–5.

105 Putnam R. Bowling alone: America's declining social capital. *J Democracy* 1995; **6**: 65–78.

106 Balint L, Dome P, Daroczi G, Gonda X, Rihmer Z. Investigation of the marked and long-standing spatial inhomogeneity of the Hungarian suicide rate: a spatial regression approach. *J Affect Disord* 2014; **155**: 180–5.

107 Kapusta ND, Tran US, Rockett IR, De Leo D, Naylor CP, Niederkrotenthaler T, et al. Declining autopsy rates and suicide misclassification: a cross-national analysis of 35 countries. *Arch Gen Psychiatry* 2011; **68**: 1050–7.

108 Moniruzzaman S, Andersson R. Relationship between economic development and suicide mortality: a global cross-sectional analysis in an epidemiological transition perspective. *Public Health* 2004; **118**: 346–8.

109 Lucey S, Corcoran P, Keeley HS, Brophy J, Arensman E, Perry IJ. Socioeconomic change and suicide: a time-series study from the Republic of Ireland. *Crisis* 2005; **26**: 90–4.

EXTRA CONTENT ONLINE

Table DS1 Raw data for all 29 countries

Year	Total population	Male population	Female population	Total N of suicides	Male suicides	Female suicides	total suicide rate	male suicide rate	female suicide rate	National unemployment rate	National growth rate	GDP (per capita)	inflation
European Union and Eurozone countries													
Austria													
2000	8020186	3868331	4133855	1586	1155	431	19,78	29,86	10,43	3,60	3,67	23974	2,00
2001	8020946	3881104	4139842	1489	1081	408	18,56	27,85	9,86	3,60	0,86	23834	2,30
2002	8063640	3906734	4156906	1551	1189	362	19,23	30,43	8,71	4,20	1,69	25679	1,70
2003	8100273	3929599	4170674	1456	1068	388	17,97	27,18	9,30	4,30	0,87	31269	1,30
2004	8142573	3952600	4189973	1418	1073	345	17,41	27,15	8,23	4,90	2,59	35662	2,00
2005	8201359	3984866	4216493	1392	1043	349	16,97	26,17	8,28	5,20	2,40	37067	2,10
2006	8254298	4014344	4239954	1293	997	296	15,66	24,84	6,98	4,80	3,67	39300	1,70
2007	8282984	4030062	4252922	1280	965	315	15,45	23,95	7,41	4,40	3,71	45181	2,20
2008	8318592	4048633	4269959	1265	962	303	15,21	23,76	7,10	3,80	1,40	49679	3,22
2009	8355260	4068047	4287213	1273	968	305	15,24	23,80	7,11	4,80	-3,81	45859	0,40
2010	8375290	4079093	4296197	1261	968	293	15,06	23,73	6,82	4,40	1,80	44916	1,70
2011	8338534	4087188	4301346	1286	973	313	15,42	23,81	7,28	4,20	2,80	49581	3,60
Correlations (all years)													
Total suic rate										-0,31	0,049	-0,90	-0,09
Male suic rate										-0,29	0,01	-0,89	-0,11
Female suic rate										-0,41	-0,12	-0,80	0,07
Correlations (2000-2005)													
Total suic rate										-0,89	0,08	-0,83	-0,20
Male suic rate										-0,81	-0,08	-0,77	-0,29
Female suic rate										-0,87	-0,14	-0,83	0,06
Correlations (2006-2011)													

Total suic rate										0,41	0,71	-0,37	0,06
Male suic rate										0,41	0,71	-0,37	0,06
Female suic rate										-0,17	0,31	0,43	0,40
Belgium													
2000													
2001													
2002													
2003	10355844	5066885	5288959	2091	1537	554	20,19	30,33	10,47	8,2	0,8	26615	1,59
2004	10396421	5087176	5309245	1986	1450	536	19,10	28,50	10,10	8,4	3,3	27952	2,1
2005	10445852	5111325	5334527	2028	1477	551	19,41	28,90	10,33	8,5	1,8	28958	2,78
2006	10511382	5143821	5367561	1934	1394	540	18,40	27,10	10,06	8,3	2,7	30227	1,79
2007	10584534	5181408	5403126	1856	1319	537	17,54	25,46	9,94	7,5	2,9	31604	1,82
2008	10666866	5224309	5442557	2000	1453	547	18,75	27,81	10,05	7,0	1,0	32341	4,49
2009	10753080	5268651	5484429	2013	1459	554	18,72	27,69	10,10	7,9	-2,8	31560	-0,04
2010	10839905	5312221	5527684	1831	1328	503	16,89	25,00	9,10	8,3	2,4	32849	2,19
2011													
Correlations (all years)													
Total suic rate										0,26	-0,33	-0,81	0,00
Male suic rate										0,26	-0,33	-0,81	0,00
Female suic rate										0,32	-0,48	-0,86	-0,38
Estonia													
2000	1372071	632709	739362	377	289	88	27,48	45,68	11,90	13,60	9,70	4497	4,00
2001	1366959	630449	736510	401	315	86	29,34	49,96	11,68	12,60	6,30	5110	5,80
2002	1361242	627591	733651	371	299	72	27,25	47,64	9,81	10,30	6,60	5723	3,60
2003	1356045	624961	731084	342	276	66	25,22	44,16	9,03	10,00	7,80	6441	1,30
2004	1351069	622450	728619	323	264	59	23,91	42,41	8,10	9,70	6,30	7178	3,00
2005	1347510	620600	726910	273	220	53	20,26	35,45	7,29	7,90	8,90	8306	4,10

2006	1344684	619299	725385	247	191	56	18,37	30,84	7,72	5,90	10,10	9966	4,40
2007	1342409	618245	724164	253	207	46	18,85	33,48	6,35	4,70	7,50	11977	6,60
2008	1340935	617410	723525	242	189	53	18,05	30,61	7,33	5,50	-4,20	12109	10,40
2009	1340415	617299	723116	269	220	49	20,07	35,64	6,78	13,80	-14,10	10267	-0,10
2010	1340127	617323	722804	221	181	40	16,49	29,32	5,53	16,90	3,30	10687	3,00
2011	1340194	617757	722437	218	178	40	16,27	28,81	5,54	12,50	8,30	11904	5,00
Correlations (all years)													
Total suic rate										0,17	0,11	-0,90	-0,22
Male suic rate										0,19	0,01	-0,87	-0,27
Female suic rate										0,03	0,24	-0,85	-0,05
Correlations (2000-2005)													
Total suic rate										0,94	-0,14	-0,94	0,37
Male suic rate										0,83	-0,32	-0,83	0,31
Female suic rate										1,00	0,11	-1,00	0,26
Correlations (2006-2011)													
Total suic rate										-0,26	-0,37	-0,26	-0,26
Male suic rate										-0,26	-0,37	-0,26	-0,26
Female suic rate										-0,48	0,08	-0,20	0,20
Finland													
2000	5171000	2523000	2648000	1165	873	292	22,53	34,60	11,03	9,80	5,30	25539	3,40
2001	5181000	2529000	2652000	1204	933	271	23,24	36,89	10,22	9,10	2,30	26848	2,60
2002	5195000	2538000	2657000	1095	824	271	21,08	32,47	10,20	9,10	1,80	27621	1,60
2003	5206000	2545000	2661000	1075	815	260	20,65	32,02	9,77	9,00	2,00	27917	0,90
2004	5220000	2553000	2667000	1064	812	252	20,38	31,81	9,45	8,80	4,10	29124	0,20
2005	5237000	2562000	2675000	994	724	270	18,98	28,26	10,09	8,40	2,90	30009	0,90
2006	5256000	2572000	2683000	1062	803	259	20,21	31,22	9,65	7,70	4,40	31477	1,60
2007	5277000	2584000	2693000	995	751	244	18,86	29,06	9,06	6,90	5,30	34003	2,50
2008	5300000	2597000	2704000	1033	801	232	19,49	30,84	8,58	6,40	0,30	34944	4,10

2009	5326000	2612000	2715000	1034	761	273	19,41	29,13	10,06	8,20	-8,50	32276	0,00
2010	5351000	2625000	2726000	954	718	236	17,83	27,35	8,66	8,40	3,30	33336	1,20
2011	5375000	2638000	2749000	912	710	202	16,97	26,91	7,35	7,80	2,70	35173	3,40
Correlations (all years)													
Total suic rate										0,72	-0,08	-0,89	0,07
Male suic rate										0,68	-0,05	-0,86	0,10
Female suic rate										0,77	0,00	-0,90	-0,16
Correlations (2000-2005)													
Total suic rate										0,89	-0,08	-0,94	0,84
Male suic rate										0,89	-0,08	-0,94	0,84
Female suic rate										0,81	0,14	-0,83	0,98
Correlations (2006-2011)													
Total suic rate										-0,46	-0,03	-0,60	-0,03
Male suic rate										-0,48	-0,03	-0,60	-0,03
Female suic rate										0,20	0,03	-0,88	-0,77
France													
2000	60508000	29366000	31142000	10957	8071	2886	18,11	27,48	9,27	8,50	3,70	16638	1,70
2001	60941000	29560000	31381000	10585	7767	2818	17,37	26,28	8,98	7,70	1,80	16666	1,70
2002	61385000	29759000	31626000	10778	7837	2941	17,56	26,33	9,30	7,90	0,90	17953	1,90
2003	61824000	29957000	31867000	11013	8154	2859	17,81	27,22	8,97	8,50	0,90	22002	2,10
2004	62251000	30152000	32099000	10943	7976	2967	17,58	26,45	9,24	8,90	2,50	25051	2,10
2005	62731000	30366000	32365000	10856	7930	2926	17,31	26,11	9,04	8,90	1,80	25841	1,80
2006	63186000	30570000	32616000	10569	7717	2852	16,73	25,24	8,74	8,80	2,50	27093	1,60
2007	63601000	30702000	32819000	10266	7532	2734	16,14	24,53	8,33	8,00	2,30	30826	1,50
2008	63962000	30958000	33004000	10522	7763	2759	16,45	25,08	8,36	7,40	-0,10	33615	2,80
2009	64305000	31126000	33179000	10644	7883	2761	16,55	25,33	8,32	9,10	-2,70	30929	0,10
2010	64648000	31295000	33353000	10509	7735	2774	16,26	24,72	8,32	9,40	1,50	29930	1,50
2011	64949000	31447000	33502000	10542	7812	2730	16,23	24,84	8,15	9,60	1,70	32382	2,10

Correlations (all years)													
Total suic rate										-0,25	0,26	-0,85	0,29
Male suic rate										-0,22	0,19	-0,80	0,32
Female suic rate										-0,47	0,36	-0,82	0,27
Correlations (2000-2005)													
Total suic rate										0,03	0,29	-0,48	0,17
Male suic rate										0,03	0,29	-0,48	0,17
Female suic rate										0,00	0,26	-0,26	-0,15
Correlations (2006-2011)													
Total suic rate										-0,14	-0,14	-0,26	-0,03
Male suic rate										-0,03	-0,37	0,08	-0,06
Female suic rate										-0,83	0,31	-0,26	0,20
Germany													
2000	82260000	40157000	42103000	11065	8131	2934	13,45	20,25	6,97	7.40	3,20	24912	1,40
2001	82440309	40274676	42165633	11156	8188	2968	13,53	20,33	7,04	7.50	1,20	25527	1,90
2002	82536680	40344879	42191801	11163	8106	3057	13,52	20,09	7,25	8.30	0,00	25850	1,50
2003	82531671	40359023	42172648	11150	8179	2971	13,51	20,27	7,04	9.20	-0,20	26024	1,00
2004	82500800	40353600	42147200	10733	7939	2794	13,01	19,67	6,63	9.70	1,20	26614	1,70
2005	82438000	40340000	42098000	10260	7523	2737	12,45	18,65	6,50	10.60	0,80	26974	1,50
2006	82314900	40301200	42013700	9765	7225	2540	11,86	17,93	6,05	9.80	3,40	28093	1,60
2007	82217800	40274300	41943500	9402	7009	2393	11,44	17,40	5,71	8.30	2,70	29521	2,30
2008	82002000	40184000	41818000	9451	7039	2412	11,53	17,52	5,77	7.20	1,00	30124	2,60
2009	81803000	40104000	41699000	9616	7228	2388	11,76	18,02	5,73	7.40	-4,70	29002	0,40
2010	81751000	40112000	41639000	10021	7465	2556	12,26	18,61	6,14	6.80	3,60	30295	1,10
2011	81843000	40206000	41637000	10144	7646	2498	12,39	19,02	6,00	5.70	3,00	31436	2,30
Correlations (all years)													
Total suic rate										0.10	0.00	-0.80	-0.24

Male suic rate										0.03	-0.00	-0.75	-0.24
Female suic rate										0.26	0.01	-0.87	-0.22
Correlations (2000-2005)													
Total suic rate										-0,66	-0,14	-0,66	0,20
Male suic rate										-0,71	0,03	-0,71	-0,03
Female suic rate										-0,48	-0,49	-0,48	-0,23
Correlations (2006-2011)													
Total suic rate										0,26	0,60	0,48	-0,29
Male suic rate										0,14	0,37	0,54	-0,40
Female suic rate										-0,14	0,83	0,26	-0,23
Greece													
2000	10917457	5406043	5511414	382	298	84	3.50	5.51	1.52	11,35	3,80	12483	3,20
2001	10934985	5396313	5538672	334	286	48	3.05	5.30	0.87	10,78	3,60	13372	3,40
2002	10968542	5410574	5557968	323	257	66	2.94	4.75	1.19	10,31	3,50	14254	3,60
2003	10998903	5421915	5576988	375	306	69	3.41	5.64	1.24	9,71	4,70	15642	3,50
2004	11037745	5439271	5598474	353	285	68	3.20	5.24	1.21	10,49	3,70	16748	2,90
2005	11073713	5453840	5619873	400	321	79	3.61	5.89	1.41	9,85	3,70	17386	3,50
2006	11112113	5469623	5642490	402	330	72	3.62	6.03	1.28	8,89	4,20	18713	3,20
2007	11143780	5481987	5661793	328	268	60	2.94	4.89	1.06	8,28	4,00	19938	2,90
2008	11182224	5498982	5683242	373	308	65	3.34	5.60	1.14	7,65	2,90	20753	4,20
2009	11190654	5499396	5691258	391	333	58	3.49	6.06	1.02	9,46	-2,00	20481	1,21
2010	11183516	5488800	5694716	377	336	41	3.37	6.12	0.72	12,53	-4,50	19646	4,71
2011	11123392	5453444	5669948	477	393	84	4.29	7.21	1.48	17,65	-7,10	18454	3,33
2012	11123034	5449803	5673231	508	417	91	4.57	7.65	1.60				
**Greek Statistics Authority data, pending final confirmation*													
Correlations (all years)													
Total suic rate										0,23	-0,07	0,04	-0,08

Male suic rate										0,24	-0,36	0,38	0,12
Female suic rate										0,17	0,33	-0,38	-0,15
Correlations (2000-2005)													
Total suic rate										-0,14	0,69	0,31	-0,20
Male suic rate										-0,37	0,66	0,31	0,06
Female suic rate										-0,03	0,72	0,08	-0,17
Correlations (2006-2011)													
Total suic rate										0,71	-0,37	-0,71	-0,03
Male suic rate										0,88	-0,66	-0,77	0,43
Female suic rate										0,03	0,08	-0,48	-0,03
Italy													
2000	56923524	27562988	29360536	4108	3062	1046	7,22	11,11	3,56	10,40	3,7	21044	2,50
2001	56960692	27576326	29384366	4030	3050	980	7,08	11,06	3,34	9,70	1,8	22039	2,80
2002	56993742	27587242	29406500	4069	3145	924	7,14	11,40	3,14	9,10	0,5	22777	2,50
2003	57321070	27766223	29554847	4075	3078	997	7,11	11,09	3,37	8,60	-0,05	23294	2,70
2004													
2005													
2006	58751711	28526888	30224823	3701	2842	859	6,30	9,96	2,84	6,79	2,20	25331	2,10
2007	59131287	28718441	30412846	3757	2893	864	6,35	10,07	2,84	6,09	1,68	26176	1,80
2008	59619290	28949747	30669543	3906	2999	907	6,55	10,36	2,96	6,74	-1,16	26326	3,30
2009	60045068	29152423	30892645	3975	3094	881	6,62	10,61	2,85	7,79	-5,49	25247	0,80
2010													
2011													
Correlations (all years)													
Total suic rate										0,94	0,22	-0,91	0,38
Male suic rate										0,89	0,06	-0,84	0,28
Female suic rate										0,90	0,47	-0,91	0,49

Correlations (2000-2005)													
Total suic rate										0,59	0,65	-0,62	-0,85
Male suic rate										-0,25	-0,34	0,28	-0,65
Female suic rate										0,63	0,74	-0,67	-0,02
Correlations (2006-2011)													
Total suic rate										0,72	-0,94	-0,02	-0,14
Male suic rate										0,78	-0,98	-0,15	-0,32
Female suic rate										-0,02	-0,17	0,62	0,79
Ireland													
2000	3789500	1882900	1906600	486	395	91	12,82	20,98	4,77	4,3	11,0	32977	5,6
2001	3847200	1913100	1934100	519	429	90	13,49	22,42	4,65	3,9	2,7	34102	4,9
2002	3917203	1946164	1971039	478	387	91	12,20	19,89	4,62	4,4	1,8	35307	4,6
2003	3979800	1976900	2002900	497	386	111	12,49	19,53	5,54	4,6	4,7	36047	3,5
2004	4045200	2011900	2033300	493	406	87	12,19	20,18	4,28	4,5	3,8	36954	2,2
2005	4133800	2061800	2072000	481	382	99	11,64	18,53	4,78	4,4	6,0	38361	2,5
2006	4232900	2117300	2115600	460	379	81	10,87	17,90	3,83	4,5	6,5	39525	4,0
2007	4375900	2191300	2184600	458	362	96	10,47	16,52	4,39	4,7	3,6	40135	4,9
2008	4485100	2238600	2246500	506	386	120	11,28	17,24	5,34	6,4	-1,8	38311	4,1
2009	4533400	2257300	2276100	552	443	109	12,18	19,63	4,79	12,0	-9,1	35483	-4,5
2010	4554800	2262200	2292600	495	405	90	10,87	17,90	3,93	13,8	0,5	34941	-1,0
2011	4574900	2270500	2304400	554	458	96	12,11	20,17	4,17	14,6	-1,6	35542	2,6
Correlations (all years)													
Total suic rate										-0,56	0,14	-0,71	0,25
Male suic rate										-0,46	0,10	-0,73	0,11
Female suic rate										-0,16	-0,09	-0,07	0,09
Correlations (2000-2005)													
Total suic rate										-0,55	-0,08	-0,88	0,83

Male suic rate										-0,66	-0,20	-0,77	0,60
Female suic rate										0,17	0,60	0,08	0,14
Correlations (2006-2011)													
Total suic rate										0,66	-0,88	-0,66	-0,71
Male suic rate										0,77	-0,43	-0,71	-0,83
Female suic rate										0,08	-0,77	0,03	0,14
Netherlands													
2000	15863950	7846317	8017633	1500	999	501	9,46	12,73	6,25	2,60	7,00	26245	2,60
2001	15987075	7909855	8077220	1473	1010	463	9,21	12,77	5,73	2,00	2,10	27903	4,50
2002	16105285	7971967	8133318	1567	1062	505	9,73	13,32	6,21	2,30	0,10	28808	3,40
2003	16192572	8015471	8177101	1500	1016	484	9,26	12,68	5,92	5,40	0,90	29395	2,10
2004	16258032	8045914	8212118	1514	1022	492	9,31	12,70	5,99	6,40	3,50	30168	1,20
2005	16305526	8065979	8239547	1572	1073	499	9,64	13,30	6,06	6,50	3,30	31459	1,70
2006	16334210	8077407	8256803	1524	1046	478	9,33	12,95	5,79	5,50	5,50	33049	1,10
2007	16357992	8088514	8269478	1353	943	410	8,27	11,66	4,96	4,50	4,60	34903	1,60
2008	16405399	8112073	8293326	1435	988	447	8,75	12,18	5,39	3,80	2,00	36148	2,50
2009	16485787	8156396	8329391	1525	1064	461	9,25	13,04	5,53	4,80	-5,00	34678	1,20
2010	16574989	8203476	8371513	1600	1124	476	9,65	13,70	5,69	5,40	4,90	35616	1,30
2011	16655799	8243482	8412317	1647	1136	511	9,89	13,78	6,07	5,40	2,10	36293	2,30
Correlations (all years)													
Total suic rate										0,27	0,12	0,00	0,07
Male suic rate										0,17	-0,08	0,17	0,00
Female suic rate										0,08	0,11	-0,51	0,35
Correlations (2000-2005)													
Total suic rate										0,26	-0,08	0,20	-0,14
Male suic rate										-0,26	-0,31	-0,03	0,43
Female suic rate										0,14	0,31	-0,20	-0,08
Correlations (2006-2011)													

Total suic rate										0,75	0,26	0,31	-0,14
Male suic rate										0,58	-0,03	0,37	-0,08
Female suic rate										0,84	0,31	0,14	-0,26
Portugal													
2000	10256658	4950696	5305962	525	418	107	5,12	8,44	2,02	3,90	3,92	8311	2,85
2001	10329340	4988937	5340403	754	586	168	7,30	11,75	3,15	4,00	1,97	8471	4,37
2002	10407465	5030247	5377218	1199	947	252	11,52	18,83	4,69	5,00	0,76	9244	3,60
2003	10474685	5066308	5408377	1155	888	267	11,03	17,53	4,94	6,30	-0,91	11238	3,22
2004	10529255	5094339	5434916	1205	908	297	11,44	17,82	5,46	6,60	1,56	12792	2,37
2005	10569592	5115742	5453850	914	696	218	8,65	13,61	4,00	7,60	0,78	13177	2,28
2006	10599095	5129937	5469158	873	678	195	8,24	13,22	3,57	7,70	1,45	13814	3,11
2007	10617575	5138807	5478768	1014	747	267	9,55	14,54	4,87	8,00	2,37	15829	2,45
2008	10627250	5142566	5484684	1035	791	244	9,74	15,38	4,45	7,60	-0,01	17185	2,59
2009	10637713	5148203	5489510	1014	793	221	9,53	15,40	4,03	9,40	-2,91	15955	-0,83
2010	10636979	5146643	5490336	1098	833	265	10,32	16,19	4,83	10,80	1,94	15493	1,40
2011	10562178	5046600	5515578	1012	788	224	9,58	15,61	4,06	12,70	1,55	16307	3,70
Correlations (all years)													
Total suic rate										0,13	-0,39	0,16	-0,05
Male suic rate										0,19	-0,45	0,14	-0,08
Female suic rate										0,23	-0,19	0,23	-0,22
Correlations (2000-2005)													
Total suic rate										0,48	-0,71	0,48	0,03
Male suic rate										0,48	-0,71	0,48	0,03
Female suic rate										0,66	-0,66	0,66	-0,20
Correlations (2006-2011)													
Total suic rate										0,26	0,31	0,37	-0,08
Male suic rate										0,77	0,08	0,25	-0,26
Female suic rate										0,08	0,71	0,14	-0,26

Slovakia													
2000	5378900	2611900	2767000	459	383	76	8,53	14,66	2,75	18,80		3862	12,20
2001	5378900	2611900	2767000	466	376	90	8,66	14,40	3,25	19,30	3,50	4084	7,30
2002	5379200	2611300	2767900	514	443	71	9,56	16,96	2,57	18,70	4,60	4665	3,10
2003	5380000	2611100	2768900	539	447	92	10,02	17,12	3,32	17,60	4,80	6173	8,60
2004	5384800	2613500	2771300	487	409	78	9,04	15,65	2,81	18,20	5,00	7548	7,60
2005	5389200	2615900	2773300	576	487	89	10,69	18,62	3,21	16,30	6,70	8249	2,70
2006	5393530	2618130	2775400	463	404	59	8,58	15,43	2,13	13,40	8,50	9273	4,50
2007	5401000	2623100	2777900	490	427	63	9,07	16,28	2,27	11,10	10,60	11292	2,80
2008	5412300	2629800	2782500	631	531	100	11,66	20,19	3,59	9,50	5,80	13122	4,60
2009	5424900	2636900	2788000	609	534	75	11,23	20,25	2,69	12,00	-4,90	11666	1,60
2010	5435200	2642200	2793000	612	534	78	11,26	20,21	2,79	14,40	4,20	11620	1,00
2011													
Correlations (all years)													
Total suic rate										-0,58	-0,25	0,73	-0,58
Male suic rate										-0,62	-0,31	0,74	-0,66
Female suic rate										0,14	-0,24	-0,03	0,34
Correlations (2000-2005)													
Total suic rate										-0,88	0,70	0,83	-0,60
Male suic rate										-0,94	0,70	0,77	-0,43
Female suic rate										-0,26	-0,10	0,26	0,08
Correlations (2006-2011)													
Total suic rate										-0,30	-0,50	0,90	0,00
Male suic rate										0,10	-0,90	0,70	-0,60
Female suic rate										-0,30	-0,50	0,90	0,00
Slovenia													
2000	1977229	957919	1019310	588	433	155	29,74	45,20	15,21	11,80	-0,20	10858	10,60

2001	1992035	973711	1018324	581	459	122	29,17	47,14	11,98	11,20	-0,50	11441	9,70
2002	1995718	976111	1019607	540	433	107	27,06	44,36	10,49	11,30	-0,60	12281	7,40
2003	1996773	977436	1019337	562	440	122	28,15	45,02	11,97	10,90	-1,20	12900	6,50
2004	1997004	977092	1019912	512	370	142	25,64	37,87	13,92	10,30	-0,30	13559	4,30
2005	2001114	980070	1021044	503	391	112	25,14	39,90	10,97	10,20	-0,40	14369	2,60
2006	2008516	985876	1022640	529	415	114	26,34	42,09	11,15	9,40	0,40	15467	2,60
2007	2019406	995125	1024281	434	335	99	21,49	33,66	9,67	7,70	0,60	17123	3,60
2008	2039399	1012277	1027122	409	325	84	20,05	32,11	8,18	6,70	1,70	18450	6,90
2009	2042335	1011767	1030568	448	351	97	21,94	34,69	9,41	9,10	1,50	17415	-0,60
2010	2049261	1014716	1034545	416	336	80	20,30	33,11	7,73	10,50	1,80	17379	1,10
2011	2052496	1015430	1037066	437	348	89	21,29	34,27	8,58	11,50	1,60	17620	0,20
Correlations (all years)													
Total suic rate										0,56	-0,82	-0,94	0,63
Male suic rate										0,60	-0,83	-0,90	0,58
Female suic rate										0,39	-0,73	-0,85	0,59
Correlations (2000-2005)													
Total suic rate										0,83	0,08	-0,94	0,94
Male suic rate										0,66	-0,14	-0,83	0,83
Female suic rate										0,26	0,71	-0,43	0,43
Correlations (2006-2011)													
Total suic rate										0,14	-0,88	-0,71	-0,37
Male suic rate										0,37	-0,77	-0,54	-0,54
Female suic rate										-0,14	-1,00	-0,66	0,03
Spain													
2000	40499790	19821384	20678407	3393	2574	819	8,38	12,99	3,96	14,00	5,00	13767	3,96
2001	41116842	20165514	20951328	3189	2430	759	7,76	12,05	3,62	10,63	3,70	13361	2,71
2002	41837894	20564089	21273805	3371	2554	817	8,06	12,42	3,84	11,30	2,70	14883	4,00
2003	42717064	21034326	21682738	3478	2650	828	8,14	12,60	3,82	11,30	3,10	22915	2,60

2004	43197684	21285247	21912437	3507	2651	856	8,12	12,45	3,91	10,40	3,20	29519	3,20
2005	44108530	21780869	22327661	3381	2557	824	7,67	11,74	3,69	9,16	3,60	21395	3,70
2006	44708964	22100466	22608498	3246	2504	730	7,26	11,33	3,23	8,51	4,10	21938	2,70
2007	45200737	22339962	22860775	3263	2473	800	7,22	11,07	3,50	8,65	3,50	23828	4,20
2008	46157822	22847737	23310085	3421	2648	773	7,41	11,59	3,32	11,55	0,90	22653	1,40
2009	46745807	23116988	23628819	3429	2743	415	7,34	11,87	1,76	18,10	-3,70	23369	0,80
2010	47021031	23226185	23794846	3145	2456	689	6,69	10,57	2,90	20,10	-0,30	24166	3,00
2011													
Correlations (all years)													
Total suic rate										0,06	0,34	-0,41	0,12
Male suic rate										0,14	0,25	-0,35	0,04
Female suic rate										-0,17	0,48	-0,31	0,55
Correlations (2000-2005)													
Total suic rate										0,78	0,08	0,14	-0,03
Male suic rate										0,78	0,08	0,14	-0,03
Female suic rate										0,52	0,02	0,26	0,48
Correlations (2006-2011)													
Total suic rate										-0,20	-0,10	-0,70	-0,80
Male suic rate										-0,10	-0,30	-0,60	-0,90
Female suic rate										-0,60	0,70	-0,10	0,60
European Union, no Eurozone countries													
Bulgaria													
2000													
2001													
2002													
2003													

2004													
2005	7713750	3743327	3975423	980	726	254	12,70	19,39	6,39	10,20	6,40	2705	5,00
2006	7679290	3720932	3958358	975	748	226	12,70	20,10	5,71	9,00	6,60	3125	7,30
2007	7640238	3699639	3940549	902	662	240	11,81	17,89	6,09	6,90	6,40	3984	8,40
2008	7606551	3681280	3925271	936	692	243	12,31	18,80	6,19	5,70	6,20	4926	12,30
2009	7563710	3659311	3904399	862	659	207	11,40	18,01	5,30	6,90	-5,50	4639	2,80
2010	7504868	3629809	3875059	856	646	209	11,41	17,80	5,39	10,30	0,40	4589	2,40
2011													
Correlations (all years)													
Total suic rate										0,14	0,81	-0,66	0,43
Male suic rate										-0,11	0,64	-0,43	0,37
Female suic rate										-0,11	0,55	-0,37	0,60
Croatia													
2000	4381000	2135300	2245700	926	692	234	21,14	32,41	10,42	22,60	2,90	3954	5,50
2001	4437460	2135900	2301560	882	657	225	19,88	30,76	9,78	15,30	4,40	3996	2,40
2002	4443000	2138400	2304600	875	645	230	19,69	30,16	9,98	15,20	5,20	4631	1,80
2003	4442300	2138300	2304000	865	672	193	19,47	31,43	8,38	14,10	5,40	6816	1,70
2004	4439400	2136900	2302500	871	645	226	19,62	30,18	9,82	13,80	4,10	7436	2,70
2005	4442000	2138700	2303300	875	652	223	19,70	30,49	9,68	12,70	4,30	8112	3,60
2006	4440000	2138900	2301100	798	575	223	17,97	26,88	9,69	11,10	4,90	8951	2,10
2007	4435982	2137984	2297998	776	578	198	17,49	27,03	8,62	9,60	5,10	9781	5,80
2008	4434508	2138022	2296486	795	611	184	17,93	28,58	8,01	8,40	2,10	10722	2,90
2009	4429078	2136231	2292847	790	618	172	17,84	28,93	7,50	9,10	-6,90	10111	1,90
2010	4417718	2131812	2285969	777	585	192	17,59	27,44	8,40	11,80	-1,40	10158	1,80
2011	3936022	1861229	2074793	720	520	182	18,29	27,94	8,77	17,80	0,00	10205	1,20
Correlations (all years)													
Total suic rate										0,76	0,26	-0,79	0,12
Male suic rate										0,59	0,18	-0,73	0,10

Female suic rate										0,69	0,33	-0,73	0,23
Correlations (2000-2005)													
Total suic rate										0,60	-0,60	-0,60	0,71
Male suic rate										0,48	-0,20	-0,48	0,26
Female suic rate										0,60	-0,60	-0,60	0,48
Correlations (2006-2011)													
Total suic rate										0,31	-0,08	0,26	-0,48
Male suic rate										-0,43	-0,71	0,66	-0,26
Female suic rate										0,66	0,60	-0,43	-0,08
Czech Rep													
2000	10266546	4996731	5269815	1649	1298	351	16,06	25,98	6,66	8,78	4,20	6207	3,90
2001	10206436	4967986	5238450	1623	1294	329	15,90	26,05	6,28	8,90	3,10	7030	4,70
2002	10203269	4966706	5236563	1534	1216	318	15,03	24,48	6,07	9,81	2,10	8171	1,80
2003	10211455	4974740	5236715	1719	1365	354	16,83	27,44	6,76	10,31	3,80	8274	0,10
2004	10220577	4980913	5239664	1583	1286	297	15,49	25,82	5,67	9,47	4,70	8999	2,80
2005	10251079	5002648	5248431	1564	1272	292	15,26	25,43	5,56	8,88	6,80	10224	1,90
2006	10287189	5026184	5261005	1400	1142	258	13,61	22,72	4,90	7,67	7,00	11522	2,50
2007	10381130	5082934	5298196	1375	1147	228	13,25	22,57	4,30	5,98	5,70	12779	2,80
2008	10467542	5136377	5331165	1379	1123	256	13,17	21,86	4,80	5,96	3,10	14791	6,30
2009	10506813	5157197	5349616	1464	1230	234	13,93	23,85	4,37	9,24	-4,70	13482	1,00
2010	10532770	5168799	5363971	1502	1245	257	14,26	24,09	4,79	9,57	2,70	14197	1,50
2011													
Correlations (all years)													
Total suic rate										0,59	0,01	-0,82	-0,17
Male suic rate										0,61	-0,01	-0,81	-0,16
Female suic rate										0,43	0,05	-0,85	0,04
Correlations (2000-2005)													
Total suic rate										0,03	0,03	-0,37	0,08

Male suic rate										0,14	-0,08	-0,31	0,14
Female suic rate										0,25	-0,48	-0,66	-0,08
Correlations (2006-2011)													
Total suic rate										1,00	-0,50	-0,10	-0,90
Male suic rate										1,00	-0,50	-0,10	-0,90
Female suic rate										-0,10	0,40	0,00	0,20
Denmark													
2000	5530018	2634122	2695896	729	533	196	13,68	20,23	7,27	4,60	3,50	21724	2,90
2001	5349212	2644319	2704893	727	508	219	13,59	19,21	8,10	4,80	0,70	21700	2,40
2002	5368354	2654146	2714208	723	538	185	13,47	20,27	6,82	4,80	0,50	23437	2,40
2003	5383507	2662423	2721084	653	500	153	12,13	18,78	5,62	5,60	0,40	28581	2,10
2004	5397640	2670135	2727505	691	499	192	12,80	18,69	7,04	5,70	2,30	32813	1,20
2005	5411405	2677292	2734113	654	480	174	12,09	17,93	6,36	5,00	2,40	34453	1,80
2006	5427659	2685846	2741813	650	472	178	11,98	17,57	6,49	4,10	3,40	36566	1,90
2007	5447084	2696662	2750422	580	401	179	10,65	14,87	6,51	3,80	1,60	41319	1,70
2008	5476011	2712886	2763125	597	415	182	10,90	15,30	6,59	3,50	-0,80	45359	3,40
2009	5511451	2732020	2779431	622	477	145	11,29	17,46	5,22	6,10	-5,70	40743	1,30
2010	5534738	2743286	2791452	562	406	156	10,15	14,80	5,59	7,60	1,60	40931	2,30
2011	5560628	2756582	2804046	589	437	152	10,59	15,85	5,42	7,70	1,10	43397	2,80
Correlations (all years)													
Total suic rate										-0,36	0,26	-0,94	0,01
Male suic rate										-0,10	0,11	-0,91	0,14
Female suic rate										-0,59	0,44	-0,65	0,17
Correlations (2000-2005)													
Total suic rate										-0,67	0,09	-0,86	0,62
Male suic rate										-0,72	-0,20	-0,77	0,84
Female suic rate										-0,53	0,17	-0,56	0,08
Correlations (2006-2011)													

Total suic rate										-0,51	-0,05	-0,61	-0,33
Male suic rate										0,03	-0,06	-0,48	-0,26
Female suic rate										-0,89	0,52	-0.06	0,26
Hungary													
2000	10043224	4791817	5251407	3269	2463	806	32,55	51,40	15,35	6,40	4,20	7100	9,80
2001	10200298	4851012	5349286	2979	2282	697	29,21	47,04	13,03	5,70	3,70	7400	9,20
2002	10174853	4836980	5337873	2843	2195	648	27,94	45,38	12,14	5,80	4,50	7700	5,30
2003	10142362	4818456	5323906	2801	2161	640	27,62	44,85	12,02	5,90	3,90	8000	4,70
2004	10116742	4804113	5312629	2742	2087	655	27,10	43,44	12,33	6,10	4,80	8400	6,80
2005	10097549	4793115	5304434	2621	2028	593	25,96	42,31	11,18	7,20	4,00	8800	3,60
2006	10076581	4784579	5292002	2461	1861	600	24,42	38,90	11,34	7,50	3,90	9200	3,90
2007	10066158	4779078	5287080	2450	1879	571	24,34	39,32	10,80	7,40	0,10	9200	8,00
2008	10045401	4769562	5275839	2477	1911	566	24,66	40,07	10,73	7,80	0,90	9300	6,10
2009	10030975	4763050	5267925	2461	1902	559	24,53	39,93	10,61	10,00	-6,80	8700	4,20
2010	10014324	4756900	5257424	2492	1945	547	24,88	40,89	10,40	11,20	1,30	8800	4,90
2011	9985722	4743901	5241821	2422	1847	575	24,25	38,93	10,97	10,90	1,60	9000	3,90
Correlations (all years)													
Total suic rate										-0,79	0,63	-0,87	0,52
Male suic rate										-0,77	0,57	-0,88	0,57
Female suic rate										-0,81	0,79	-0,72	0,45
Correlations (2000-2005)													
Total suic rate										-0,43	-0,20	-1,00	0,83
Male suic rate										-0,43	-0,20	-1,00	0,83
Female suic rate										-0,26	0,08	-0,83	1,00
Correlations (2006-2011)													
Total suic rate										0,08	-0,20	-0,11	0,32
Male suic rate										0,26	-0,48	-0,20	0,58
Female suic rate										-0,31	0,60	0,49	-0,46

Latvia													
2000	2381715	1096888	1284827	770	618	152	32,33	56,34	11,83	14,40	5,70	2834	2,60
2001	2353384	1082964	1270420	708	566	142	30,08	52,26	11,18	13,10	7,30	3141	2,50
2002	2320956	1066248	1254708	672	522	150	28,95	48,96	11,95	12,00	7,20	3511	1,90
2003	2299390	1054827	1244563	605	483	122	26,31	45,79	9,80	10,60	7,60	3961	2,90
2004	2276520	1044465	1232055	562	456	106	24,69	43,66	8,60	10,40	8,90	4665	6,20
2005	2249724	1032109	1217615	564	445	119	25,07	43,12	9,77	9,00	10,10	5719	6,70
2006	2227874	1022058	1205816	489	408	81	21,95	39,92	6,72	6,80	11,20	7135	6,50
2007	2208840	1013791	1195049	453	358	95	20,51	35,31	7,95	6,00	9,60	9515	10,10
2008	2191810	1007041	1184769	527	427	100	24,04	42,40	8,44	7,50	-3,30	10508	15,40
2009	2162834	992648	1170186	516	416	100	23,86	41,91	8,55	16,90	-17,70	8681	3,50
2010	2120504	970931	1149573	436	375	61	20,56	38,62	5,31	18,70	-0,90	8673	-1,10
2011	2074605	947939	1126666	440	365	75	21,21	38,50	6,66	15,40	5,50	9872	4,40
Correlations (all years)													
Total suic rate										0,11	0,04	-0,84	-0,37
Male suic rate										0,13	0,02	-0,87	-0,43
Female suic rate										0,00	0,11	-0,81	-0,32
Correlations (2000-2005)													
Total suic rate										0,94	-0,88	-0,94	-0,71
Male suic rate										1,00	-0,94	-1,00	-0,77
Female suic rate										0,77	-0,88	-0,77	-0,88
Correlations (2006-2011)													
Total suic rate										0,14	-0,54	0,26	0,26
Male suic rate										0,26	-0,60	0,08	0,14
Female suic rate										-0,26	-0,48	0,31	0,43
Lithuania													
2000	3512074	1644301	1867773	1631	1317	314	46,44	80,09	16,81	16,40	3,62	3553	1,40

2001	3486998	1630930	1856068	1535	1257	278	44,02	77,07	14,98	17,40	6,70	3929	2,00
2002	3475586	1624478	1851108	1551	1308	243	44,63	80,52	13,13	13,80	6,84	4396	-1,00
2003	3462553	1617304	1845249	1455	1199	256	42,02	74,14	13,87	12,40	10,28	4858	-1,30
2004	3445857	1608687	1837170	1381	1124	257	40,08	69,87	13,99	11,40	7,37	5410	2,90
2005	3425324	1598155	1827169	1319	1084	235	38,51	67,83	12,86	8,30	7,79	6326	3,00
2006	3403284	1586650	1816634	1049	853	196	30,82	53,76	10,79	5,60	7,81	7394	4,50
2007	3384879	1576963	1807916	1025	848	177	30,28	53,77	9,79	4,30	9,80	8922	8,10
2008	3366357	1566994	1799363	1111	918	193	33,00	58,58	10,73	5,80	2,91	10162	8,50
2009	3349872	1559247	1790625	1138	952	186	33,97	61,06	10,39	13,70	-14,85	8443	1,30
2010	3329039	1547751	1781288	1018	829	189	30,58	53,56	10,61	17,80	1,60	8920	3,80
2011	3244601	1507268	1737333	1018	817	201	31,38	54,20	11,57	15,40	6,05	10166	3,40
Correlations (all years)													
Total suic rate										0,39	-0,01	-0,86	-0,78
Male suic rate										0,30	0,08	-0,82	-0,77
Female suic rate										0,39	0,17	-0,82	-0,56
Correlations (2000-2005)													
Total suic rate										0,83	-0,77	-0,94	-0,60
Male suic rate										0,77	-0,66	-0,83	-0,66
Female suic rate										0,71	-0,71	-0,77	-0,14
Correlations (2006-2011)													
Total suic rate										0,26	-0,66	0,03	-0,37
Male suic rate										-0,08	-0,37	0,26	-0,20
Female suic rate										0,31	0,08	0,26	-0,08
Poland													
2000	38650000	18710000	19940000	4947	4090	857	12,80	21,86	4,30	15,10	4,00	4884	8,30
2001	38250000	18520000	19730000	4971	4184	787	13,00	22,59	3,99	17,50	1,30	5563	3,60
2002	38230000	18510000	19720000	5100	4215	885	13,34	22,77	4,49	18,00	1,30	6006	0,80
2003	38210000	18490000	19720000	4634	3890	744	12,13	21,04	3,77	20,00	3,60	5034	1,60

2004	38180000	18480000	19700000	4893	4104	769	12,82	22,21	3,90	19,00	5,20	7968	4,40
2005	38170000	18480000	19690000	4621	3885	736	12,11	21,02	3,74	17,60	3,30	6416	0,80
2006	38140000	18460000	19680000	4090	3444	646	10,72	18,66	3,28	14,80	6,00	7144	1,40
2007	38120000	18450000	19670000	3530	2924	606	9,26	15,85	3,08	11,20	6,70	8211	4,20
2008	38130000	18460000	19670000	3964	3333	631	10,40	18,06	3,21	9,50	5,10	9569	3,30
2009	38150000	18460000	19690000	4384	3739	645	11,49	20,25	3,28	12,10	1,80	8175	3,80
2010	38530000	18650000	19880000	4087	3517	570	10,61	18,86	2,87	12,40	3,70	9272	2,90
2011													
Correlations (all years)													
Total suic rate										0,79	-0,62	-0,74	-0,06
Male suic rate										0,78	-0,66	-0,71	-0,04
Female suic rate										0,72	-0,46	-0,83	-0,01
Correlations (2000-2005)													
Total suic rate										-0,08	-0,40	0,08	0,06
Male suic rate										-0,08	-0,40	0,08	0,06
Female suic rate										-0,37	-0,26	-0,31	0,23
Correlations (2006-2011)													
Total suic rate										0,60	-0,70	-0,60	-0,40
Male suic rate										0,50	-0,90	-0,30	-0,30
Female suic rate										0,30	0,00	-0,70	-0,30
Romania													
2000	22435205	10968854	11466351	2836	2325	511	12,64	21,20	4,46	7,20	2,50	1800	45,70
2001	22408393	10949490	11458903	2720	2278	442	12,14	20,80	3,86	7,20	5,80	2000	34,50
2002	21794793	10642538	11152255	3067	2539	528	14,07	23,86	4,73	7,50	8,00	2200	22,50
2003	21733556	10606245	11127311	2894	2386	508	13,32	22,50	4,57	6,80	5,50	2400	15,30
2004	21673328	10571606	11101722	2720	2276	444	12,55	21,53	4,00	8,00	8,80	2800	11,90
2005	21623849	10543518	11080331	2602	2132	470	12,03	20,22	4,24	7,20	4,40	3700	9,00
2006	21584365	10521189	11063176	2717	2237	480	12,59	21,26	4,34	7,30	8,10	4500	6,56

2007	21537563	10496720	11040843	2429	1983	446	11,28	18,89	4,04	6,40	6,50	5800	4,84
2008	21504442	10477611	11026831	2472	2026	446	11,50	19,34	4,04	5,80	7,50	6500	7,85
2009	21469959	10457219	11012740	2586	2197	389	12,04	21,01	3,53	6,90	-6,40	5500	5,59
2010	21431298	10434143	10997155	2766	2304	462	12,91	22,08	4,20	7,30	-1,50	5800	6,09
2011	21413815	10423518	10990297	2537	2142	395	11,85	20,55	3,59	7,04	2,50	6100	3,33
Correlations (all years)													
Total suic rate										0,59	0,04	-0,63	0,57
Male suic rate										0,63	0,10	-0,49	0,42
Female suic rate										0,25	0,27	-0,45	0,54
Correlations (2000-2005)													
Total suic rate										0,03	0,20	-0,37	0,37
Male suic rate										0,21	0,48	-0,14	0,14
Female suic rate										-0,15	-0,14	-0,08	0,08
Correlations (2006-2011)													
Total suic rate										0,87	-0,26	-0,52	0,26
Male suic rate										0,87	-0,26	-0,52	0,26
Female suic rate										0,46	0,66	-0,20	0,66
Sweden													
2000	8861426	4380118	4481308	1130	802	328	12,75	18,31	7,32	4,70	4,50	30636	1,00
2001	8882792	4392753	4490039	1196	833	363	13,46	18,96	8,08	5,80	1,30	31680	2,40
2002	8909128	4408445	4500683	1180	862	318	13,24	19,55	7,07	6,00	2,50	32856	2,20
2003	8940788	4427107	4513681	1108	775	333	12,39	17,51	7,38	6,60	2,30	34092	1,90
2004	8975670	4446656	4529014	1154	833	321	12,86	18,73	7,09	7,40	4,20	35508	0,40
2005	9011392	4466311	4545081	1219	835	384	13,53	18,70	8,45	7,80	3,20	36804	0,50
2006	9047752	4486550	4561202	1196	817	379	13,22	18,21	8,31	7,10	4,30	38916	1,40
2007	9113257	4523523	4589734	1126	801	325	12,36	17,71	7,08	6,10	3,30	41004	2,20
2008	9182927	4563921	4619006	1170	855	315	12,74	18,73	6,82	6,20	-0,60	41712	3,40
2009	9256347	4603710	4652637	1240	887	353	13,40	19,27	7,59	8,30	-5,00	40080	-0,30

2010	9340682	4649014	4691668	1138	836	302	12,18	17,98	6,44	8,60	6,60	42708	1,30
2011	9415570	4690244	4725326	1099	779	320	11,67	16,61	6,77	7,80	3,70	44448	2,60
Correlations (all years)													
Total suic rate										-0,15	-0,41	-0,57	-0,38
Male suic rate										-0,22	-0,51	-0,41	-0,17
Female suic rate										-0,11	-0,24	-0,52	-0,42
Correlations (2000-2005)													
Total suic rate										0,31	-0,20	0,31	0,08
Male suic rate										-0,08	-0,26	-0,08	0,37
Female suic rate										0,26	-0,31	0,26	0,03
Correlations (2006-2011)													
Total suic rate										-0,08	-0,54	-0,88	-0,43
Male suic rate										0,14	-0,54	-0,60	-0,37
Female suic rate										-0,37	-0,37	-0,94	-0,25
UK													
2000	58886100	28690500	30195600	6124	4581	1543	10,40	15,97	5,11	5,70	4,46	27000	1,10
2001	59113497	28832420	30281077	5932	4469	1463	10,03	15,50	4,83	5,10	3,15	27800	0,80
2002	59318779	28960754	30358025	5826	4347	1479	9,82	15,01	4,87	5,00	2,66	28800	1,50
2003	59552182	29104342	30447840	5731	4267	1464	9,62	14,66	4,81	5,10	3,52	27660	1,30
2004	59841892	29273840	30568052	5850	4288	1562	9,78	14,65	5,11	4,70	2,96	29600	1,50
2005	60235498	29493020	30742478	5671	4192	1479	9,41	14,21	4,81	4,70	2,09	30500	2,10
2006	60584338	29689265	30895073	5554	4196	1358	9,17	14,13	4,40	5,10	2,61	32200	2,70
2007	60985677	29917938	31067739	5377	4085	1292	8,82	13,65	4,16	5,50	3,47	33700	2,10
2008	61398226	30153832	31244394	5706	4331	1375	9,29	14,36	4,40	5,10	-1,10	29300	4,10
2009	61791956	30374010	31417946	5675	4304	1371	9,18	14,17	4,36	6,70	-4,37	25500	1,90
2010	62261967	30643254	31618713	5608	4231	1377	9,01	13,81	4,36	7,90	2,09	27500	3,30
2011													
Correlations (all years)													

Total suic rate										-0,39	0,46	-0,34	-0,80
Male suic rate										-0,31	0,48	-0,40	-0,78
Female suic rate										-0,54	0,42	-0,16	-0,67
Correlations (2000-2005)													
Total suic rate										0,71	0,60	-0,66	-0,75
Male suic rate										0,88	0,71	-0,83	-0,84
Female suic rate										0,18	0,26	-0,20	-0,17
Correlations (2006-2011)													
Total suic rate										-0,41	-0,80	-0,50	0,30
Male suic rate										-0,41	-0,80	-0,50	0,30
Female suic rate										-0,66	-0,50	-0,20	0,50
Non EU countries													
Montenegro													
2000	612496	305931	309104	112	78	34	18,29	25,50	11,00	19,20	1,00	1750	24,80
2001	614791	305931	309104	142	95	47	23,10	31,05	15,21	21,20	1,10	2113	28,00
2002	617085	305931	309104	120	84	36	19,45	27,46	11,65	20,70	1,90	2208	9,40
2003	620145	305931	309104	131	84	47	21,12	27,46	15,21	22,70	2,50	2435	6,70
2004	613353	302111	311242	119	93	26	19,40	30,78	8,35	27,70	4,40	2684	4,30
2005	614261	302400	311861	118	82	36	19,21	27,12	11,54	30,30	4,20	2912	1,80
2006	615025	302734	312291	138	107	31	22,44	35,34	9,93	29,60	8,60	3443	2,00
2007	615875	303273	312602	121	89	32	19,65	29,35	10,24	19,40	10,70	4280	8,00
2008	616969	303956	313013	126	80	46	20,42	26,32	14,70	16,80	6,90	4908	7,30
2009	618294	304732	313562	107	77	30	17,31	25,27	9,57	19,10	5,70	4720	1,50
2010													
2011													
Correlations (all years)													

Total suic rate										0,25	0,11	-0,07	0,36
Male suic rate										0,61	0,18	-0,18	0,18
Female suic rate										-0,07	-0,47	-0,33	0,53
Correlations (2000-2005)													
Total suic rate										0,03	-0,03	-0,08	0,37
Male suic rate										0,20	0,23	0,06	0,23
Female suic rate										-0,11	-0,32	-0,20	0,40
Correlations (2006-2011)													
Total suic rate										0,40	0,40	-0,40	0,20
Male suic rate										0,80	0,80	-0,80	0,40
Female suic rate										-0,40	0,40	0,40	0,80
Norway													
2000	4478497	2217140	2261357	541	409	132	12,08	18,45	5,84	3,40	2,60	27153	3,00
2001	4503436	2231301	2272135	549	411	138	12,19	18,42	6,07	3,60	1,50	27439	2,70
2002	4524066	2241934	2282132	494	362	132	10,92	16,15	5,78	3,90	0,90	30645	0,80
2003	4552252	2256107	2296145	502	374	128	11,03	16,58	5,57	4,50	0,40	35697	2,00
2004	4577457	2269049	2308408	529	359	170	11,56	15,82	7,36	4,40	3,40	41034	0,60
2005	4606363	2284070	2322293	533	360	173	11,57	15,76	7,45	4,60	1,90	47657	1,50
2006	4640219	2301981	2338238	532	391	141	11,46	16,99	6,03	3,40	1,40	52868	2,50
2007	4681134	2325788	2355346	485	336	149	10,36	14,45	6,33	2,50	1,70	60547	0,70
2008	4737171	2359690	2377481	505	347	158	10,66	14,71	6,65	2,50	-1,30	68977	3,40
2009	4799252	2395053	2404199	573	416	157	11,94	17,37	6,53	3,10	-2,80	56852	2,30
2010	4858199	2426752	2431447	548	384	164	11,28	15,82	6,74	3,50	-0,80	62431	2,30
2011	4920305	2460849	2459456	598	434	164	12,15	17,64	6,67	3,30	-0,10	71842	1,20
Correlations (all years)													
Total suic rate										0,17	0,17	-0,26	0,22
Male suic rate										0,03	-0,03	-0,42	0,39
Female suic rate										0,02	0,04	0,54	-0,23

Correlations (2000-2005)													
Total suic rate										-0,43	0,43	-0,37	0,66
Male suic rate										-0,83	-0,14	-0,94	0,83
Female suic rate										0,26	0,71	0,48	-0,26
Correlations (2006-2011)													
Total suic rate										0,46	-0,31	0,08	-0,03
Male suic rate										0,46	-0,31	0,08	-0,03
Female suic rate										0,32	-0,42	0,77	-0,06
Serbia													
2000	7516346	3655777	3860569	1546	1072	474	20,57	29,32	12,28	12,10		3398	1,13
2001	7503433	3648533	3854900	1443	1026	417	19,23	28,12	10,82	12,20	5,30	1709	0,39
2002	7500031	3647190	3852841	1449	1053	396	19,32	28,87	10,28	13,30	4,30	2137	0,15
2003	7480591	3637789	3842802	1381	998	383	18,46	27,43	9,97	14,60	2,50	2313	0,11
2004	7463157	3629194	3833963	1346	979	367	18,04	26,98	9,57	18,50	9,30	2549	0,14
2005	7440769	3618040	3822729	1381	998	383	18,56	27,58	10,02	20,80	5,40	2729	0,18
2006	7411569	3603698	3807871	1444	1022	422	19,48	28,36	11,08	20,90	3,60	3144	0,07
2007	7381579	3588957	3792622	1354	969	385	18,34	27,00	10,15	18,10	5,40	3857	0,10
2008	7350222	3573814	3776408	1290	903	387	17,55	25,27	10,25	13,60	3,80	4445	0,09
2009	7320807	3560048	3760759	1376	1000	376	18,80	28,09	10,00	16,10	-3,50	3955	0,07
2010	7291436	3546374	3745062	1209	905	304	16,58	25,52	8,12	19,20	1,80	3841	0,12
2011	7258753	3530924	3727829	1256	909	347	17,30	25,74	9,31	26,10	1,60	3204	0,07
Correlations (all years)													
Total suic rate										-0,46	0,19	-0,10	0,29
Male suic rate										-0,43	0,16	-0,23	0,36
Female suic rate										-0,55	0,33	0,08	0,28
Correlations (2000-2005)													
Total suic rate										-0,77	-0,32	0,08	0,77
Male suic rate										-0,77	-0,32	0,08	0,77

Female suic rate										-0,83	-0,23	0,03	0,88
Correlations (2006-2011)													
Total suic rate										-0,14	0,08	0,14	-0,75
Male suic rate										0,31	-0,20	-0,31	-0,69
Female suic rate										-0,26	0,54	0,26	-0,46
Switzerland													
2000	7204055	3519698	3684357	1292	934	358	17,93	26,54	9,72	1,80	3,70	34033	1,60
2001	7255653	3544349	3711304	1208	895	313	16,65	25,25	8,43	1,70	1,20	31965	1,00
2002	7313853	3575029	3738824	1328	932	396	18,16	26,07	10,59	2,50	0,20	31772	0,60
2003	7364148	3601539	3762609	1093	783	310	14,84	21,74	8,24	3,70	0,00	38364	0,60
2004	7415102	3628696	3786406	1089	770	319	14,69	21,22	8,42	3,90	2,40	43266	0,80
2005	7459128	3652502	3806626	1099	805	294	14,73	22,04	7,72	3,80	2,70	30038	1,20
2006	7508739	3679359	3829380	1082	765	317	14,41	20,79	8,28	3,30	3,80	29483	1,10
2007	7593494	3727014	3866480	1119	812	307	14,74	21,79	7,94	2,80	3,80	28797	0,70
2008	7701856	3786675	3915181	1060	753	307	13,76	19,89	7,84	2,60	2,20	25317	2,40
2009	7785806	3830566	3955240	808	695	113	10,38	18,14	2,86	3,70	-1,90	27969	-0,50
2010	7870134	3877426	3992708	652	568	84	8,28	14,65	2,10	3,90	3,00	31413	0,70
2011	7954662	3922253	4032409	603	572	31	7,58	14,58	0,77	2,80	1,90	27692	0,20
Correlations (all years)													
Total suic rate										-0,52	-0,04	0,61	0,23
Male suic rate										-0,51	0,09	0,56	0,37
Female suic rate										-0,51	0,03	0,64	0,31
Correlations (2000-2005)													
Total suic rate										-0,77	-0,14	-0,37	-0,06
Male suic rate										-0,77	0,31	-0,48	0,40
Female suic rate										-0,60	-0,03	-0,03	-0,08
Correlations (2006-2011)													
Total suic rate										-0,29	0,69	0,14	0,49

Male suic rate										-0,29	0,69	0,14	0,49
Female suic rate										-0,20	0,69	0,20	0,58
Europe-countries with data 2000-2010 (Belgium, Italy, Montenegro and Bulgaria excluded because of incomplete data)													
2000	429947247	209459316	220469932	59873	45153	14720	13,93	21,56	6,68				
2001	431483804	210282349	221201455	58624	44520	14104	13,59	21,17	6,38				
2002	432729703	210978947	221750756	59592	45072	14520	13,77	21,36	6,55				
2003	434540344	211934885	222605459	58583	44478	14105	13,48	20,99	6,34				
2004	435941409	212670297	223271112	57963	43821	14122	13,30	20,61	6,33				
2005	437969462	213759938	224209524	56325	42515	13810	12,86	19,89	6,16				
2006	439537845	214600383	224936462	53895	40872	13011	12,26	19,05	5,78				
2007	441202320	215434814	225687506	51615	39140	12485	11,70	18,17	5,53				
2008	443251055	216648416	226603639	53376	40684	12692	12,04	18,78	5,60				
2009	444825169	217452639	227373530	54437	42154	12012	12,24	19,39	5,28				
2010	446575604	218367743	228207924	53504	41221	12283	11,98	18,88	5,38				
EU- countries with data 2000-2010 (Belgium, Italy and Bulgaria excluded because of incomplete data)													
2000	410748349	227629689	240024185	60602	45800	14802	14,75	20,12	6,17				
2001	469181974	228434492	240747482	59454	45238	14216	12,67	19,80	5,90				
2002	470385495	229102036	241283459	60390	45870	14520	12,84	20,02	6,02				
2003	472464423	230205673	242258750	59682	45401	14281	12,63	19,72	5,89				
2004	416485693	203143358	213342335	54999	41713	13266	13,21	20,53	6,22				
2005	426176952	207948653	218233299	54292	41078	13214	12,74	19,75	6,05				

2006	486408319	237263165	249144154	55513	42284	13216	11,41	17,82	5,30				
2007	488317638	238211135	250026453	53316	40578	12748	10,92	17,03	5,10				
2008	490687647	239559264	251129383	55363	42372	12990	11,28	17,69	5,17				
2009	492528082	240478706	252050376	56517	43796	12454	11,47	18,21	4,94				
2010	434060703	212147000	221913766	51951	40010	11940	11,97	18,86	5,38				
Eurozone- countries with data 2000-2010 (Belgium and Italy excluded because of incomplete data)													
2000	246001041	147581058	155325508	36591	27081	9510	14,87	18,35	6,12				
2001	304493504	148426718	156066786	36181	26910	9271	11,88	18,13	5,94				
2002	306146777	149293341	156853436	37019	27483	9536	12,09	18,41	6,08				
2003	308086330	150311929	157774401	37217	27703	9514	12,08	18,43	6,03				
2004	251918067	123126043	128792024	32552	24115	8437	12,92	19,59	6,55				
2005	253545382	123980458	129564924	31602	23347	8255	12,46	18,83	6,37				
2006	313509987	153141012	160367975	34134	25531	8591	10,89	16,67	5,36				
2007	314996830	153835903	161080927	33293	24912	8391	10,57	16,19	5,21				
2008	316883872	154891738	161993134	34229	25730	8499	10,80	16,61	5,25				
2009	318305087	155584063	162722024	34779	26415	8093	10,93	16,98	4,97				

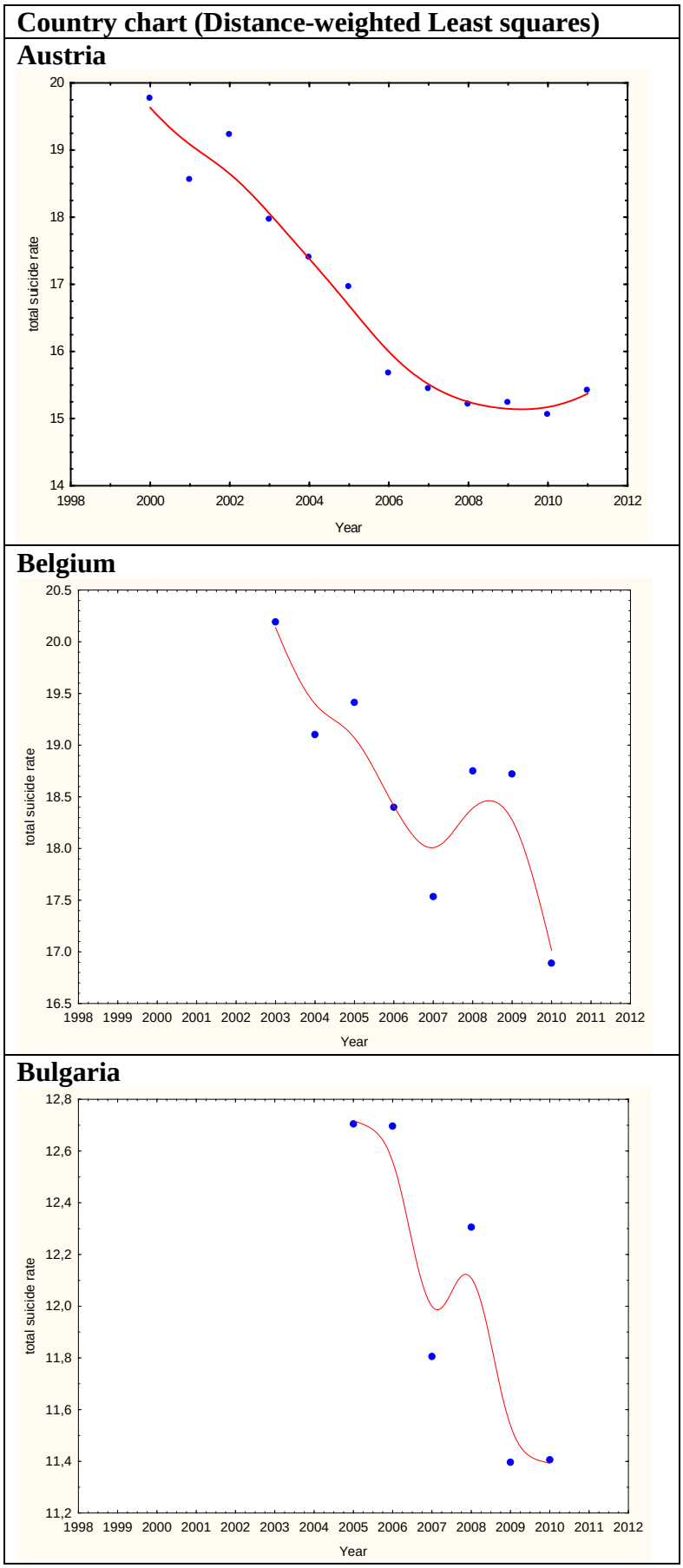
2010	259042795	126821301	132221494	30709	23091	7618	11,85	18,21	5,76				
Non-EU countries with data 2000-2010 (Montenegro excluded because of incomplete data)													
2000	19198898	9392615	9806283	3379	2415	964	17,60	25,71	9,83				
2001	19262522	9424183	9838339	3200	2332	868	16,61	24,74	8,82				
2002	19337950	9464153	9873797	3271	2347	924	16,91	24,80	9,36				
2003	19396991	9495435	9901556	2976	2155	821	15,34	22,70	8,29				
2004	19455716	9526939	9928777	2964	2108	856	15,23	22,13	8,62				
2005	19506260	9554612	9951648	3013	2163	850	15,45	22,64	8,54				
2006	19560527	9585038	9975489	3058	2178	880	15,63	22,72	8,82				
2007	19656207	9641759	10014448	2958	2117	841	15,05	21,96	8,40				
2008	19789249	9720179	10069070	2855	2003	852	14,43	20,61	8,46				
2009	19905865	9785667	10120198	2757	2111	646	13,85	21,57	6,38				
2010	20019769	9850552	10169217	2409	1857	552	12,03	18,85	5,43				
Europe-countries with data 2000-2011													
2000	278459096	135802413	142638683	43085	32067	11018	15,47	23,61	7,72				
2001	277446460	135198453	142248007	42505	31819	10686	15,32	23,54	7,51				
2002	277792989	135382814	142410175	43283	32341	10942	15,58	23,89	7,68				
2003	278491209	135731798	142759411	42549	31898	10651	15,28	23,50	7,46				
2004	279139326	136047159	143092167	41686	31110	10576	14,93	22,87	7,39				
2005	279841951	136399857	143442094	40510	30133	10377	14,48	22,09	7,23				
2006	280445674	136716389	143728285	39217	29219	9998	13,98	21,37	6,96				
2007	281132810	137029147	144023663	37616	28134	9482	13,38	20,53	6,58				
2008	281702195	137427420	144275775	38201	28649	9552	13,56	20,85	6,62				
2009	282234669	137721937	144513732	38887	29615	9272	13,78	21,50	6,42				
2010	282836966	138059022	144778007	38630	29279	9351	13,66	21,21	6,46				

2011	282811568	138039723	144833845	38507	29274	9215	13,62	21,21	6,36				
EU- countries with data 2000-2011													
2000	257067013	125236186	131812827	39922	29812	10110	15,53	23,80	7,67				
2001	258155607	125760346	132395261	39243	29435	9808	15,20	23,41	7,41				
2002	258422611	125901945	132520666	39976	29950	10026	15,47	23,79	7,57				
2003	259072652	126224942	132847710	39506	29704	9802	15,25	23,53	7,38				
2004	259660740	126509858	133150882	38679	28975	9704	14,90	22,90	7,29				
2005	260308895	126832889	133476006	37499	27959	9540	14,41	22,04	7,15				
2006	260863297	127121300	133740997	36084	27004	9080	13,83	21,24	6,79				
2007	261457569	127379121	133998448	34622	25967	8655	13,24	20,39	6,46				
2008	261895916	127700491	134196425	35420	26715	8705	13,52	20,92	6,49				
2009	262299828	127921877	134378951	36119	27493	8626	13,77	21,49	6,42				
2010	262774867	128186753	134588177	36141	27381	8760	13,75	21,36	6,51				
2011	262631949	128102705	134591244	36054	27349	8687	13,73	21,35	6,45				
Eurozone- countries with data 2000-2011													
2000	200122351	97584786	102519565	28631	21062	7569	14,31	21,58	7,38				
2001	201037070	98072978	102964092	28496	21054	7442	14,17	21,47	7,23				
2002	201935941	98530710	103405231	29065	21341	7724	14,39	21,66	7,47				
2003	202668196	98900280	103767916	29125	21528	7597	14,37	21,77	7,32				
2004	203335583	99227296	104108287	28558	21055	7503	14,04	21,22	7,21				
2005	204047652	99583689	104463963	27645	20303	7342	13,55	20,39	7,03				
2006	204655782	99895528	104759254	26724	19781	6943	13,06	19,80	6,63				
2007	205263806	100154400	105029406	25783	19119	6664	12,56	19,09	6,34				
2008	205694460	100464454	105231006	26271	19552	6719	12,77	19,46	6,39				
2009	206089312	100677752	105412560	26766	20044	6722	12,99	19,91	6,38				
2010	206586564	100952916	105633648	26952	20101	6851	13,05	19,91	6,49				

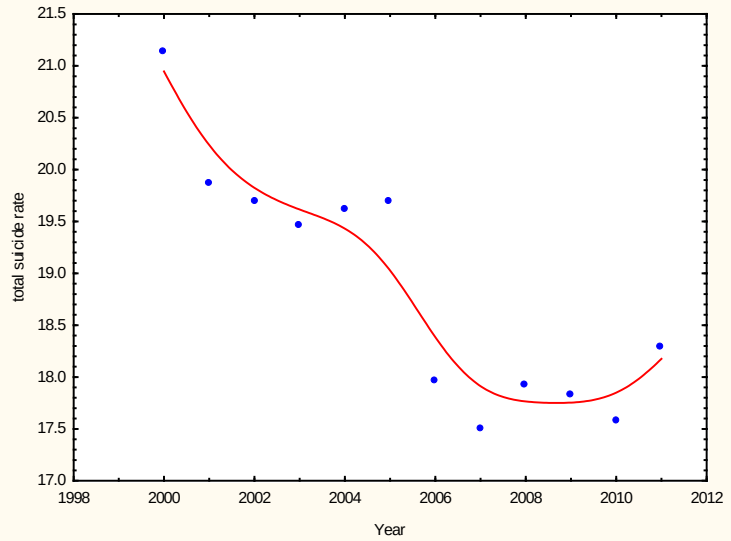
2011	207000986	101172024	105890962	27229	20442	6787	13,15	20,21	6,41				
Non-EU countries with data 2000-2011													
2000	19198898	9392615	9806283	3379	2415	964	17,60	25,71	9,83				
2001	19262522	9424183	9838339	3200	2332	868	16,61	24,74	8,82				
2002	19337950	9464153	9873797	3271	2347	924	16,91	24,80	9,36				
2003	19396991	9495435	9901556	2976	2155	821	15,34	22,70	8,29				
2004	19455716	9526939	9928777	2964	2108	856	15,23	22,13	8,62				
2005	19506260	9554612	9951648	3013	2163	850	15,45	22,64	8,54				
2006	19560527	9585038	9975489	3058	2178	880	15,63	22,72	8,82				
2007	19656207	9641759	10014448	2958	2117	841	15,05	21,96	8,40				
2008	19789249	9720179	10069070	2855	2003	852	14,43	20,61	8,46				
2009	19905865	9785667	10120198	2757	2111	646	13,85	21,57	6,38				
2010	20019769	9850552	10169217	2409	1857	552	12,03	18,85	5,43				
2011	20133720	9914026	10219694	2457	1915	542	12,20	19,32	5,30				

Data supplement to Fountoulakis et al. Relationship of suicide rates to economic variables in Europe: 2000-2011. Br J Psychiatry doi: 10.1192/bjp.bp.114.147454

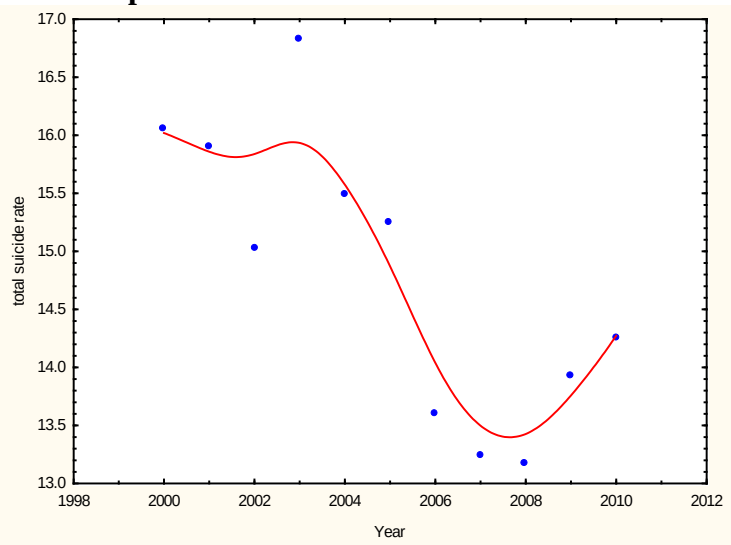
Fig. DS1 Total suicide rates by country.



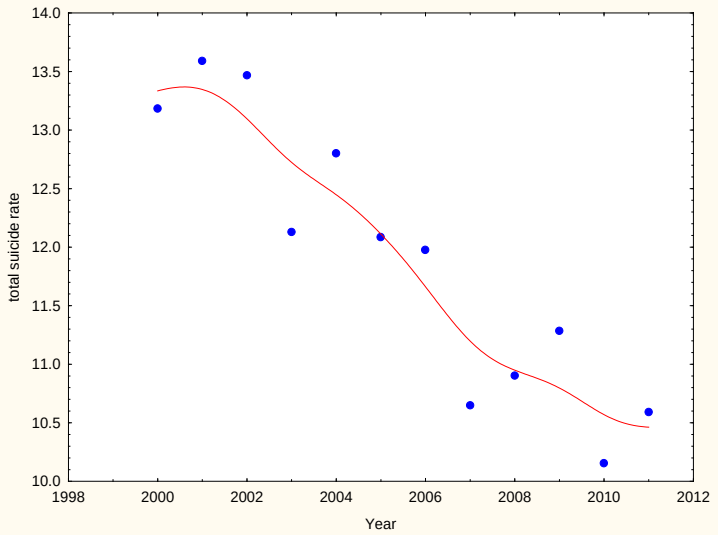
Croatia



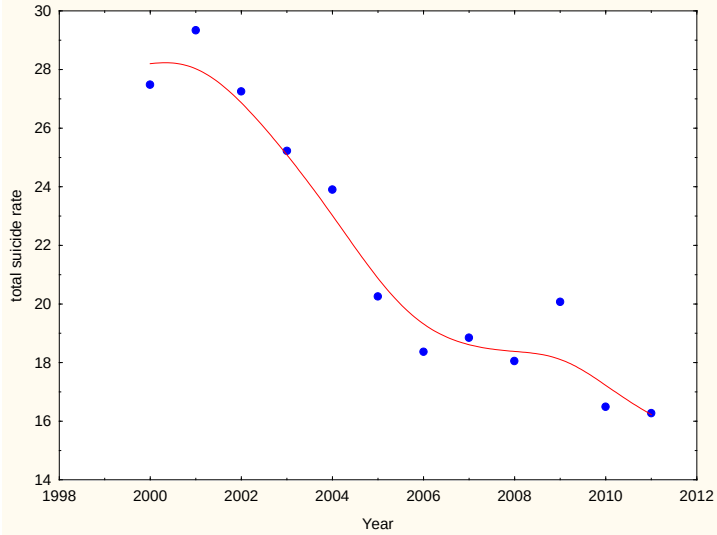
Czech Republic



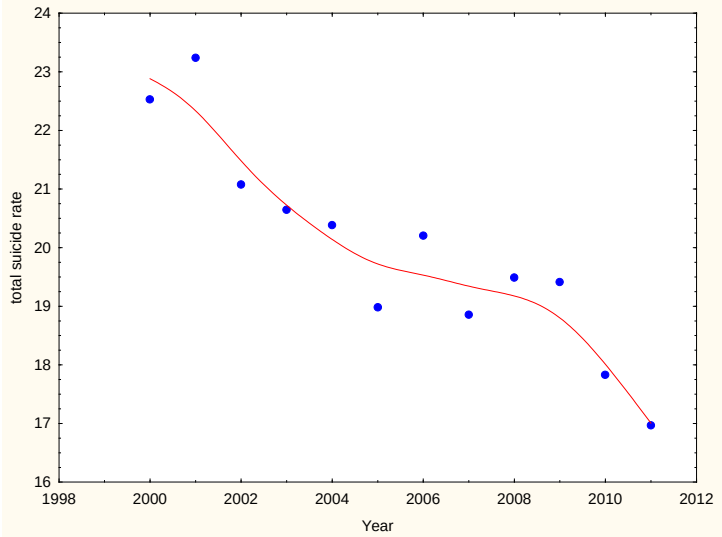
Denmark



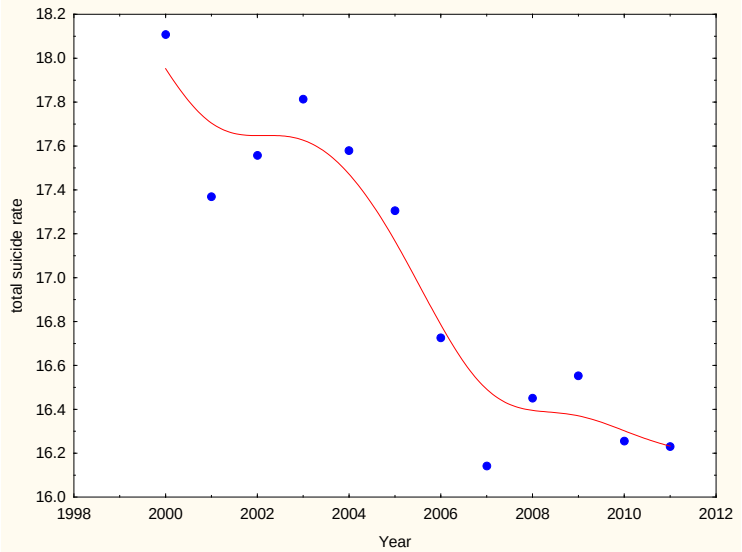
Estonia



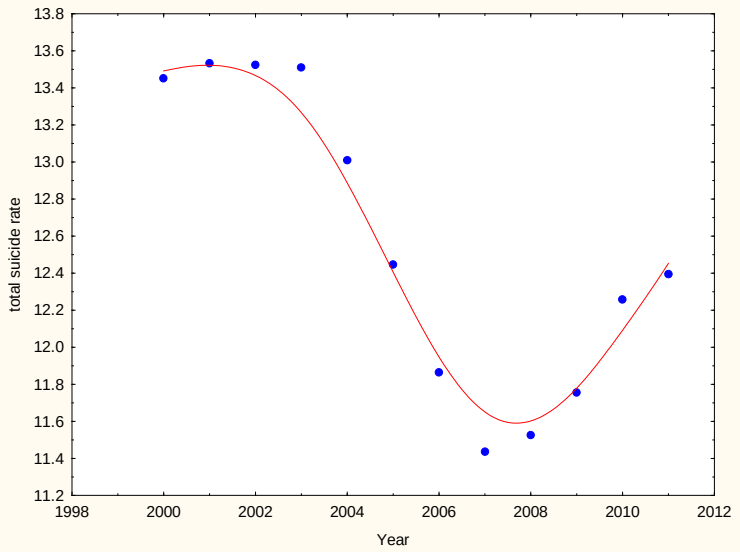
Finland



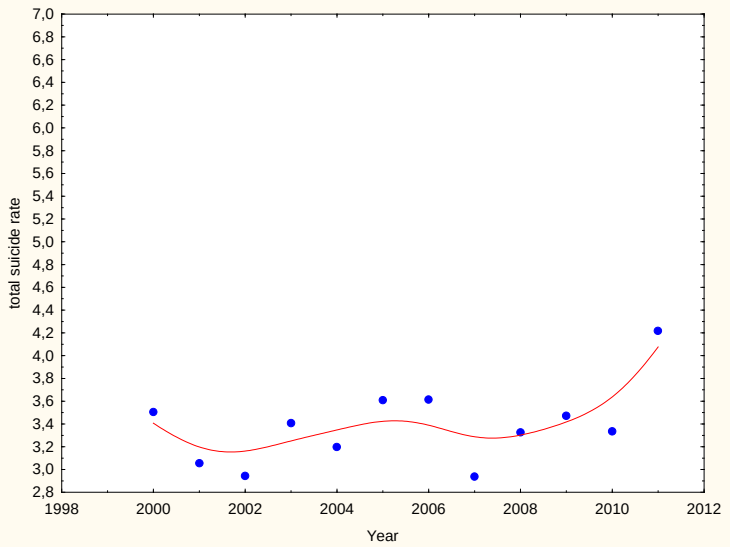
France



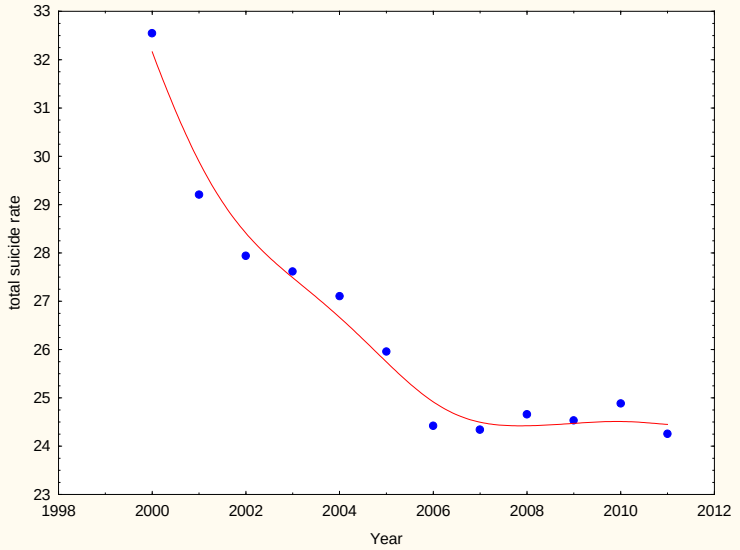
Germany



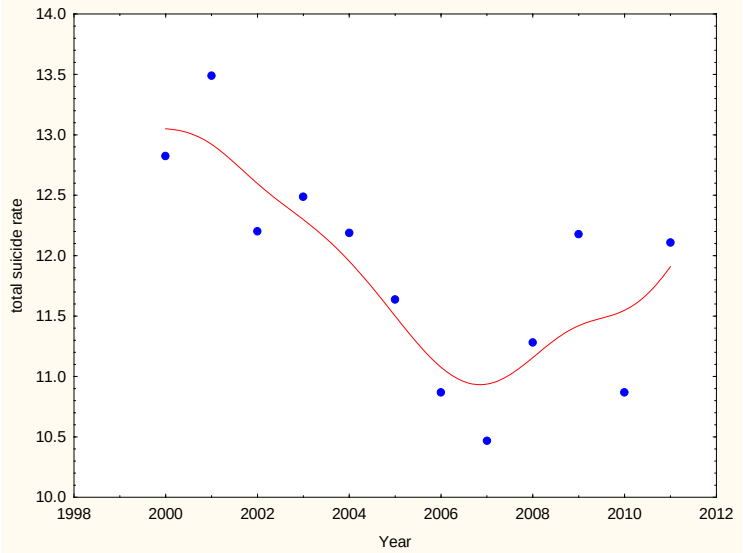
Greece



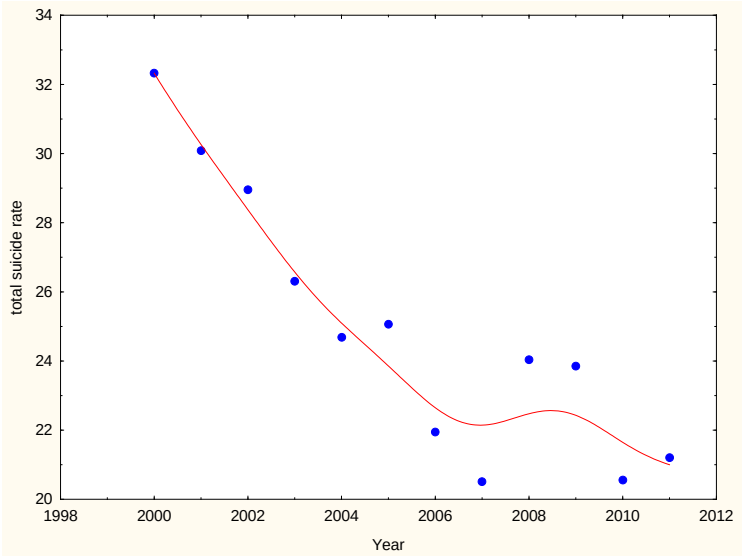
Hungary



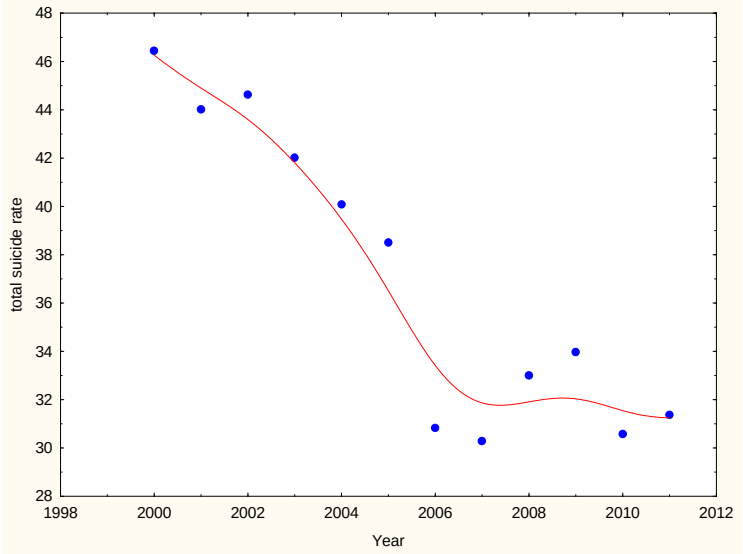
Ireland



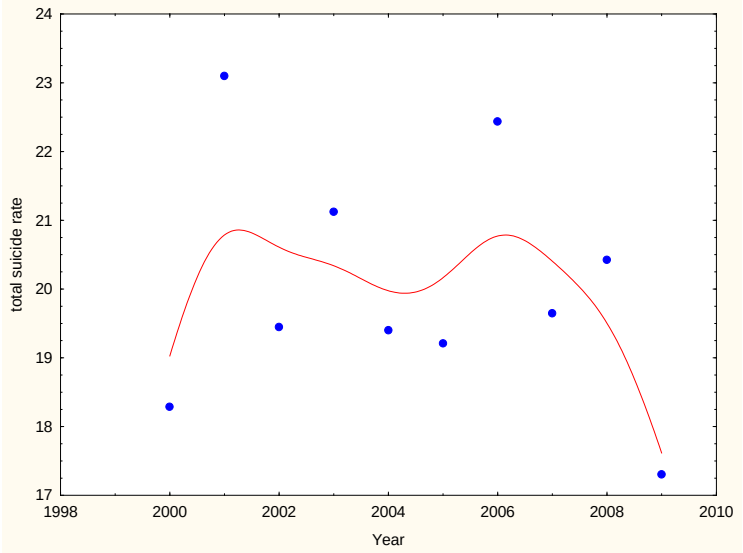
Latvia



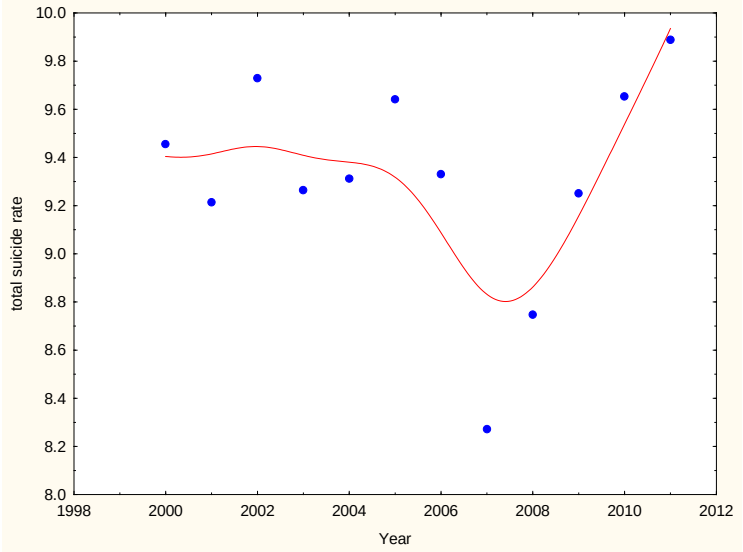
Lithuania



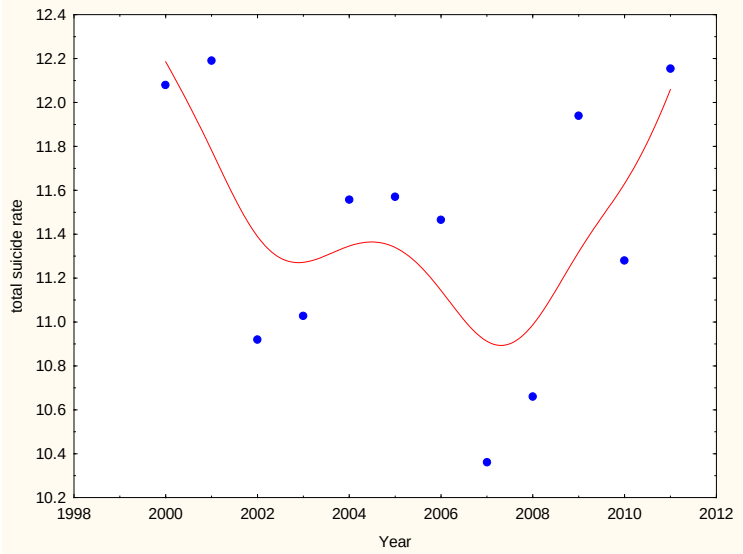
Montenegro



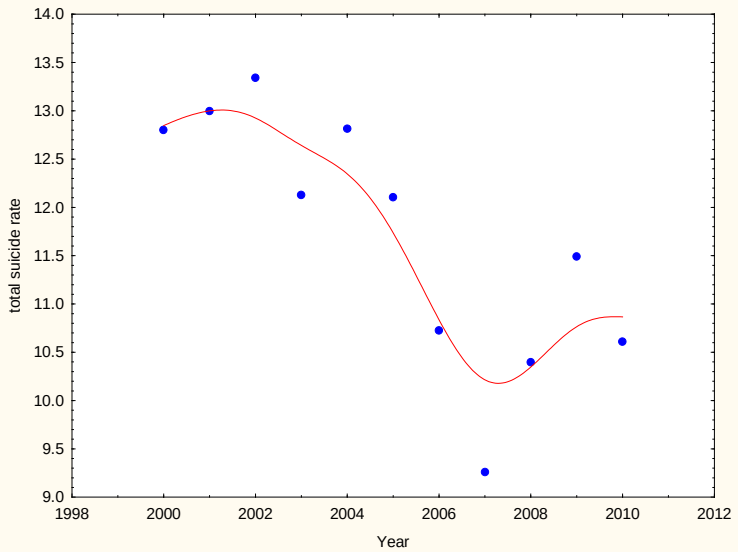
Netherlands



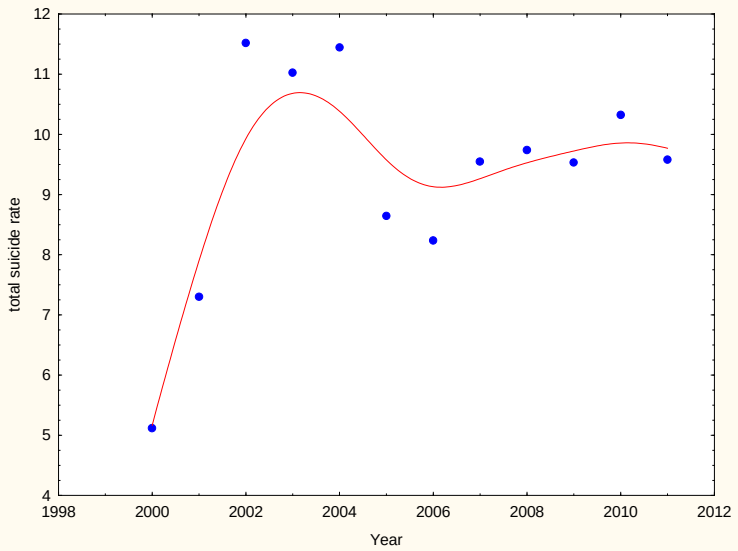
Norway



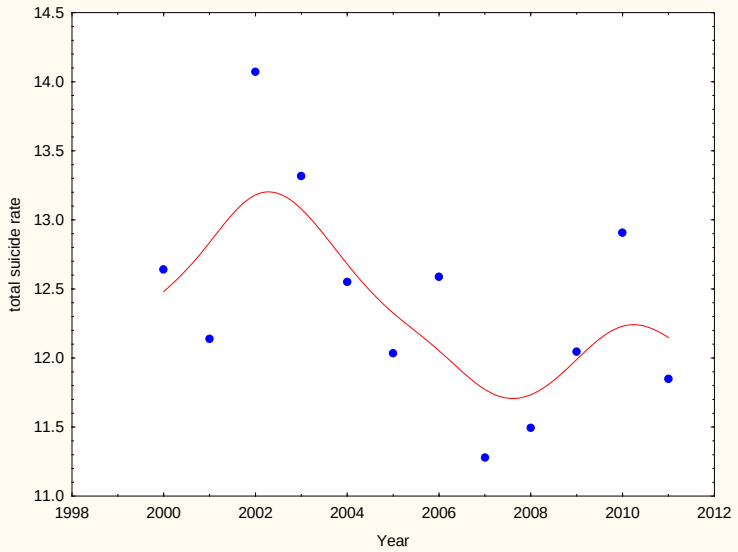
Poland



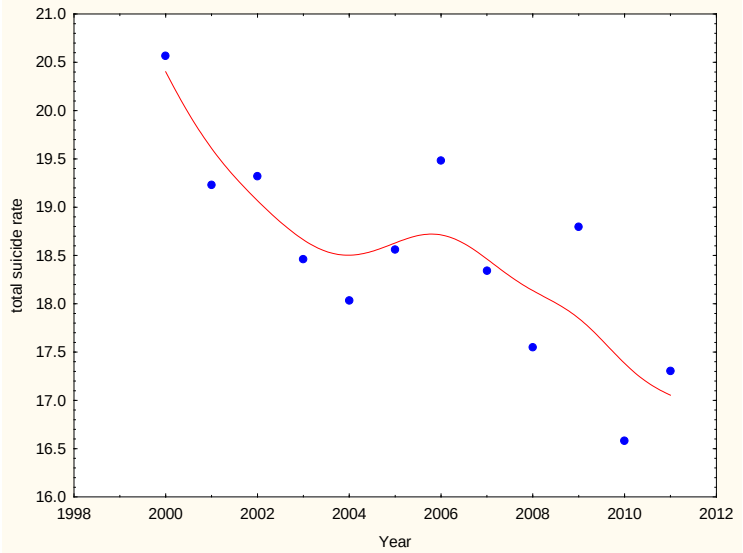
Portugal



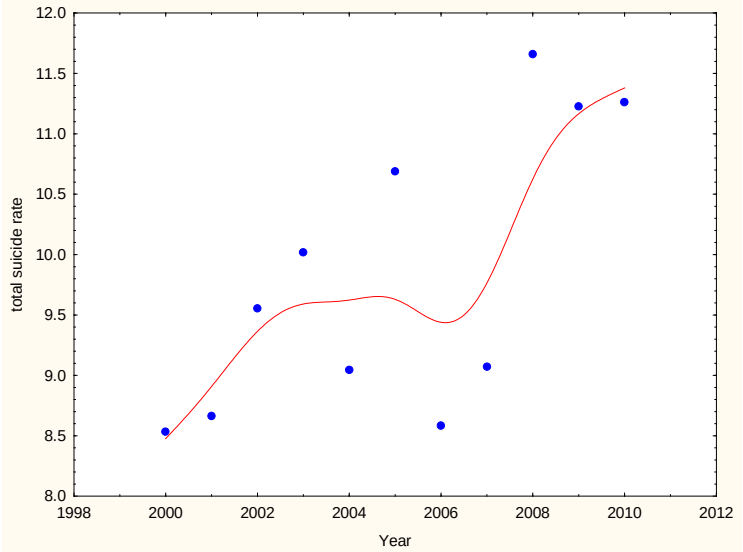
Romania



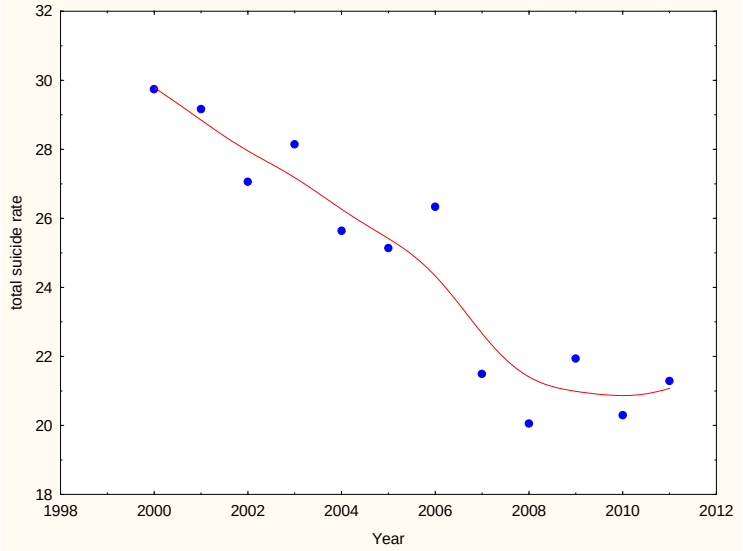
Serbia



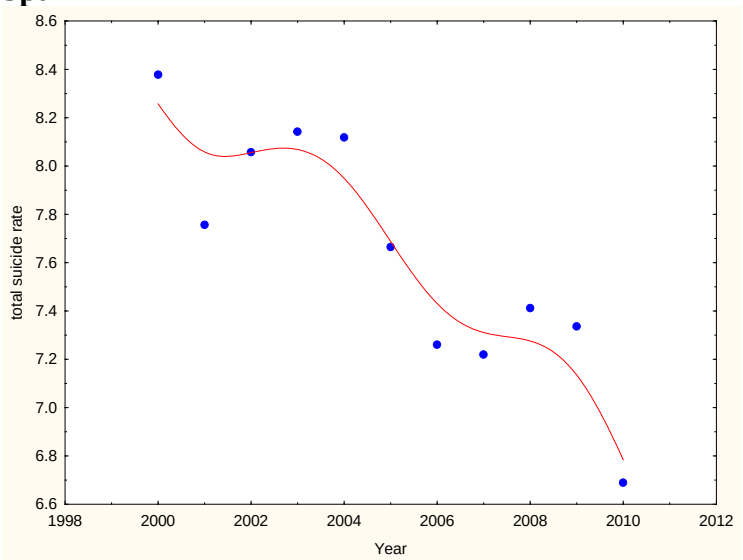
Slovakia



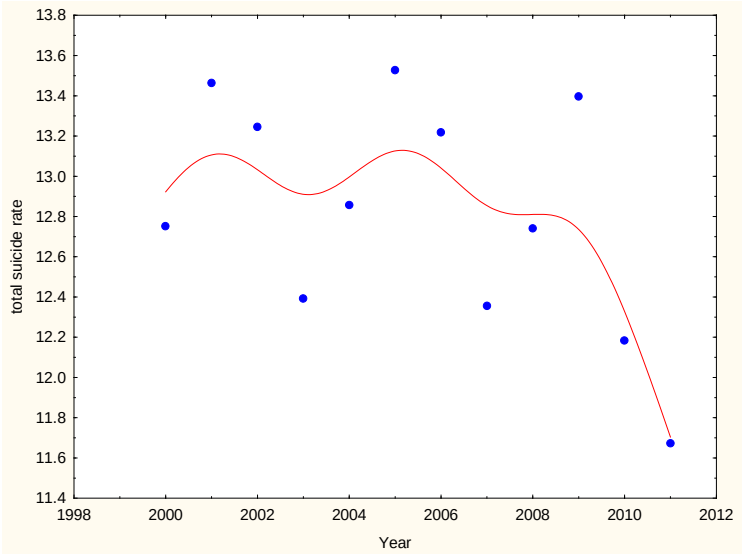
Slovenia



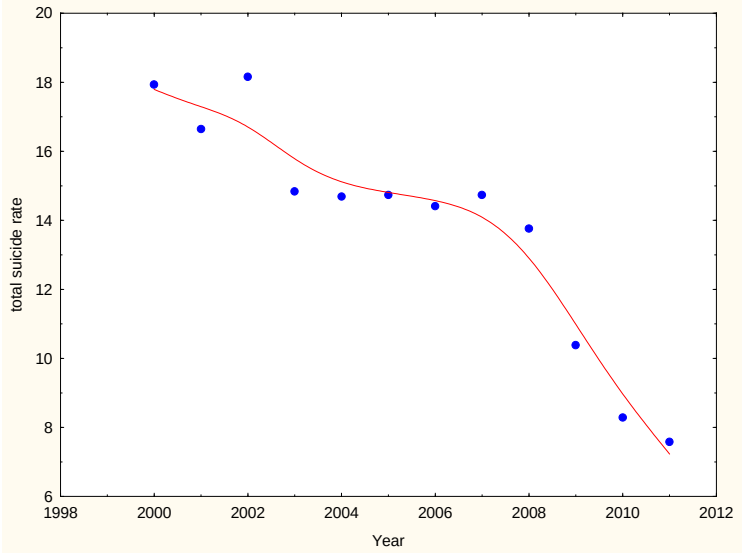
Spain



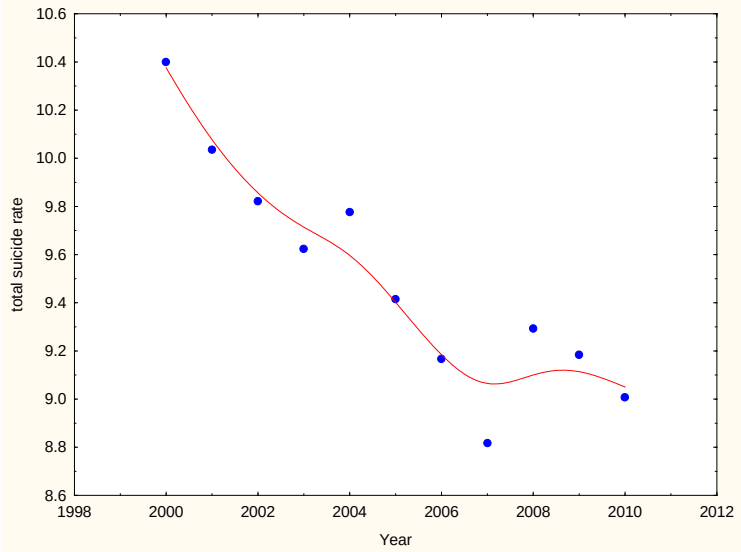
Sweden



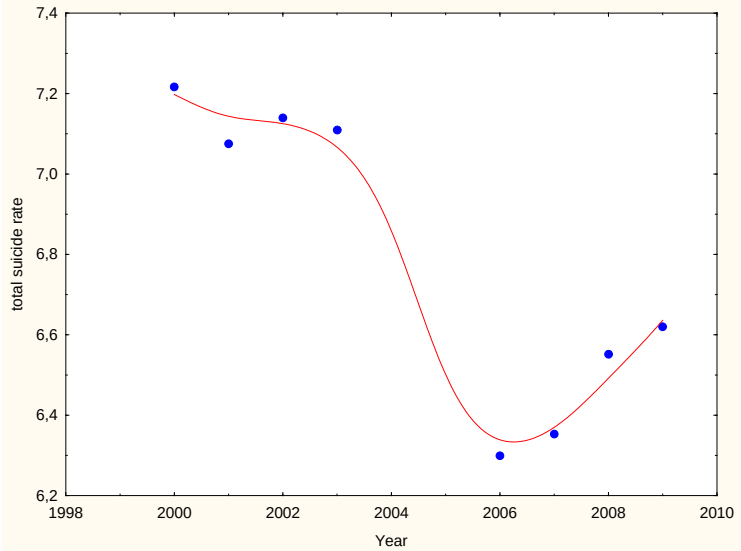
Switzerland



UK



Italy



Europe 2000-2011 (20 countries)