

Size and Development of the Shadow Economy of 31 European and 5 other OECD Countries from 2003 to 2011

by

Friedrich Schneider ^{*)}

In the Tables 1 part 1 to part 4 the size and development of 31 European and of five non-European shadow economies over the period 2003-2011 is presented¹. If we first look at the average of the 27 European Union countries we see, that the shadow economy in the year 2003 was 22.3% (of official GDP), decreased to 19.3% in 2008 and increased to 19.8 % in 2009 and then decreased again to 19.2 % in 2011. If we compare the average of 31 European countries in 2003 the average size was 22.4%, decreased to 19.4% in 2008, and increased to 19.9% in 2009 and decreased to 19.3 in 2011. If we consider the last 2 years (2010 and 2011) and compare them with the year 2008, we realize that in almost all countries we had again a decrease of the size and development of the shadow economy. This is due to the fact of the recovery from the world wide economic and financial crises. Hence the most important reason for this decrease is, that, if the official economy is recovering or booming, people have less incentives to undertake additional activities in the shadow economy and to earn extra “black” money. The only exception is Greece where the recession of the official economy is so strong, that it even reduced the demand of the shadow economy activities due to the severe income losses of the Greece people; the Greek shadow economy will decrease to 24.3% of official GDP in 2011; a decrease of 1.1 percentage points!

Furthermore there are three different developments:

- (1) The eastern countries or the new European Union members, like Bulgaria, like Cyprus, like the Czech Republic, like Latvia, like Lithuania, like Poland have a higher shadow

^{*)} Prof. Dr. Dr.h.c.mult. Friedrich Schneider, Department of Economics, Johannes Kepler University, Altenbergerst. 69, A-4040 Linz, Austria, Phone:+43 (0)732 2468-8210, Fax: +43 (0)732 2468-8209, E-mail: friedrich.schneider@jku.at, <http://www.econ.jku.at/schneider>

¹ The calculation of the size and development of the shadow economy is done with the MIMIC (Multiple Indicators and Multiple Courses) estimation procedure. As with the MIMIC estimation procedure one gets out only relative values, with the help of the currency demand approach for a few countries (Austria, Germany, Poland and Switzerland). These values have been calibrated into absolute ones. Source: Friedrich Schneider, Shadow Economy around the World: What do we really know?, European Journal of Political Economy, Vol. 21/2, September 2005, page 598-642.

economies than the “old” European Union countries, like Austria, Belgium, Germany, Italy; hence we have an increase of the size of the shadow economy from west to east.

- (2) Also we observe an increase of the size and development of the shadow economy from north to south. On average the southern European countries have considerable higher shadow economies than the one in Central and Western Europe. This can also be demonstrated looking at Figures 1 and 2.
- (3) The five other highly developed OECD countries (Australia, Canada, Japan, New Zealand and the United States) have a much lower shadow economy about 9.5 % of GDP average over 2009 to 2011.

Figure 1: Size of the Shadow Economy of 31 European Countries in 2010 (in % of off. GDP)

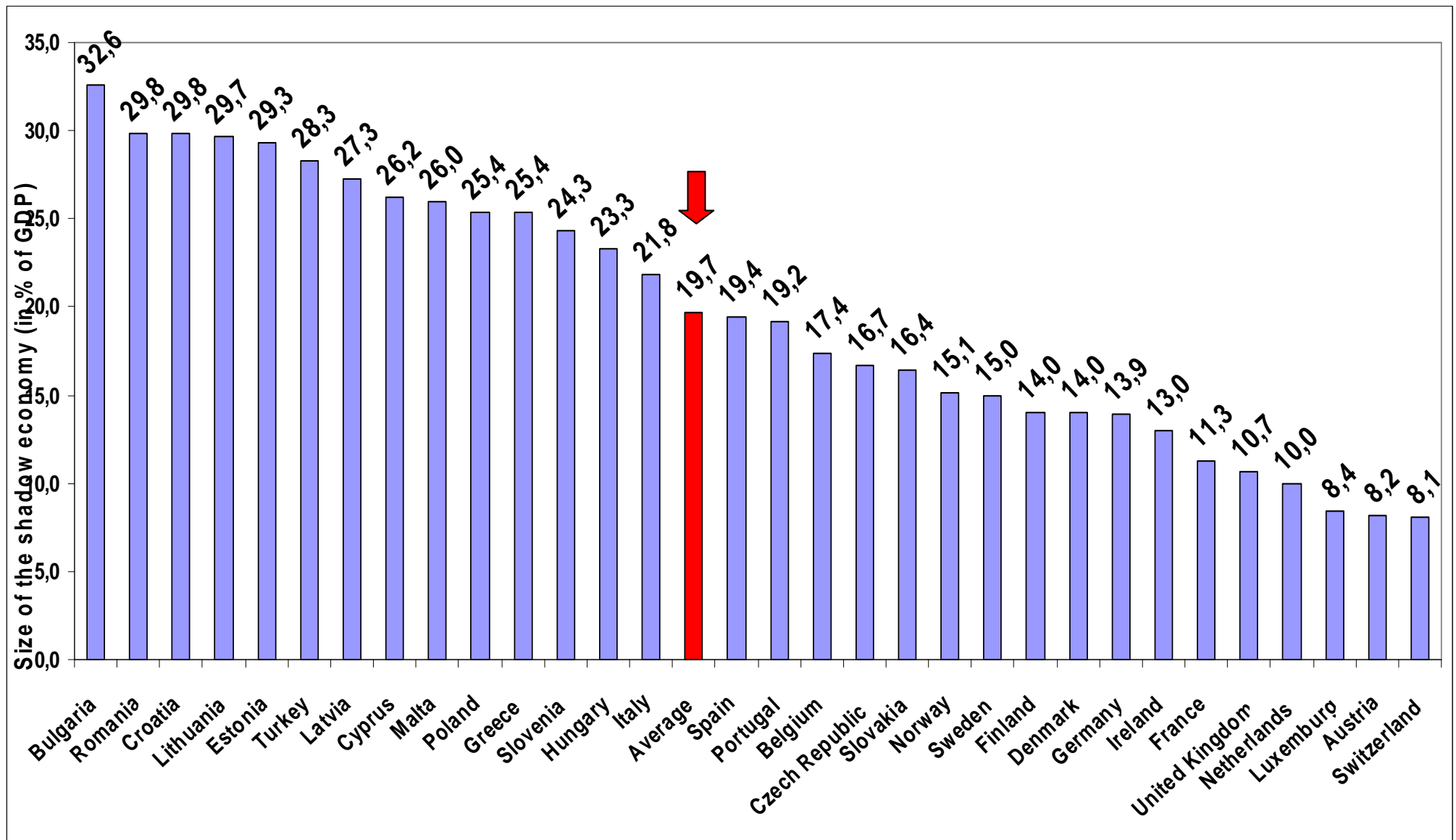


Figure 2: Size of the Shadow Economy of 31 European Countries in 2011 (in % of off. GDP)

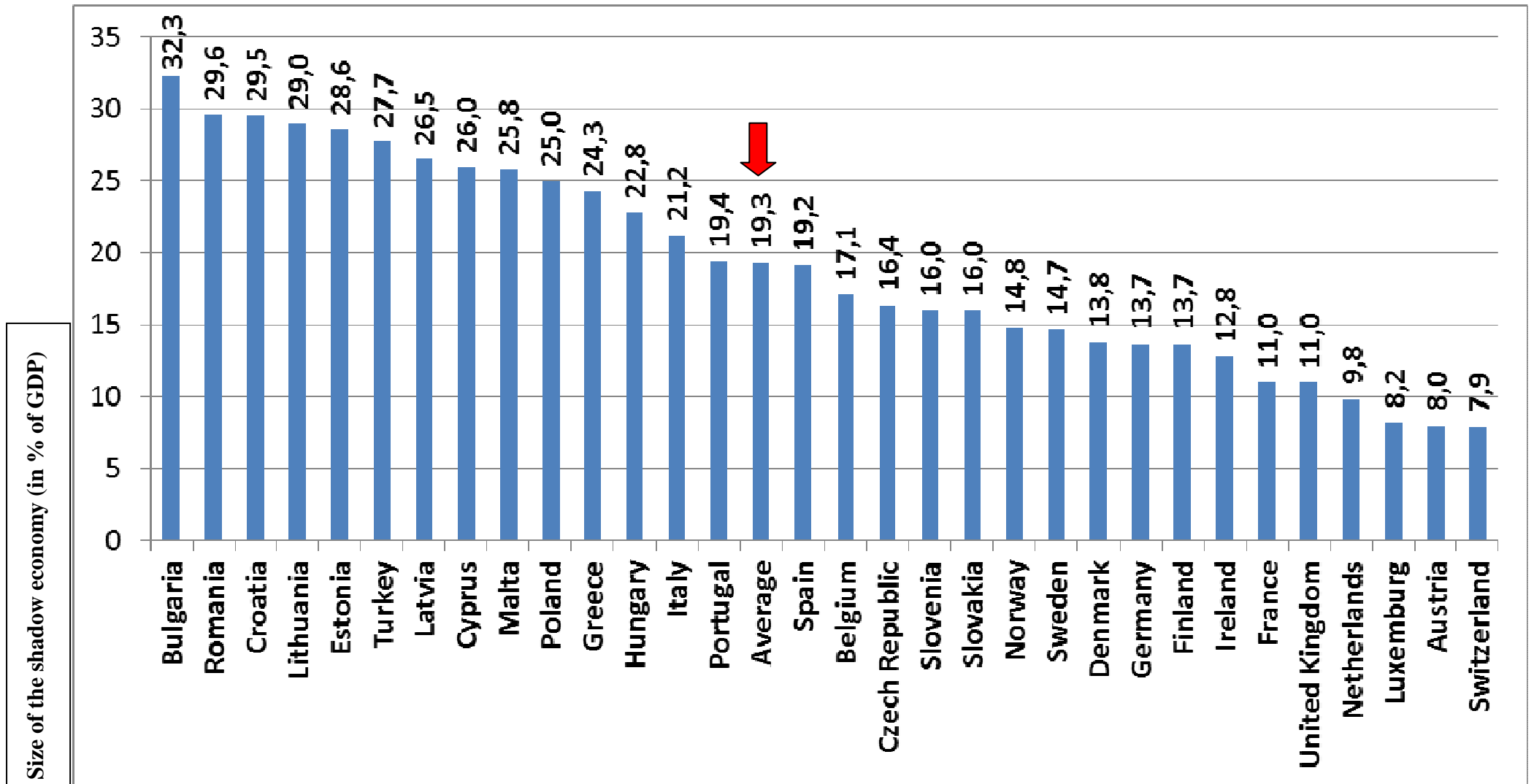


Table 1: Size of the Shadow Economy of 31 European Countries over 2003 – 2011 (in % of off. GDP) – Part 1

Country / Year											Country
	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Austria	10,8	11	10,3	9,7	9,4	8,1	8,47	8,2	8	OECD	
Belgium	21,4	20,7	20,1	19,2	18,3	17,5	17,8	17,4	17,1	OECD	
Bulgaria	35,9	35,3	34,4	34	32,7	32,1	32,5	32,6	32,3		
Cyprus	28,7	28,3	28,1	27,9	26,5	26	26,5	26,2	26		
Czech Republic	19,5	19,1	18,5	18,1	17	16,6	16,9	16,7	16,4	OECD	
Denmark	17,4	17,1	16,5	15,4	14,8	13,9	14,3	14	13,8	OECD	
Estonia	30,7	30,8	30,2	29,6	29,5	29	29,6	29,3	28,6	OECD	
Finland	17,6	17,2	16,6	15,3	14,5	13,8	14,2	14	13,7	OECD	
France	14,7	14,3	13,8	12,4	11,8	11,1	11,6	11,3	11	OECD	
Germany	17,1	16,1	15,4	15	14,7	14,2	14,6	13,9	13,7	OECD	
Greece	28,2	28,1	27,6	26,2	25,1	24,3	25	25,4	24,3	OECD	
Hungary	25	24,7	24,5	24,4	23,7	23	23,5	23,3	22,8	OECD	
Ireland	15,4	15,2	14,8	13,4	12,7	12,2	13,1	13	12,8	OECD	
Italy	26,1	25,2	24,4	23,2	22,3	21,4	22	21,8	21,2	OECD	
Latvia	30,4	30	29,5	29	27,5	26,5	27,1	27,3	26,5		
Lithuania	32	31,7	31,1	30,6	29,7	29,1	29,6	29,7	29,0		
Luxemburg (Grand-Duché)	9,8	9,8	9,9	10	9,4	8,5	8,8	8,4	8,2	OECD	
Malta	26,7	26,7	26,9	27,2	26,4	25,8	25,9	26	25,8	OECD	
Netherlands	12,7	12,5	12	10,9	10,1	9,6	10,2	10	9,8	OECD	
Poland	27,7	27,4	27,1	26,8	26	25,3	25,9	25,4	25	OECD	
Portugal	22,2	21,7	21,2	20,1	19,2	18,7	19,5	19,2	19,4	OECD	
Romania	33,6	32,5	32,2	31,4	30,2	29,4	29,4	29,8	29,6		
Slovenia	26,7	26,5	26	25,8	24,7	24	24,6	24,3	24,1	OECD	
Spain	22,2	21,9	21,3	20,2	19,3	18,7	19,5	19,4	19,2	OECD	
Slovakia	18,4	18,2	17,6	17,3	16,8	16	16,8	16,4	16	OECD	
Sweden	18,6	18,1	17,5	16,2	15,6	14,9	15,4	15	14,7	OECD	
United Kingdom	12,2	12,3	12	11,1	10,6	10,1	10,9	10,7	11,0	OECD	
27 EU-Countries / Average	22,3	21,9	21,5	20,8	19,9	19,3	19,8	19,5	19,2		

Source: Own Calculations, Jan. 2011

Table 1: Size of the Shadow Economy of 4 European Countries (Non EU-Members) over 2003 – 2011 (in % of off. GDP) – Part 2

Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Croatia	32,3	32,3	31,5	31,2	30,4	29,6	30,1	29,8	29,5	
Norway	18,6	18,2	17,6	16,1	15,4	14,7	15,3	15,1	14,8	OECD
Switzerland	9,5	9,4	9	8,5	8,2	7,9	8,3	8,1	7,9	OECD
Turkey	32,2	31,5	30,7	30,4	29,1	28,4	28,9	28,3	27,7	OECD
Non EU-Countries / Average	23,2	22,9	22,2	21,6	20,8	20,2	20,7	20,3	20,0	
Average of all 31 European Countries	22,4	22,1	21,6	20,9	20,1	19,4	19,9	19,7	19,3	

Source: Own Calculations, Jan. 2011

Table 1: Size of the Shadow Economy of 5 Highly Developed Non- European Countries over 2003 – 2011 (in % of off. GDP) – Part 3

Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
Australia	13,7	13,2	12,6	11,4	11,7	10,6	10,9	10,3	10,1
Canada	15,3	15,1	14,3	13,2	12,6	12	12,6	12,2	11,9
Japan	11	10,7	10,3	9,4	9	8,8	9,5	9,2	9
New Zealand	12,3	12,2	11,7	10,4	9,8	9,4	9,9	9,6	9,3
United States USA	8,5	8,4	8,2	7,5	7,2	7	7,6	7,2	7
Other OECD Countries / Average	12,16	11,92	11,42	10,38	10,06	9,56	10,1	9,7	9,46

Source: Own Calculations, Jan. 2011

Table 1: Size of the Shadow Economy of Various Averages over 2003 – 2011 (in % of off. GDP) – Part 4

Averages / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
27 EU-Countries / Average	22,3	21,9	21,5	20,8	19,9	19,3	19,8	19,5	19,4
4 Non EU-Countries / Average	23,2	22,9	22,2	21,6	20,8	20,2	20,7	20,3	20,0
5 Other OECD Countries / Average	12,2	11,9	11,4	10,4	10,1	9,6	10,1	9,7	9,5
All 36 Countries / Average	19,2	18,9	18,4	17,6	16,9	16,3	16,9	16,5	16,3

Source: Own Calculations, Jan. 2011