

Size and Development of the Shadow Economy of 31 European and 5 other OECD Countries from 2003 to 2013: A Further Decline

by

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In the Tables 1 to 3 the size and development of 31 European and of five non-European shadow economies over the period 2003-2013 is presented¹. If we first consider the results of the average size of the shadow economy of the 27 European Union countries, we realize, 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 18.4 % in 2013². 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 18.5 in 2013 (Table 2). If we consider the development of the shadow economy of Australia, Canada, Japan, New Zealand and the USA, we find a similar movement over time (see Table 3.); in 2013 these 5 countries had an average size of the shadow economy of 8.6%, in 2010 this value was 9.7%.

If we consider the size of the shadow economies over the last 2 years (2012 and 2013) and compare them with the years 2008/09, we realize that in most countries we had again a decrease of the size and development of the shadow economy, which is due to the fact of the recovery from the worldwide 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 exceptions are Greece and Spain, where the recession of the official economy is so strong, that it even reduces the demand of the shadow economy activities due to the severe income losses of the Greece and Spain people; the Greek (Spanish) shadow economy

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¹ The calculation of the size and development of the shadow economy is done with the MIMIC (Multiple Indicators and Multiple Courses) estimation procedure. Using the MIMIC estimation procedure one gets only relative values and one needs other methods like the currency demand approach, to calibrate the MIMIC values into absolute ones. For a detailed explanation see Friedrich Schneider, editor, Handbook on the Shadow Economy, Cheltenham (UK): Edward Elgar Publishing Company, 2011.

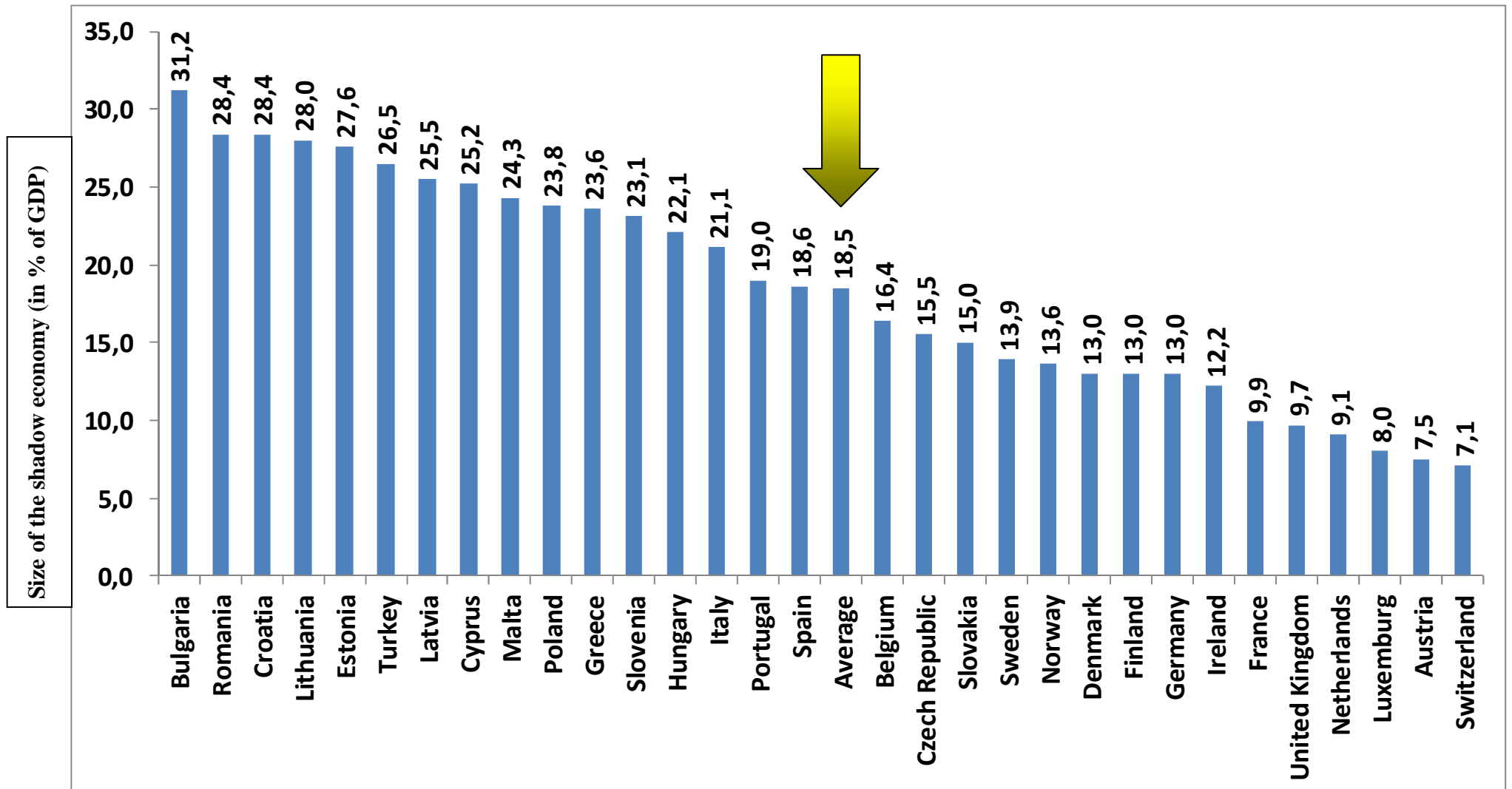
² The calculated values for 2013 are projections based on the forecasts of the official figures (GDP, unemployment, etc.) of these countries.

will decrease to 23.6% (18.6%) of official GDP in 2013; a decrease of 0.4 (0.6) percentage points compared to the year 2012!

To summarize: There are four different developments with respect to the size of the shadow economy:

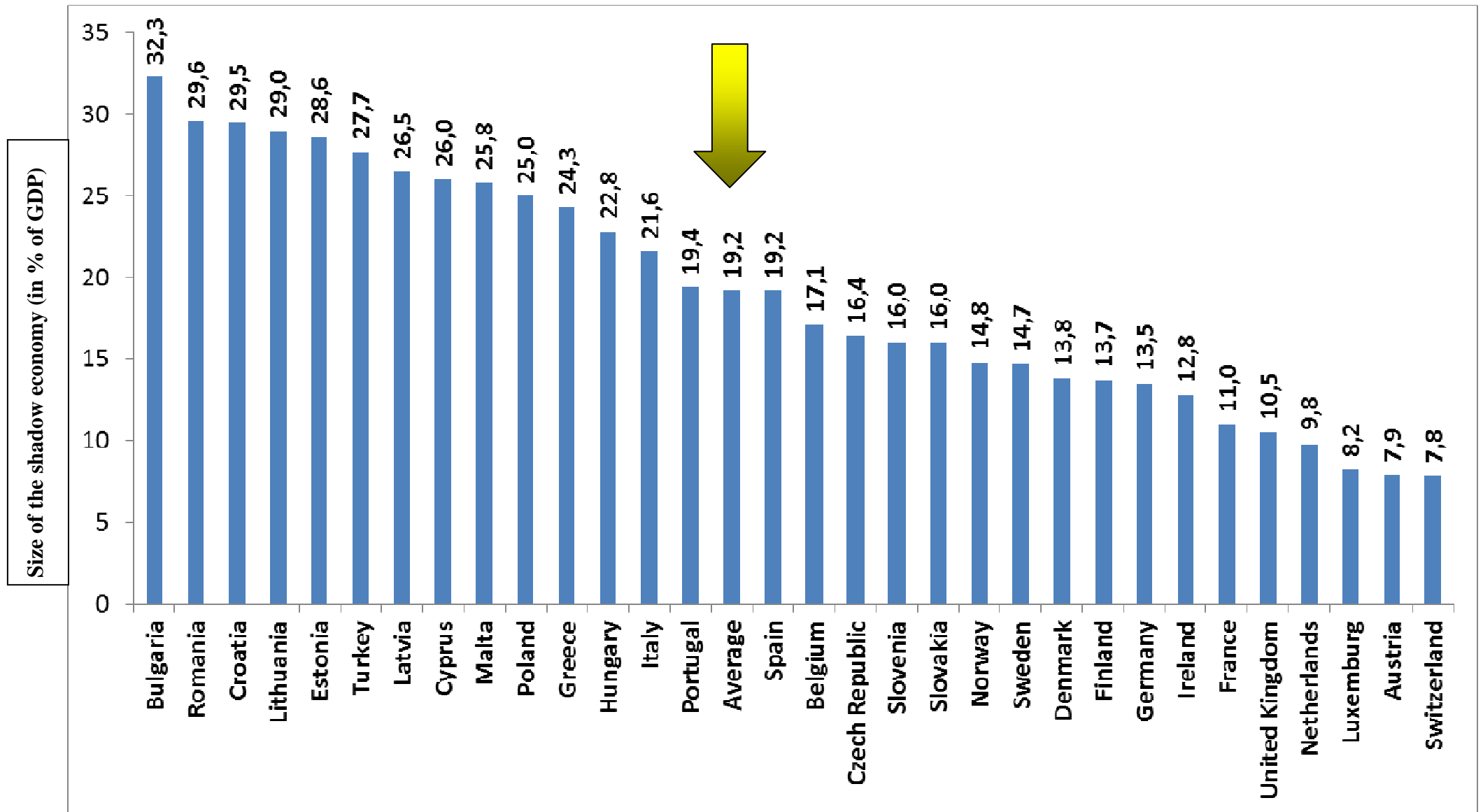
- (1) In general, we have a further decline of the shadow economies of these 36 highly developed OECD-countries. The main reason is a further recovery of the official economy in most countries.
- (2) The eastern or central European countries and/or the new European Union members, like Bulgaria, Cyprus, the Czech Republic, Latvia, Lithuania and Poland have higher shadow economies than the “old” European Union countries, like Austria, Belgium, Germany and Italy; hence, we have an increase of the size of the shadow economy from west to east.
- (3) 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.
- (4) The five non-European highly developed OECD countries (Australia, Canada, Japan, New Zealand and the United States) have a lower shadow economy about 10.1 % of GDP average in 2009, which decreased to 8.6% in 2013 (compare Table 4).

Figure 1: Size of the Shadow Economy of 31 European Countries in 2013 (in % of off. GDP)



Source: own calculations, December 2012

Figure 2: Size of the Shadow Economy of 31 European Countries in 2012 (in % of off. GDP)



Source: own calculations, March 2012

Table 1: Size of the Shadow Economy of 27 European Countries over 2003 – 2013 (in % of off. GDP)

Country / Year											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Austria	10.8	11	10.3	9.7	9.4	8.1	8.47	8.2	7.9	7.6	7.5
Belgium	21.4	20.7	20.1	19.2	18.3	17.5	17.8	17.4	17.1	16.8	16.4
Bulgaria	35.9	35.3	34.4	34	32.7	32.1	32.5	32.6	32.3	31.9	31.2
Cyprus	28.7	28.3	28.1	27.9	26.5	26	26.5	26.2	26	25.6	25.2
Czech Republic	19.5	19.1	18.5	18.1	17	16.6	16.9	16.7	16.4	16.0	15.5
Denmark	17.4	17.1	16.5	15.4	14.8	13.9	14.3	14	13.8	13.4	13.0
Estonia	30.7	30.8	30.2	29.6	29.5	29	29.6	29.3	28.6	28.2	27.6
Finland	17.6	17.2	16.6	15.3	14.5	13.8	14.2	14	13.7	13.3	13.0
France	14.7	14.3	13.8	12.4	11.8	11.1	11.6	11.3	11	10.8	9.9
Germany	17.1	16.1	15.4	15	14.7	14.2	14.6	13.9	13.7	13.3	13.0
Greece	28.2	28.1	27.6	26.2	25.1	24.3	25	25.4	24.3	24.0	23.6
Hungary	25	24.7	24.5	24.4	23.7	23	23.5	23.3	22.8	22.5	22.1
Ireland	15.4	15.2	14.8	13.4	12.7	12.2	13.1	13	12.8	12.7	12.2
Italy	26.1	25.2	24.4	23.2	22.3	21.4	22	21.8	21.2	21.6	21.1
Latvia	30.4	30	29.5	29	27.5	26.5	27.1	27.3	26.5	26.1	25.5
Lithuania	32	31.7	31.1	30.6	29.7	29.1	29.6	29.7	29.0	28.5	28.0
Luxemburg (Grand-Duché)	9.8	9.8	9.9	10	9.4	8.5	8.8	8.4	8.2	8.2	8.0
Malta	26.7	26.7	26.9	27.2	26.4	25.8	25.9	26	25.8	25.3	24.3
Netherlands	12.7	12.5	12	10.9	10.1	9.6	10.2	10	9.8	9.5	9.1
Poland	27.7	27.4	27.1	26.8	26	25.3	25.9	25.4	25	24.4	23.8
Portugal	22.2	21.7	21.2	20.1	19.2	18.7	19.5	19.2	19.4	19.4	19.0
Romania	33.6	32.5	32.2	31.4	30.2	29.4	29.4	29.8	29.6	29.1	28.4
Slovenia	26.7	26.5	26	25.8	24.7	24	24.6	24.3	24.1	23.6	23.1
Spain	22.2	21.9	21.3	20.2	19.3	18.4	19.5	19.4	19.2	19.2	18.6
Slovakia	18.4	18.2	17.6	17.3	16.8	16	16.8	16.4	16	15.5	15.0
Sweden	18.6	18.1	17.5	16.2	15.6	14.9	15.4	15	14.7	14.3	13.9
United Kingdom	12.2	12.3	12	11.1	10.6	10.1	10.9	10.7	10.5	10.1	9.7
27 EU-Countries / Average (unweighted)	22.3	21.9	21.5	20.8	19.9	19.2	19.8	19.6	19.2	18.9	18.4

Source: Own Calculations, March 2012

Table 2: Size of the Shadow Economy of 4 European Countries (Non EU-Members) over 2003 – 2013 (in % of off. GDP)

Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Croatia	32.3	32.3	31.5	31.2	30.4	29.6	30.1	29.8	29.5	29.0	28.4
Norway	18.6	18.2	17.6	16.1	15.4	14.7	15.3	15.1	14.8	14.2	13.6
Switzerland	9.5	9.4	9	8.5	8.2	7.9	8.3	8.1	7.8	7.6	7.1
Turkey	32.2	31.5	30.7	30.4	29.1	28.4	28.9	28.3	27.7	27.2	26.5
4 Non EU-Countries / Average	23.2	22.9	22.2	21.6	20.8	20.2	20.7	20.3	19.9	19.5	18.9
Unweighted Average of all 31 European Countries	22.4	22.1	21.6	20.9	20.1	19.4	19.9	19.7	19.3	19.0	18.5

Source: Own Calculations, March 2012

Table 3: Size of the Shadow Economy of 5 Highly Developed Non- European Countries over 2003 – 2013 (in % of off. GDP)

Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Australia	13.7	13.2	12.6	11.4	11.7	10.6	10.9	10.3	10.1	9.8	9.4
Canada	15.3	15.1	14.3	13.2	12.6	12	12.6	12.2	11.9	11.5	10.8
Japan	11	10.7	10.3	9.4	9	8.8	9.5	9.2	9	8.8	8.1
New Zealand	12.3	12.2	11.7	10.4	9.8	9.4	9.9	9.6	9.3	8.8	8.0
United States USA	8.5	8.4	8.2	7.5	7.2	7	7.6	7.2	7	7.0	6.6
Other OECD Countries / Unweighted Average	12.16	11.92	11.42	10.38	10.06	9.56	10.1	9.7	9.46	9.18	8.6

Source: Own Calculations, March 2012

Table 4: Size of the Shadow Economy of Various Unweighted Averages over 2003 – 2013 (in % of off. GDP)

Averages / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
27 EU-Countries / Average (unweighted)	22.3	21.9	21.5	20.8	19.9	19.3	19.8	19.5	19.4	18.9	18.4
4 Non EU-Countries / Average (unweighted)	23.2	22.9	22.2	21.6	20.8	20.2	20.7	20.3	20.0	19.5	18.9
5 Other OECD Countries / Average (unweighted)	12.2	11.9	11.4	10.4	10.1	9.6	10.1	9.7	9.5	9.18	8.6
All 36 Countries / Average (unweighted)	21.0	20.7	20.2	19.4	18.7	18.0	18.5	18.3	18.0	17.6	17.1

Source: Own Calculations, March 2012