

Size and Development of the Shadow Economy of 31 European and 5 other OECD Countries from 2003 to 2015: Different Developments

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 2003-2015 is presented¹. If we first consider the results of the average size of the shadow economy of the 28 European Union countries, we realize that the shadow economy in the year 2003 was 22.6% (of official GDP), decreased to 19.6% in 2008 and increased to 20.1% in 2009 and then decreased again to 18.3% in 2015². With respect to a decrease or increase in 2015, the development of the shadow economy in the individual countries will not be uniform. In most countries (21 out of 28) the shadow economy will further decrease but in the remaining 6 countries it will increase and in 1 country it will stay the same. The 21 EU-countries where the shadow economy will further decrease are Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, Greece, Ireland, Italy, Latvia, Lithuania, the Netherlands, Poland, Portugal, Romania, Slovenia, South-Cyprus, Spain, Slovakia, Sweden and the United Kingdom, whereas the shadow economy will increase in Austria, Belgium, France, Hungary, Luxembourg and Malta, and in Germany it will stay the same. The strongest increase will take place in France from 10.8% of official GDP (2014) to 12.3% in 2015; the strongest decrease will be in Lithuania from 27.1% (2014) to 25.8% in 2015.

To summarize: In the vast majority of the 28 EU-countries the shadow economy will decrease further, averaging to 18.3% of official GDP in 2015. If we compare these results to the aver-

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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 or the income discrepancy method, to calibrate the MIMIC values into absolute ones. For a detailed explanation of these calculation methods see Friedrich Schneider, editor, Handbook on the Shadow Economy, Cheltenham (UK): Edward Elgar Publishing Company, 2011, and Friedrich Schneider and Colin C. Williams, 2013, The Shadow Economy, The Institute of Economic Affairs, IEA, London, 2013.

² The calculated values for 2014 are projections for some countries, for 2015 they are projections for all countries, based on the forecasts of the official figures (GDP, unemployment, etc.) of these countries.

age size of the shadow economy of the 31 European countries, in 2003 the size was 22.4%, which decreased to 19.4% in 2008, and increased to 19.9% in 2009 and decreased to 18.3% in 2014 (see Table 2). In 2015 the average size will decrease to 18.0%. When looking at the individual countries again, the shadow economy will decrease in Norway and Switzerland, whereas it will increase in Turkey from 27.2% (2014) to 27.8% of official GDP in 2015.

If we consider the development of the shadow economy of the highly developed non-European OECD countries Australia, Canada, Japan, New Zealand and the USA, we find a similar movement over time (see Table 3); in 2003 these 5 countries had an average size of the shadow economy of 12.2%, in 2008 this value was only 9.6%. In 2009 it increased to 10.1% and then decreased again to 8.6% of GDP in 2014. In 2015 the shadow economy will decrease in Canada and the USA and it will increase in Australia, Japan and in New Zealand from 10.2% (2014) to 10.3% in 2015, from 8.2% (2014) to 8.4% (2015) and from 7.8% (2014) to 8.0% in 2015, respectively. On average in 2015 the size of the shadow economy in these 5 countries will stay the same at a value of 8.6%.

If we consider the size of the shadow economies over the last 2 years (2014 and 2015) and compare them with the years 2008/09, we realize that, in most countries, we will again have a decrease of the size and development of the shadow economy, which is due to 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 fewer incentives to undertake additional activities in the shadow economy and to earn extra “black” money.

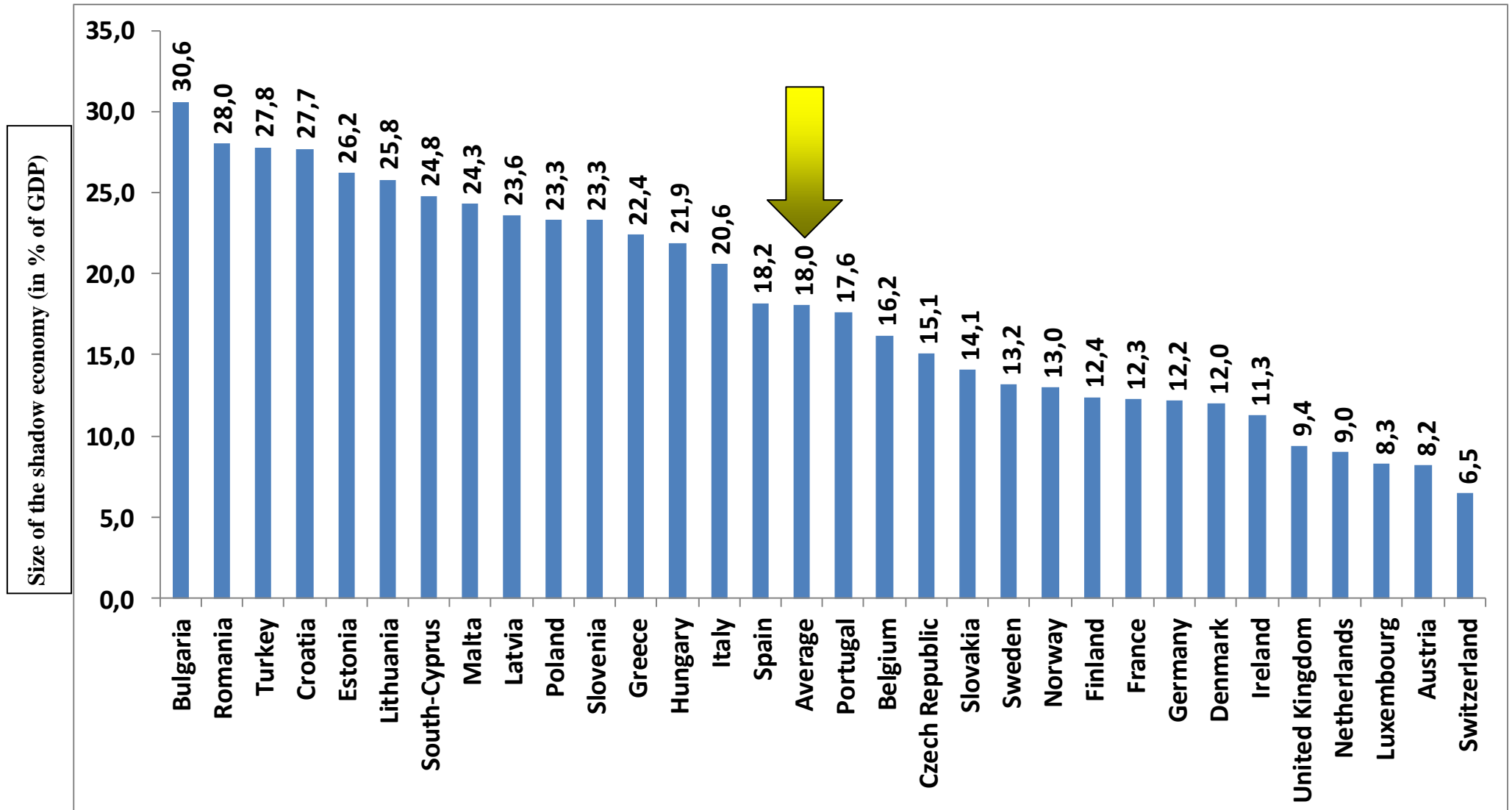
To summarize: There are four different developments with respect to the size of the shadow economy of these 36 OECD countries:

- (1) In general, we have a further decline of the shadow economy in 25 out of the 36 OECD countries. The main reason is a further recovery of the official economy. In 10 countries we observe an increase due to a sluggish official economy or due to policy decisions which increased the shadow economy. In 1 country the shadow economy stays the same.
- (2) The eastern or central European countries and/or the “new” European Union members, such as Bulgaria, Cyprus, the Czech Republic, Latvia, Lithuania and Poland have higher shadow economies than the “old” European Union countries, like Austria, Belgium, Ger-

many and Italy; hence, we have an increase of the size of the shadow economy from west to east.

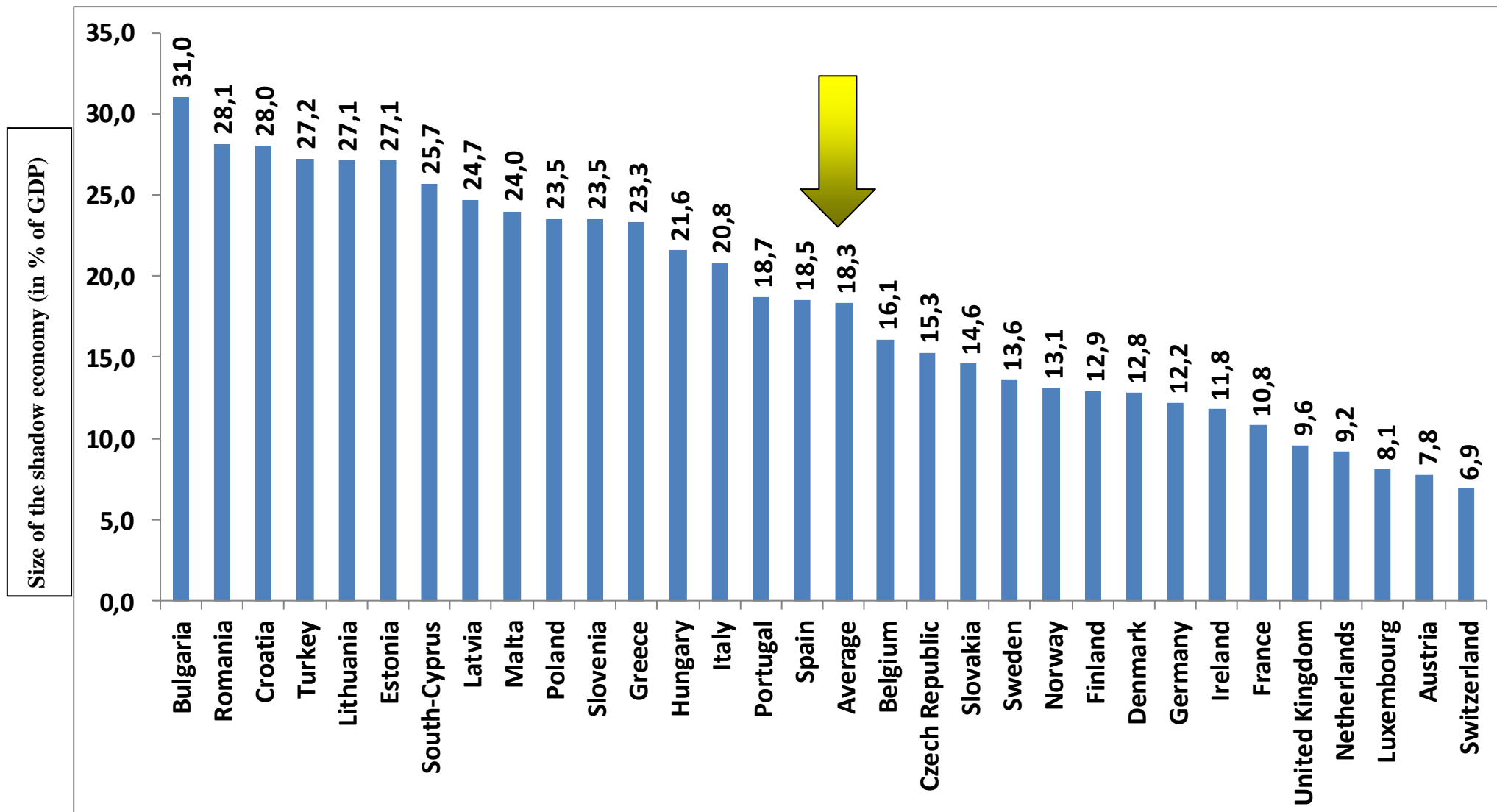
- (3) Also, we observe an increase in the size and development of the shadow economy from north to south. On average, the southern European countries have considerably higher shadow economies than those of Central and Western Europe. This can also be demonstrated by Figures 1 and 2.
- (4) The five non-European highly developed OECD countries (Australia, Canada, Japan, New Zealand and the United States) have lower shadow economies with an average size of about 10.1 % of GDP in 2009, which will decrease to 8.6% in 2015 (compare Table 4).

Figure 1: Size of the Shadow Economy of 31 European Countries in 2015 (in % of off. GDP)



Source: own calculations, January 2015.

Figure 2: Size of the Shadow Economy of 31 European Countries in 2014 (in % of off. GDP)



Source: own calculations, January 2014.

Table 1: Size of the Shadow Economy of the 28 EU-Countries over 2003 – 2015 (in % of off. GDP)

Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Austria	10.8	11.0	10.3	9.7	9.4	8.1	8.5	8.2	7.9	7.6	7.5	7.8	8.2
Belgium	21.4	20.7	20.1	19.2	18.3	17.5	17.8	17.4	17.1	16.8	16.4	16.1	16.2
Bulgaria	35.9	35.3	34.4	34.0	32.7	32.1	32.5	32.6	32.3	31.9	31.2	31.0	30.6
Croatia	32.3	32.3	31.5	31.2	30.4	29.6	30.1	29.8	29.5	29.0	28.4	28.0	27.7
Czech Republic	19.5	19.1	18.5	18.1	17.0	16.6	16.9	16.7	16.4	16.0	15.5	15.3	15.1
Denmark	17.4	17.1	16.5	15.4	14.8	13.9	14.3	14.0	13.8	13.4	13.0	12.8	12.0
Estonia	30.7	30.8	30.2	29.6	29.5	29.0	29.6	29.3	28.6	28.2	27.6	27.1	26.2
Finland	17.6	17.2	16.6	15.3	14.5	13.8	14.2	14.0	13.7	13.3	13.0	12.9	12.4
France	14.7	14.3	13.8	12.4	11.8	11.1	11.6	11.3	11.0	10.8	9.9	10.8	12.3
Germany	17.1	16.1	15.4	15.0	14.7	14.2	14.6	13.9	13.2	12.9	12.4	12.2	12.2
Greece	28.2	28.1	27.6	26.2	25.1	24.3	25.0	25.4	24.3	24.0	23.6	23.3	22.4
Hungary	25.0	24.7	24.5	24.4	23.7	23.0	23.5	23.3	22.8	22.5	22.1	21.6	21.9
Ireland	15.4	15.2	14.8	13.4	12.7	12.2	13.1	13.0	12.8	12.7	12.2	11.8	11.3
Italy	26.1	25.2	24.4	23.2	22.3	21.4	22.0	21.8	21.2	21.6	21.1	20.8	20.6
Latvia	30.4	30.0	29.5	29.0	27.5	26.5	27.1	27.3	26.5	26.1	25.5	24.7	23.6
Lithuania	32.0	31.7	31.1	30.6	29.7	29.1	29.6	29.7	29.0	28.5	28.0	27.1	25.8
Luxembourg (Grand-Duché)	9.8	9.8	9.9	10.0	9.4	8.5	8.8	8.4	8.2	8.2	8.0	8.1	8.3
Malta	26.7	26.7	26.9	27.2	26.4	25.8	25.9	26.0	25.8	25.3	24.3	24.0	24.3
Netherlands	12.7	12.5	12.0	10.9	10.1	9.6	10.2	10.0	9.8	9.5	9.1	9.2	9.0
Poland	27.7	27.4	27.1	26.8	26.0	25.3	25.9	25.4	25.0	24.4	23.8	23.5	23.3
Portugal	22.2	21.7	21.2	20.1	19.2	18.7	19.5	19.2	19.4	19.4	19.0	18.7	17.6
Romania	33.6	32.5	32.2	31.4	30.2	29.4	29.4	29.8	29.6	29.1	28.4	28.1	28.0
Slovenia	26.7	26.5	26.0	25.8	24.7	24.0	24.6	24.3	24.1	23.6	23.1	23.5	23.3
South-Cyprus	28.7	28.3	28.1	27.9	26.5	26.0	26.5	26.2	26.0	25.6	25.2	25.7	24.8
Spain	22.2	21.9	21.3	20.2	19.3	18.4	19.5	19.4	19.2	19.2	18.6	18.5	18.2
Slovakia	18.4	18.2	17.6	17.3	16.8	16.0	16.8	16.4	16.0	15.5	15.0	14.6	14.1
Sweden	18.6	18.1	17.5	16.2	15.6	14.9	15.4	15.0	14.7	14.3	13.9	13.6	13.2
United Kingdom	12.2	12.3	12.0	11.1	10.6	10.1	10.9	10.7	10.5	10.1	9.7	9.6	9.4
28 EU-Countries / Average (unweighted)	22.6	22.3	21.8	21.1	20.3	19.6	20.1	19.9	19.6	19.3	18.8	18.6	18.3

Source: Own Calculations, January 2015

Table 2: Size of the Shadow Economy of 3 European Countries (Non EU-Members) over 2003 – 2015 (in % of off. GDP)

Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Norway	18.6	18.2	17.6	16.1	15.4	14.7	15.3	15.1	14.8	14.2	13.6	13.1	13.0
Switzerland	9.5	9.4	9.0	8.5	8.2	7.9	8.3	8.1	7.8	7.6	7.1	6.9	6.5
Turkey	32.2	31.5	30.7	30.4	29.1	28.4	28.9	28.3	27.7	27.2	26.5	27.2	27.8
3 Non EU-Countries / Average	20.1	19.7	19.1	18.3	17.6	17.0	17.5	17.2	16.8	16.3	15.7	15.7	15.8
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	18.3	18.0

Source: Own Calculations, January 2015

Table 3: Size of the Shadow Economy of 5 Highly Developed Non- European Countries over 2003 – 2015 (in % of off. GDP)

Country / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Australia	13.7	13.2	12.6	11.4	11.7	10.6	10.9	10.3	10.1	9.8	9.4	10.2	10.3
Canada	15.3	15.1	14.3	13.2	12.6	12.0	12.6	12.2	11.9	11.5	10.8	10.4	10.3
Japan	11.0	10.7	10.3	9.4	9.0	8.8	9.5	9.2	9.0	8.8	8.1	8.2	8.4
New Zealand	12.3	12.2	11.7	10.4	9.8	9.4	9.9	9.6	9.3	8.8	8.0	7.8	8.0
United States USA	8.5	8.4	8.2	7.5	7.2	7.0	7.6	7.2	7.0	7.0	6.6	6.3	5.9
Other OECD Countries / Unweighted Average	12.2	11.9	11.4	10.4	10.1	9.6	10.1	9.7	9.5	9.2	8.6	8.6	8.6

Source: Own Calculations, January 2015

Table 4: Size of the Shadow Economy of Various Unweighted Averages over 2003 – 2015 (in % of off. GDP)

Averages / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
28 EU-Countries / Average (unweighted)	22.6	22.3	21.8	21.1	20.3	19.6	20.1	19.9	19.6	19.3	18.8	18.6	18.3
3 Non EU-Countries / Average (unweighted)	20.1	19.7	19.1	18.3	17.6	17.0	17.5	17.2	16.8	16.3	15.7	15.7	15.8
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	8.6	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	17.0	16.7

Source: Own Calculations, January 2015