























Economic Aspects of OSH

Dr. Jukka Takala
Brussels,
November 24, 2010























Member States	GDP 2009 millions of euro	Populati on in millions	GDP (PPP) per capita 2009 euro	GDP (Nominal) per capita 2009 euro	GDP (PPP) per capita 2009 perc. of EU27	Eurozone yes/no
 European Union	11,808,717	500	23,600	23,600	100.0%	
 Germany	2,409,100	82.3	27,300	29,300	116.2%	yes
 France	1,907,145	63.8	25,300	29,600	107.3%	yes
 United Kingdom	1,566,741	60.9	27,400	25,300	117.0%	no
 Italy	1,520,870	60.1	24,000	25,200	101.6%	yes
 Spain	1,051,151	44.8	24,500	22,900	103.0%	yes
 Netherlands	570,208	16.4	30,700	34,600	130.0%	yes
 Poland	310,075	38.2	14,300	8,100	61%	no
 Belgium	337,284	10.6	27,200	31,400	114.9%	yes
 Sweden	292,680	9.1	28,400	31,300	120.3%	no
 Austria	277,074	8.3	28,800	32,800	124.0%	yes
 Greece	237,494(p)	11.2	21,900(p)	20,700(p)	95%	yes
 Denmark	222,893	5.5	27,600	40,300	117.3%	no
 Ireland	163,543	4.4	30,200	35,700	128.0%	yes
 Finland	170,971	5.3	26,100	32,100	110.4%	yes
 Portugal	167,633	10.6	18,500	15,800	78.3%	yes
 Czech Republic	137,246	10.3	18,900	13,100	80.4%	no
 Romania	115,869	21.5	10,700	5,400	45%	no
 Hungary	93,086	10.0	14,800	9,300	63.0%	no
 Slovakia	63,332	5.4	16,800	11,600	71.5%	yes



 Slovenia	34,894	2.0	20,600(b)	17,300(b)	86.1%	yes
 Bulgaria	33,877	7.6	10,800(2008)	4,700(2008)	41%	no
 Lithuania	26,650	3.4	12,500	7,900	53.1%	no
 Latvia	18,539	2.3	11,400	8,200	48.5%	no
 Cyprus	16,947	0.8	23,200	21,200	98.2%	yes
 Estonia	13,730	1.3	14,800	10,300	62.0%	no
 Malta	5,720	0.4	18,400	13,900	77.6%	yes



EU Candidates 	GDP 2008 millions of euro 	Populati on in millions 	GDP (PPP) per capita 2009 euro 	GDP (Nominal) per capita 2009 euro 	GDP (PPP) per capita 2009 perc. of EU27 	Eurozone yes/no 
 Iceland	8,688	0.3	28,300	27,200	119.7%	no
 Croatia	45,376	4.5	15,700(2008)	10,800(2008)	64%	no
 Turkey	441,019	71.0	11,400(2008)	7,000(2008)	46%	no
 Macedonia	6,852	2.0	8,400(2008)	3,300(2008)	35%	no

States outside EU 	GDP 2008 millions of euro 	Populati on in millions 	GDP (PPP) per capita 2009 euro 	GDP (Nominal) per capita 2009 euro 	GDP (PPP) per capita 2009 perc. of EU27 	Eurozone yes/no 
 Norway	275,060	4.6	41,500	56,500	177.3%	no
 Switzerland	354,680	7.7	33,900(p)	45,800(p)	144%	no

Disease	Attribution %, Overall: 6.7%	Reference: ILO, Decent Work-SafeWork, 2005
Asthma, adult males	30	Karjalainen et al. 2001
Lung cancer	25-30	Axelsson 2001
Cardiovascular disorders		
CHD	5-30	Leigh 1997
Stroke	5	Leigh 1997
Musculoskeletal disorders		
Upper extremities	15-40	EU OSHA
Low back	37	WHO 2002, Punnet et al. 2005
Mental health disorders	5-10	e.g. Toppinen et al. 1997
Diabetes II	+	
Breast cancer	+	

Rank	Country	GDP (millions of USD)
—	World	57,843,376 ^[4]
—	 European Union	16,414,697 ^[4]
1	 United States	14,119,050
2	 Japan	5,068,894
3	 People's Republic of China	4,984,731 ^[2]
4	 Germany	3,338,675
5	 France	2,656,378
6	 United Kingdom	2,178,856
7	 Italy	2,118,264
8	 Brazil	1,574,039
9	 Spain	1,467,889
10	 Canada	1,336,427
11	 India	1,235,975
12	 Russia	1,231,892
13	 Australia	994,246
14	 Mexico	874,810
15	 South Korea	832,512
16	 Netherlands	796,651
17	 Turkey	614,466
18	 Indonesia	539,377

Loss by poor Working Conditions, 5.9 % of GDP (ref. Australia)

3,412,759 millions World USD
2,509,381 millions World Euro

968,467 millions Europe USD
712,108 millions Europe Euro

[http://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(nominal\)](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal))

Price of premature retirement EU27/Finland

70.094/7million new retirements/year	Average age 57.4 years Loss 7.6 years/person	EU27 estimate
Annual average salary: 30.000 eur	16 billion	1600 billion
Annual average salary+expenses/ person: +30 %	21 billion	2100 billion
GDP/employed 73.500 eur	39 billion	3900 billion

Statistics, Finland: GDP 2007, Pensions 2007, Salaries 2007,
premature pension payments: 4.5 billion eur/year in 2006
GDP in 2007: 178 billion (US billion = 1000 million = 10⁹ euro =
mrd) euro, population of Finland 5.2 million

712,108 millions Europe Euro = 712 billion (US billion = mrd = 10⁹) Australia es

The attributable fractions related work of various diseases. Fractions (%) are based on largely industrial country conditions while application of these fractions was adapted to conditions in selected developing countries

Causes	Attributable fraction	Attributable fraction, men	Attributable fraction, women
Communicable diseases	8.8	4.8	32.5
Malignant neoplasms	8.4	13.8	2.2
Respiratory systems diseases	4.1	6.8	1.1
Circulatory systems diseases	12.4	14.4	6.7
Neuro-psychiatric conditions	3.4	6.6	1.8
Digestive systems diseases	2.1	2.3	1.5
Diseases of the genitourinary system	1.3	3.0	0.4

Overall work-relatedness of mortality, ILO:	6.7%
GDP loss, Australian method	5.9%
Global Burden of disease and injury in Europe, WHO	5.0%

Thank you for your attention

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