

# **Memo: Full-time equivalent employment rates among the age groups 55-59, 60-64 and 65-69: Finland's performance in international comparison**

Finnish Centre for Pensions

Aart-Jan Riekhoff

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## **Summary**

- Full-time equivalent (FTE) employment rates are employment rates adjusted for average working hours
- Due to the relatively lower incidence in part-time work in Finland the gap between FTE employment rates and regular employment rates is smaller than in most other European countries
- Finnish women's FTE employment rates are among the highest of the countries included in the analysis, nearing the levels of Sweden
- Especially in Germany and the Netherlands, women's FTE employment rates are pushed downwards by the high incidence of part-time work
- Finnish men's FTE employment rates are lowest among the investigated countries and have seen little improvement between 2007 and 2017
- In all countries, changes in FTE employment rates are mainly due to changes in regular employment rates: average working hours have been relatively stable over time

## **Introduction**

In the face of the economic and social challenges that accompany ageing populations, many governments aim to raise employment and productivity of older workers. To measure and compare the performance of older workers in the labour market, employment rates of those aged between 55 and 64 are commonly used as a relevant indicator. The employment rate is a simple measure that is calculated as the proportion of those within the entire population who are in work.

In spite of its simplicity and common usage, the employment rate as a measuring instrument and a policy target suffers from several limitations. One issue related to its measurement is that it indicates how many people work, but not how much those people work. In other words, people may be employed, but work very few hours. Therefore, if variation in working hours is large between countries and between groups within countries, employment rates are an imprecise indicator for work input. One way to counter this problem is to adjust the employment rate for the number of hours worked, i.e. by calculating full-time equivalent (FTE) employment rates (OECD 2019).

In international comparison, Finland is lagging behind the other Nordic countries in terms of employment, especially among older men. Yet, comparisons of employment rates ignore the fact that part-time work is much less common in Finland than in its Nordic neighbours as well as in some other high-employment European countries. Therefore, comparing FTE employment rates for these countries might shed a different light on Finland's performance in a European context.

## Data and methods

To calculate the FTE employment rates for Finland, Sweden, Denmark, Norway, Germany and the Netherlands, the European Labour Force Survey (EU-LFS) is used. EU-LFS data collection started in 1983 and is currently collected in the 28 European Union (EU) member states, plus Iceland, Norway and Switzerland. It produces quarterly results on labour market participation of people aged 15 years or older and also covers people outside the labour force. Samples are representative for the entire working population and cover all occupations and industries. In the latest available year, 2017, the sample size of all countries combined was 1.5 million (Eurostat 2019).

In this short analysis, FTE employment rates are calculated for the age groups 55-59, 60-64 and 65-69 for the total population as well as for men and women separately for the years 2007-2017. Following the OECD (2019) definition, for each selected group  $g$ , FTE employment rates for each year  $y$  are obtained as follows:

$$FTE ER_g^y = \frac{\text{Employed persons}_g^y}{\text{Total population}_g^y} \times \frac{\text{Average usual weekly working hours}_g^y}{40}$$

The first part of the function describes the ‘normal’ employment rate within a certain group in a certain year by taking the proportion of the total population of that group that is employed. For each respondent in the survey information is available whether they are employed or not. The second part establishes the average usual hours worked per week within that group as a proportion of what is considered full-time work, namely 40 hours per week. Employed respondents in the survey are asked how many hours per week they usually work ranging from 1 to a cut-off point at 80 hours. Although regulations, norms and practices of what constitutes full-time work might differ between countries, 40 hours is commonly used as a benchmark in international comparisons. Hence, in the FTE employment rate, the ‘usual’ employment rate is adjusted for the average weekly hours usually worked relative to a standard of 40 hours per week. The calculated FTE employment rates by year, gender and age groups are reported in the table in the Annex.

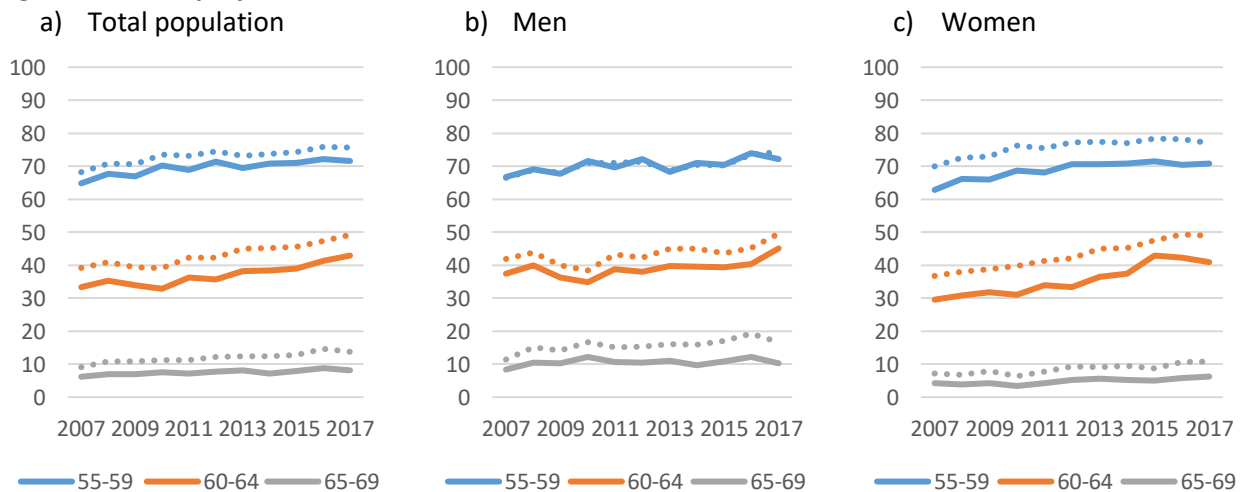
## Results

Figures 1-6 show the FTE employment rates (the thick lines) for the total population (panel a), men (panel b) and women (panel c) and for each of the age groups for each of the countries. The dotted lines indicate the usual employment rates based on EU-LFS data without adjusting for working hours. It should be noted that for the age groups 55-59 and 60-64 sample size were generally large enough for reliable calculations, but in case of the 65-69 year olds the number of observations was often quite small, especially among women in the countries where their labour market participation is very low. Therefore, the results for the oldest age group should be interpreted with some reservation.

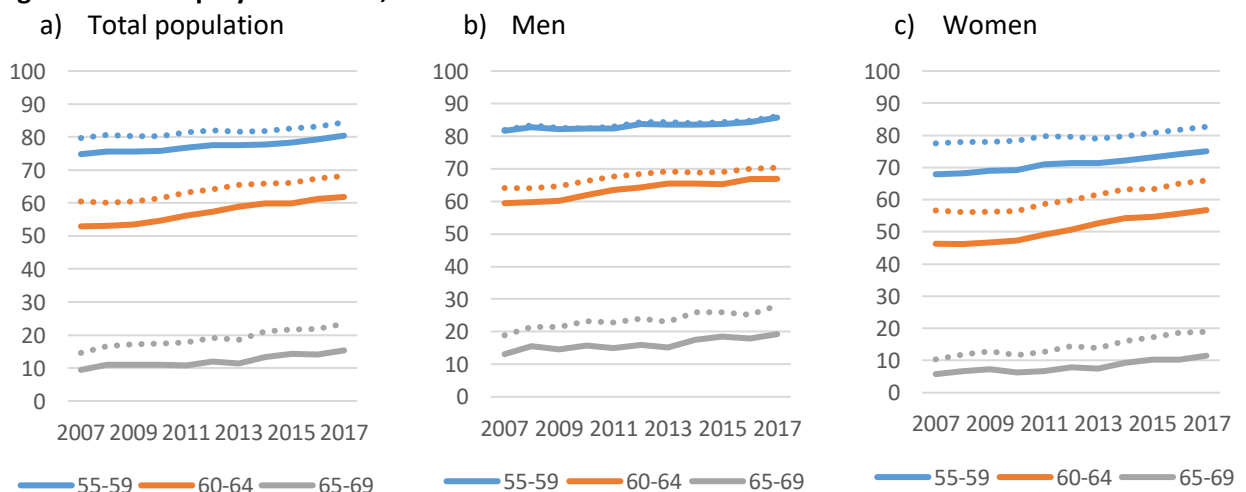
Figure 1 for Finland shows that employment rates decline by age. While FTE employment rates are close to 70 per cent among the youngest age group of 55-59, they decline to 30-50 per cent for ages 60-64 and are 5 to 10 per cent for the age group 65-69. Finland is relatively unique in an international context, as employment rates of women are similar to or even higher than men’s, even when adjusting for working hours. There is a relatively small gap between employment rates and FTE employment rates, due to most people working close to full-time hours. The gap is larger among women than among men. Men between ages 55 and 59 have working hours that are close to 40 hours a week on average. The gap widens somewhat among the older age groups. Across time, the gap between employment rates and FTE employment rates remains relatively constant, indicating that there are almost no changes in the average hours that people work. Relative stability in work hours is found in all the other countries as well, although there are small declines among women in Germany (Figure 5c) and the Netherlands (Figure 6c).

Sweden (Figure 2), although having higher employment rates among all age groups, is relatively similar to Finland in terms of FTE employment rates that are close to unadjusted employment rates among men and with relatively small gaps between adjusted and unadjusted indicators among women. In both countries, female FTE employment rates are high, especially among the age group 55-59. In Norway (Figure 4), the employment rates among men are high similar to Sweden, but FTE employment rates are somewhat lower. Among Norwegian women, the gap is even more considerable. In Denmark (Figure 3), the gaps between employment rates and FTE employment rates are similar to Norway. In this country, the age group 60-64 has been catching up during the last decade, while employment rates among the 55-59 years old has stagnated though remaining at a high level. In Germany (Figure 5) and the Netherlands (Figure 6) the gender differences are particularly striking. Although among men employment rates have caught up to Nordic levels and men work close to full-time on average (or even more in case of German men), women's FTE employment rates are lagging due to the high incidence of part-time work in both countries.

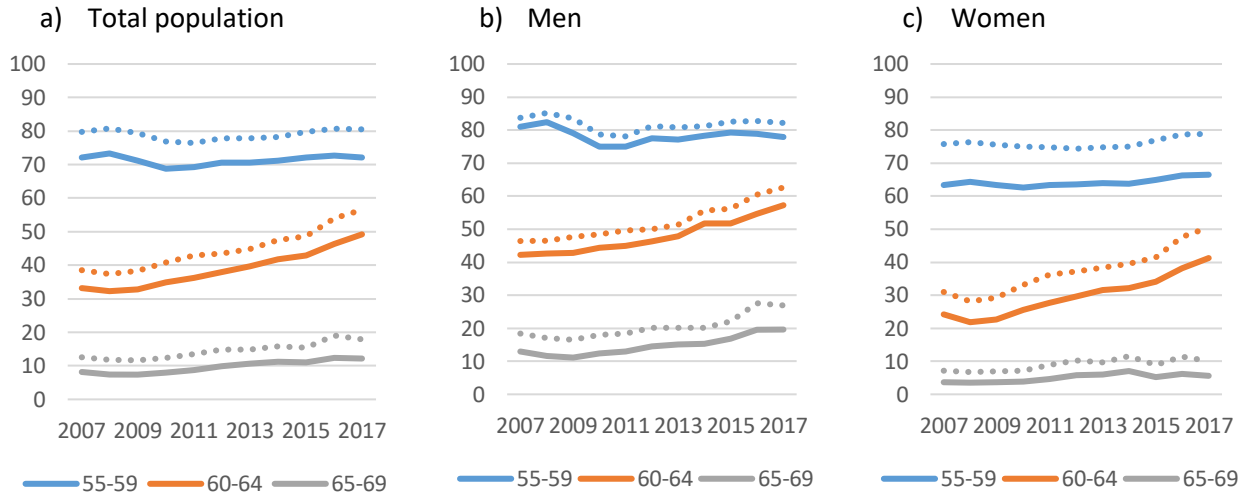
**Figure 1. FTE employment rates, Finland**



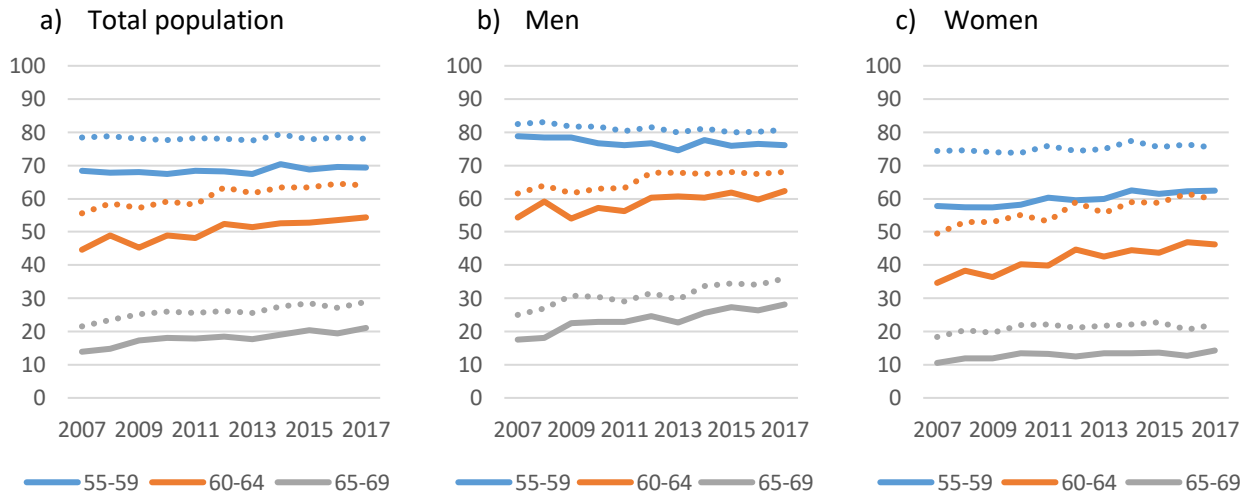
**Figure 2. FTE employment rates, Sweden**



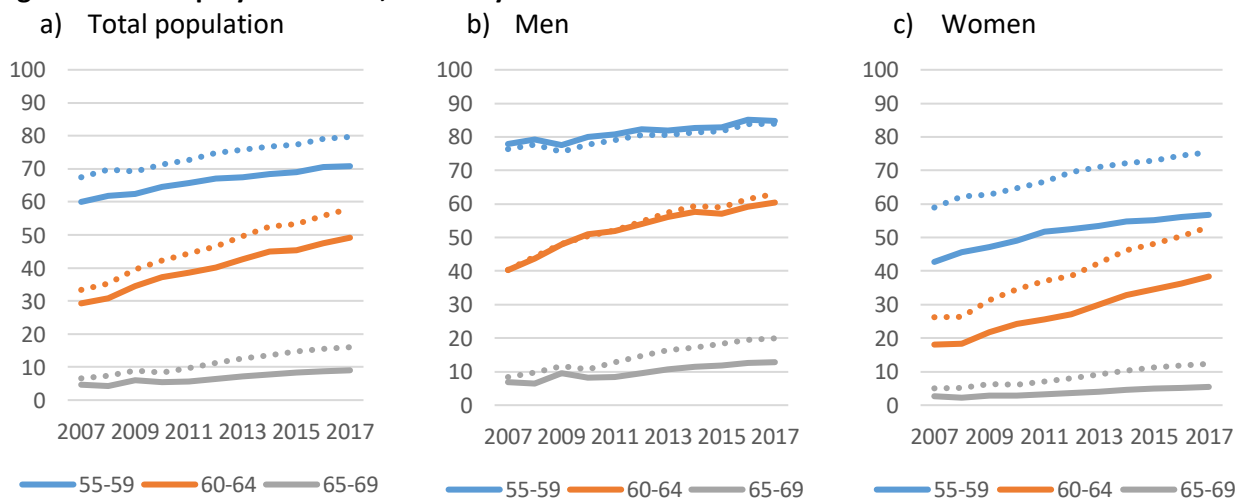
**Figure 3. FTE employment rates, Denmark**



**Figure 4. FTE employment rates, Norway**



**Figure 5. FTE employment rates, Germany**



**Figure 6. FTE employment rates, the Netherlands**

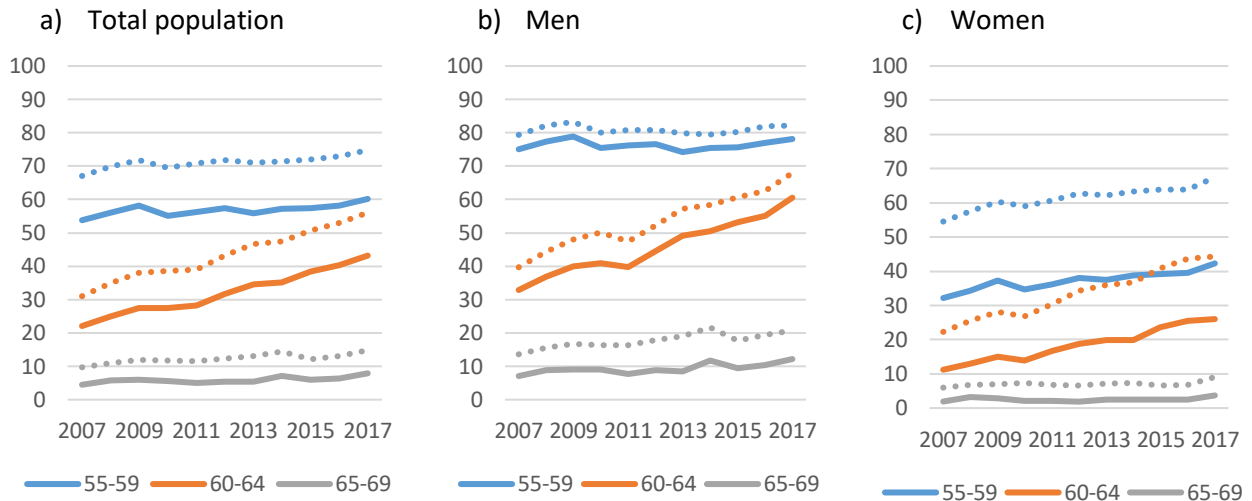
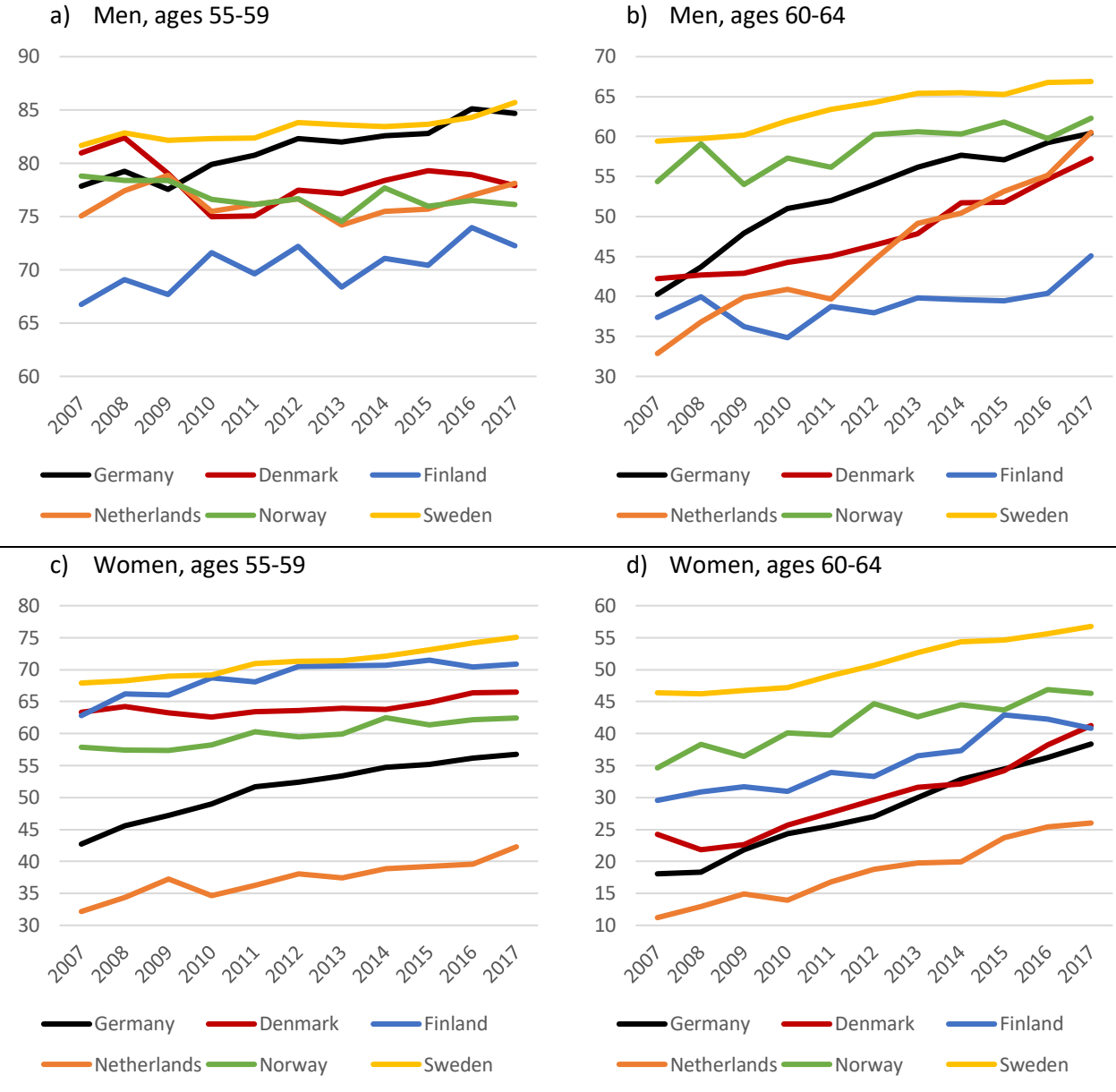


Figure 7 zooms in on the differences between countries and changes in FTE employment rates during the past decade and allows for easier comparisons. Results are separated by gender and age groups 55-59 and 60-64. Note the differences in scales on the y-axis. The age group 65-69 has been excluded due to the very low rates and unreliable estimations.

Among men, Finland clearly has the lowest FTE employment rates in both age groups. In the age group 55-59 (Figure 7a), by 2017 Finland had grown more closely to the FTE employment levels of Denmark, Norway and the Netherlands, but this is also due to stagnation in the employment rates of those three countries. In the age group 60-64 (Figure 7b), Finland was still performing similarly to the Netherlands, Germany and Denmark in 2007, but FTE employment rates have risen at a considerably higher pace in the latter countries than in Finland after that.

Compared to men, Finnish women have been performing much better in the international context. Finnish women aged 55-59 have had FTE employment rates similar to Sweden (Figure 7c). Denmark and Norway perform worse in particular due to lower working hours. In this category Germany and especially the Netherlands have the lowest FTE employment rates, not only due to low employment rates, but also because of low working hours. Within the age group 60-64, FTE employment rates among women drop more sharply in Finland than in Sweden and Norway, although the gap with the latter country is not large (Figure 7d). Finnish women in this age group have performed better during the recent decade than their Danish, German and Dutch counterparts.

**Figure 7. Changes in FTE employment rates by gender, age groups and countries**



## References

Eurostat (2019). European Labour Force Survey (EU LFS).

<https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>.

OECD (2019). Employment: Full-time equivalent employment rate, by sex.

<https://stats.oecd.org/index.aspx?queryid=54749>.

Annex: FTE employment rates by gender and age groups, calculations based on EU-LFS data

Country	Year	Total			Men			Women		
		55-59	60-64	65-69	55-59	60-64	65-69	55-59	60-64	65-69
Finland	2007	64,8	33,3	6,2	66,7	37,3	8,4	62,8	29,5	4,3
	2008	67,6	35,4	7,0	69,1	40,0	10,5	66,2	30,8	3,9
	2009	66,8	33,9	7,0	67,7	36,2	10,2	66,0	31,7	4,3
	2010	70,2	32,8	7,5	71,6	34,8	12,2	68,7	31,0	3,4
	2011	68,9	36,3	7,2	69,6	38,8	10,7	68,1	33,9	4,2
	2012	71,4	35,6	7,7	72,2	37,9	10,5	70,5	33,3	5,3
	2013	69,5	38,2	8,1	68,4	39,8	11,0	70,6	36,5	5,7
	2014	70,9	38,5	7,2	71,1	39,6	9,6	70,7	37,4	5,1
	2015	71,0	39,0	7,9	70,4	39,4	10,9	71,5	42,9	5,0
	2016	72,1	41,3	8,8	74,0	40,4	12,1	70,4	42,2	5,9
2017	71,5	42,9	8,2	72,2	45,1	10,2	70,8	40,8	6,2	
Sweden	2007	74,8	52,9	9,4	81,7	59,4	13,1	67,9	46,4	5,8
	2008	75,6	53,0	11,0	82,8	59,7	15,5	68,3	46,2	6,7
	2009	75,6	53,5	10,9	82,1	60,2	14,6	68,9	46,7	7,2
	2010	75,7	54,6	10,9	82,3	62,0	15,6	69,1	47,2	6,2
	2011	76,7	56,2	10,8	82,4	63,4	14,9	70,9	49,1	6,6
	2012	77,6	57,4	11,9	83,8	64,2	16,0	71,3	50,7	7,9
	2013	77,5	59,0	11,3	83,6	65,4	15,2	71,4	52,7	7,5
	2014	77,8	59,9	13,4	83,4	65,5	17,5	72,2	54,3	9,4
	2015	78,4	59,9	14,3	83,7	65,3	18,5	73,1	54,6	10,2
	2016	79,3	61,2	14,1	84,3	66,8	17,9	74,2	55,6	10,3
2017	80,4	61,8	15,3	85,7	66,9	19,2	75,1	56,8	11,5	
Denmark	2007	72,2	33,2	8,2	80,9	42,2	12,9	63,3	24,2	3,6
	2008	73,3	32,3	7,4	82,4	42,7	11,5	64,3	21,8	3,5
	2009	71,1	32,7	7,4	79,1	42,9	11,1	63,3	22,6	3,7
	2010	68,8	34,9	8,0	75,0	44,3	12,4	62,6	25,6	3,9
	2011	69,2	36,3	8,7	75,0	45,0	12,9	63,4	27,7	4,6
	2012	70,6	37,9	10,0	77,5	46,4	14,5	63,6	29,6	5,8
	2013	70,6	39,6	10,6	77,2	47,8	15,2	64,0	31,6	6,0
	2014	71,1	41,8	11,2	78,4	51,7	15,2	63,8	32,1	7,1
	2015	72,1	42,9	11,0	79,3	51,8	16,9	64,9	34,2	5,3
	2016	72,6	46,4	12,4	78,9	54,7	19,5	66,3	38,3	6,1
2017	72,2	49,2	12,3	77,9	57,2	19,6	66,5	41,3	5,7	
Norway	2007	68,4	44,6	13,9	78,8	54,4	17,5	57,8	34,6	10,5
	2008	67,9	48,9	14,8	78,4	59,1	18,0	57,4	38,3	11,9
	2009	68,0	45,2	17,2	78,4	54,0	22,5	57,4	36,4	11,9
	2010	67,4	48,9	18,0	76,6	57,3	22,8	58,2	40,1	13,4
	2011	68,3	48,2	17,9	76,1	56,2	22,8	60,3	39,8	13,3
	2012	68,1	52,5	18,4	76,6	60,2	24,6	59,5	44,7	12,6
	2013	67,5	51,4	17,8	74,5	60,6	22,6	60,0	42,6	13,4
	2014	70,4	52,6	19,1	77,7	60,3	25,6	62,5	44,5	13,4
	2015	68,9	52,7	20,3	76,0	61,8	27,3	61,4	43,7	13,7
	2016	69,5	53,5	19,5	76,5	59,8	26,4	62,2	46,9	12,8
2017	69,4	54,4	21,1	76,1	62,3	28,1	62,4	46,3	14,3	
Germany	2007	60,0	29,3	4,6	77,8	40,3	6,8	42,7	18,1	2,6
	2008	61,9	30,9	4,3	79,2	43,7	6,4	45,6	18,3	2,2



Country	Year	Total			Men			Women		
		55-59	60-64	65-69	55-59	60-64	65-69	55-59	60-64	65-69
	2009	62,4	34,5	6,0	77,5	47,9	9,4	47,2	21,8	2,9
	2010	64,5	37,2	5,4	79,9	51,0	8,2	49,0	24,3	2,9
	2011	65,7	38,5	5,7	80,8	52,0	8,5	51,7	25,6	3,2
	2012	67,1	40,1	6,4	82,3	54,0	9,5	52,4	27,0	3,5
	2013	67,5	42,6	7,3	82,0	56,1	10,8	53,4	29,9	4,0
	2014	68,5	45,0	7,9	82,6	57,6	11,4	54,7	32,9	4,6
	2015	68,9	45,3	8,3	82,8	57,1	11,8	55,2	34,5	5,0
	2016	70,6	47,5	8,7	85,1	59,3	12,7	56,2	36,3	5,1
	2017	70,8	49,2	9,0	84,7	60,4	12,8	56,8	38,4	5,4
<b>Netherlands</b>	2007	53,8	22,1	4,5	75,1	32,9	7,1	32,2	11,2	2,0
	2008	56,0	24,9	5,8	77,4	36,8	8,8	34,3	12,9	3,1
	2009	58,1	27,4	6,0	78,9	39,9	9,1	37,2	15,0	2,8
	2010	55,1	27,5	5,6	75,5	40,9	9,1	34,7	14,0	2,1
	2011	56,2	28,2	4,9	76,1	39,7	7,8	36,2	16,8	2,1
	2012	57,4	31,6	5,4	76,7	44,5	8,9	38,1	18,8	1,9
	2013	55,8	34,5	5,5	74,2	49,1	8,5	37,4	19,8	2,5
	2014	57,1	35,2	7,0	75,5	50,4	11,7	38,8	20,0	2,5
	2015	57,4	38,4	6,0	75,7	53,1	9,5	39,2	23,7	2,5
	2016	58,2	40,2	6,4	77,0	55,2	10,4	39,6	25,4	2,5
	2017	60,2	43,2	7,9	78,1	60,5	12,2	42,3	26,0	3,7