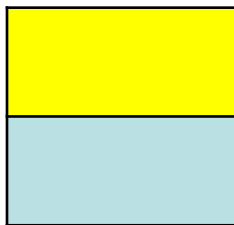
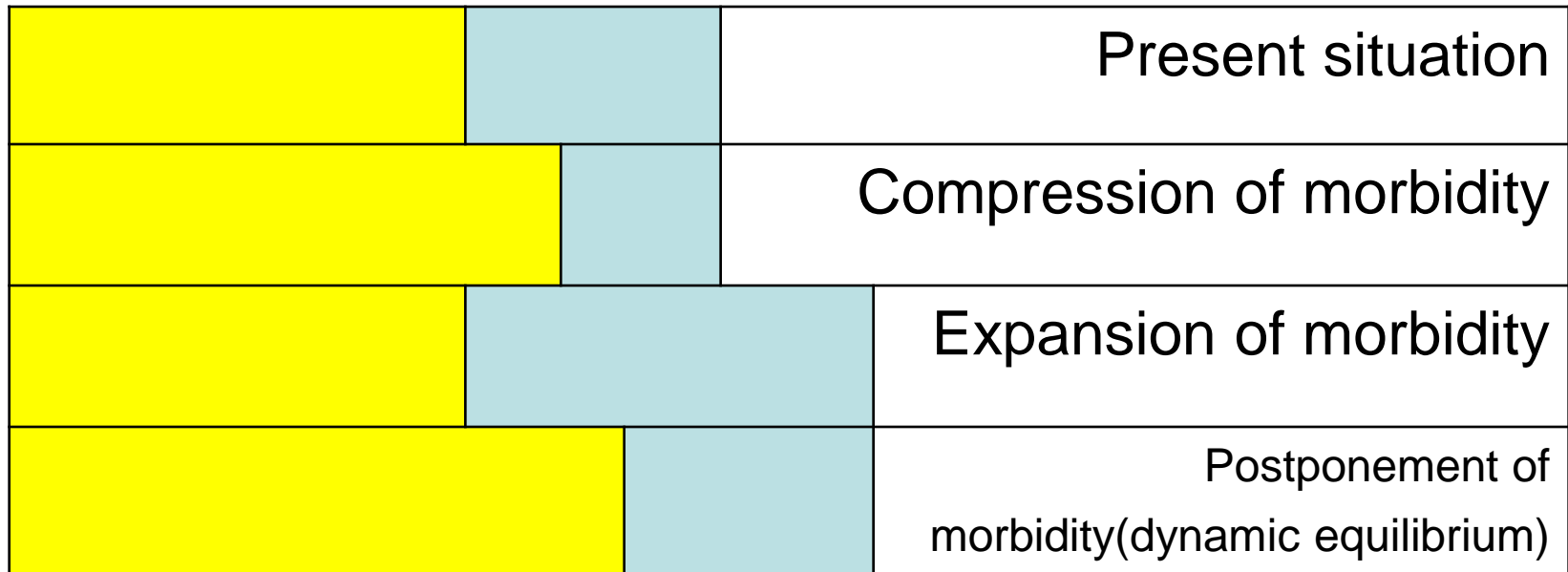


Prediction of life expectancy and healthy life years in Sweden 2010 – 2040 using microsimulation

Mårten Lagergren

12-05-08

Three hypotheses regarding connection between future length of life and health among the elderly



Healthy years

Years with ill-health

Healthy Life Years (HLY),

- HLY, the expected length of life in health, has been denoted by the European Commission as the structural indicator of health to be used in comparisons between EU-countries.
- HLY can be calculated using prevalence of ill-health per age-group according to a representative population study (the Sullivan method).
- The result will depend on which indicator of ill-health that is used.

Aim of study

- To calculate HLE according to different measures of ill-health
- To calculate added life-years in the period 2010 - 2040 divided between health and ill-health

Material and method

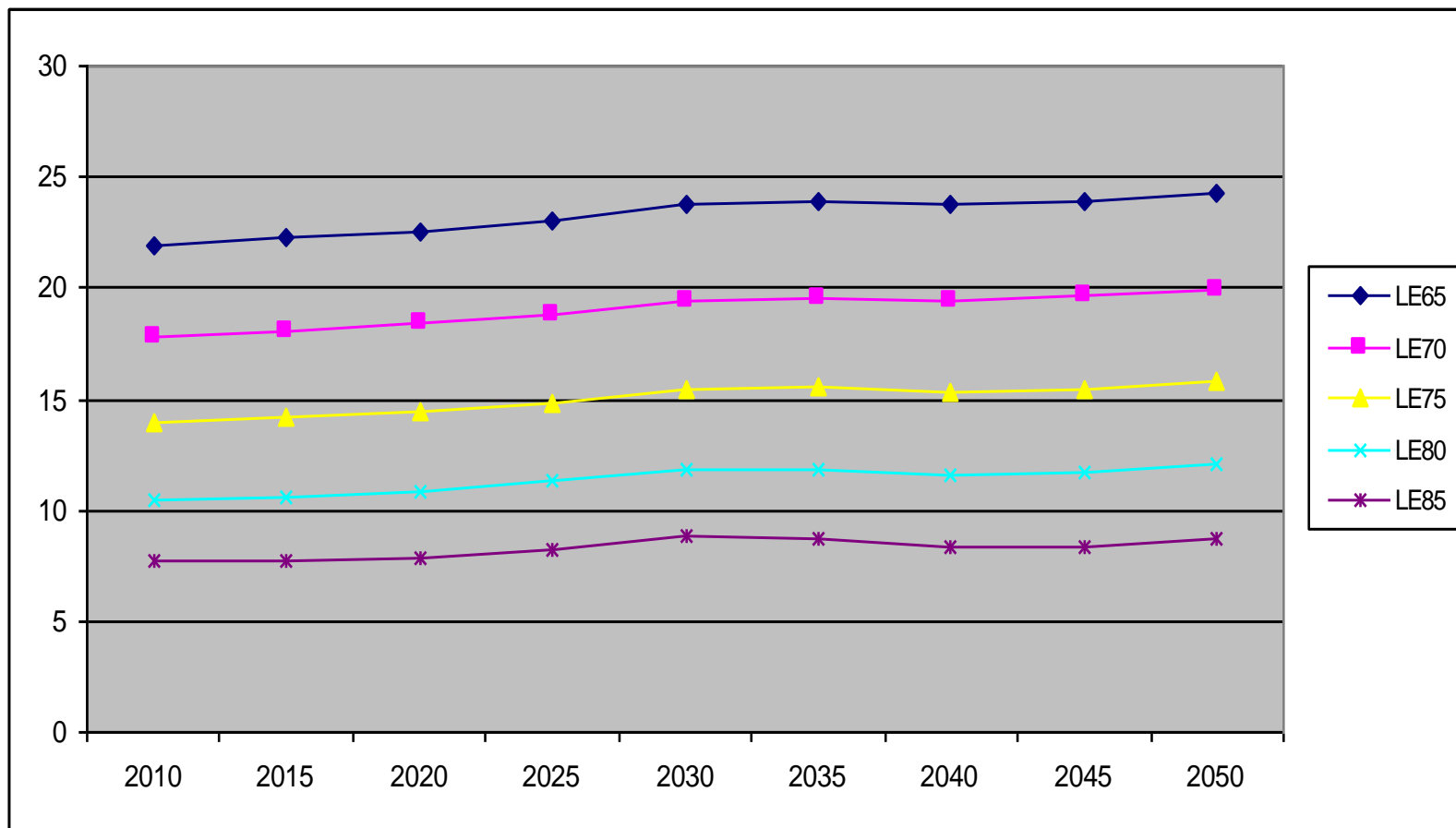
- HLY was calculated by the Sullivan method
- Prevalence predictions from SESIM microsimulation model with estimations based on observed data in the Swedish Survey of Living Conditions (ULF) and the SNAC-study.

Prevalences of ADL-dependency and dementia 2010 - 2040 as predicted by the SESIM model

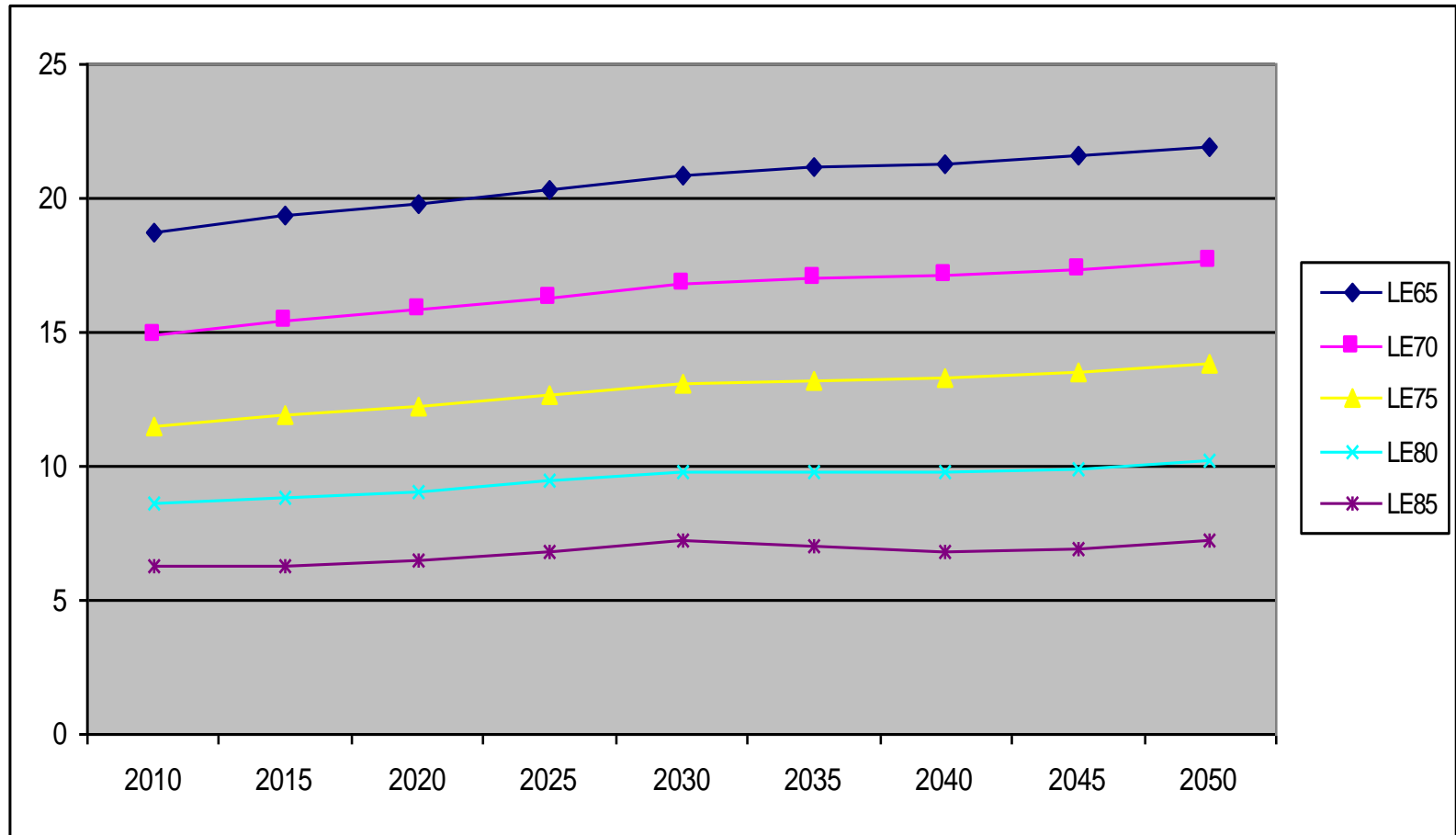
	ADL-dependency			Dementia			ADL-dependency <i>and</i> dementia		
	2010	2025	2040	2010	2025	2040	2010	2025	2040
Men									
65 – 69	3,9	3,9	4,0	2,1	2,1	1,8	0,8	0,7	0,7
70 – 74	7,6	8,1	8,4	9,8	7,9	7,8	3,9	3,4	3,4
75 – 79	15,5	15,5	16,4	16,3	15,1	15,3	9,1	9,4	9,5
80 – 84	22,7	22,2	24,5	22,3	21,1	22,9	13,5	14,9	16,0
85+	33,7	35,2	32,9	29,6	28,9	26,2	22,4	24,2	21,3
Women									
65 – 69	6,8	6,7	6,8	2,3	2,3	2,3	0,8	1,1	1,1
70 – 74	9,9	10,9	9,3	11,3	9,5	8,4	3,4	3,6	3,4
75 – 79	21,0	18,0	17,6	19,8	17,0	17,4	10,6	8,6	7,1
80 – 84	32,0	31,0	28,7	28,6	28,0	27,2	19,6	18,6	16,0
85+	44,8	45,5	44,2	37,9	37,8	32,0	29,6	30,7	26,4

Life expectancy, years from 65, ..., 85

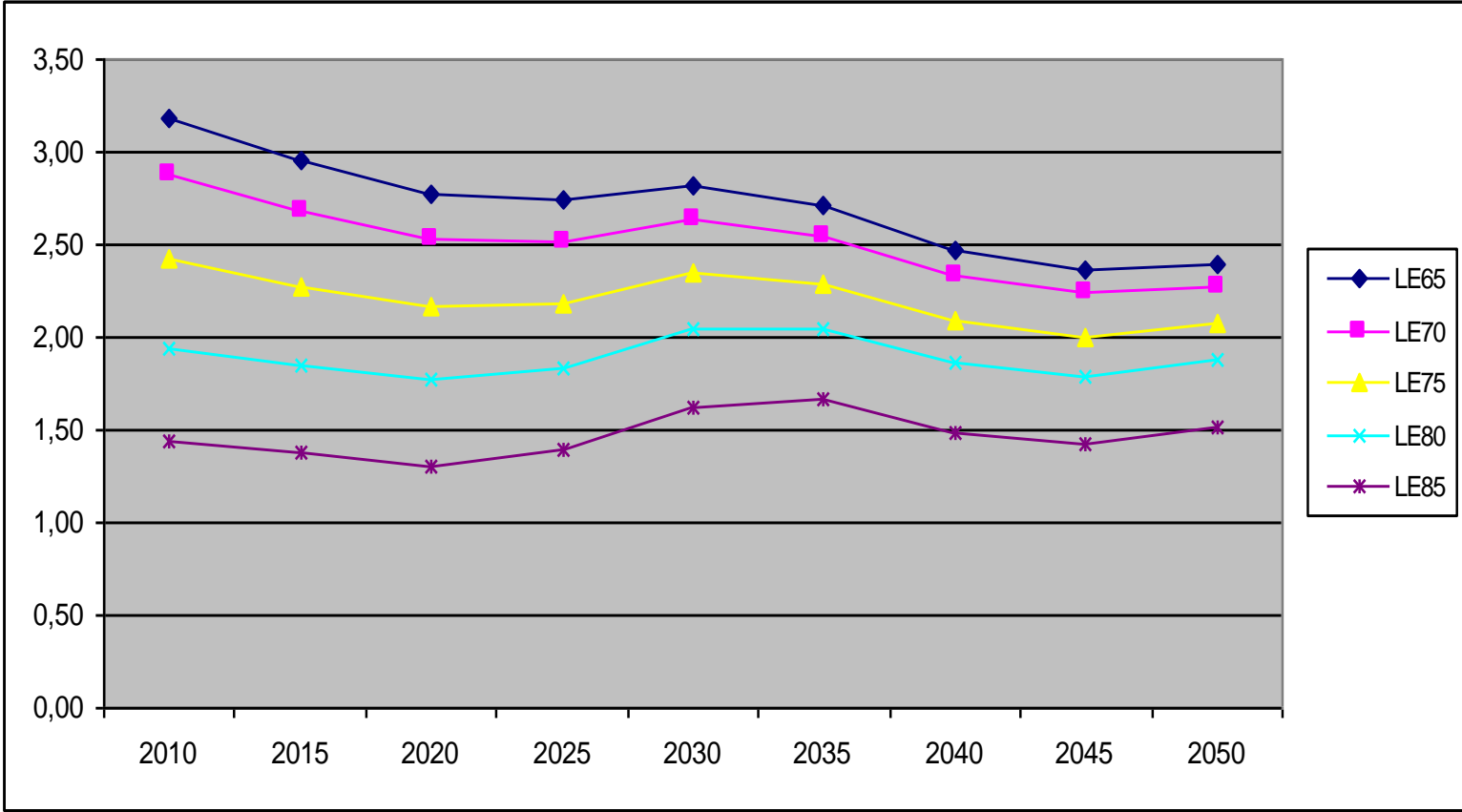
Women, 2010- 2040



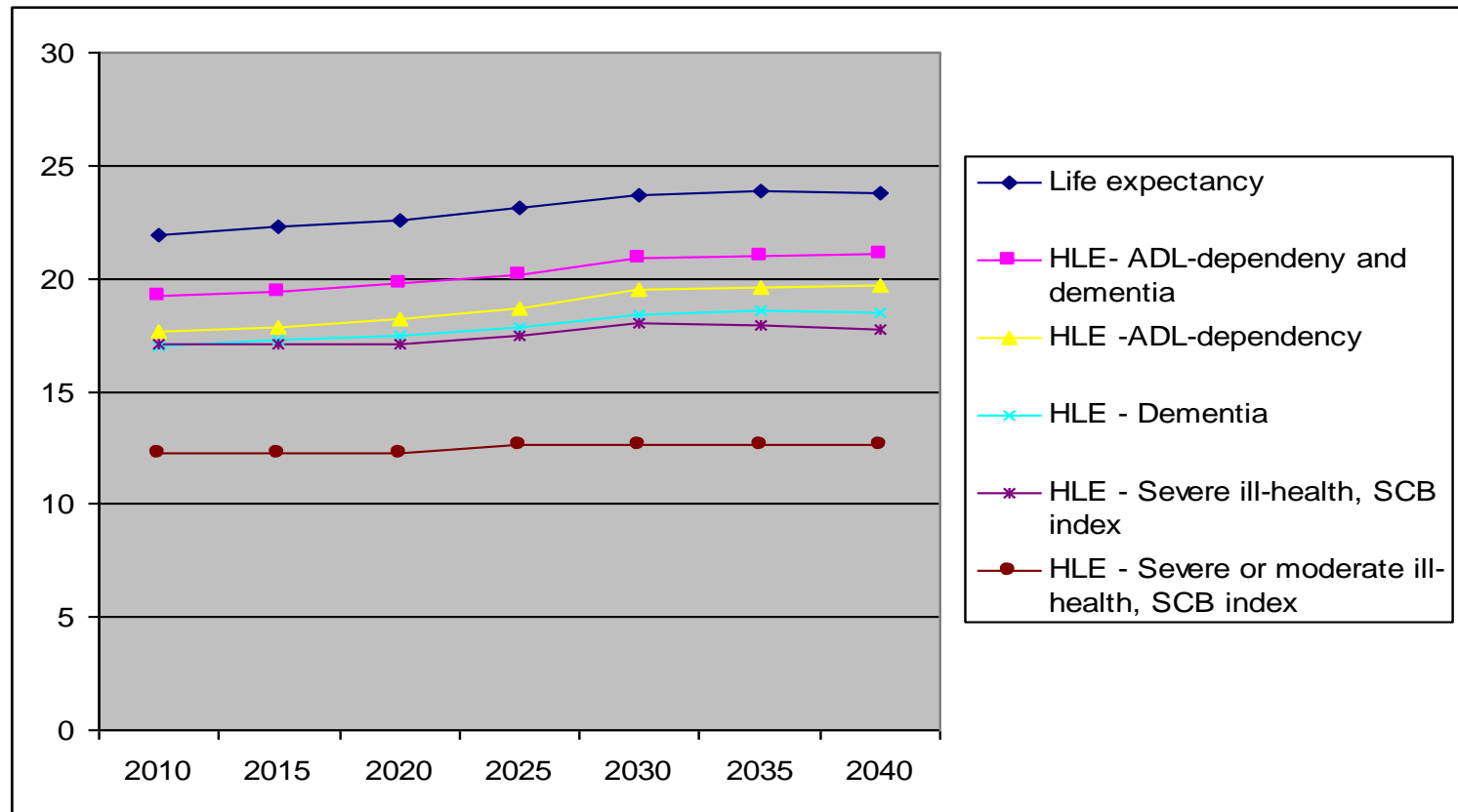
Life expectancy, years from 65, ..., 85 men, 2010- 2040



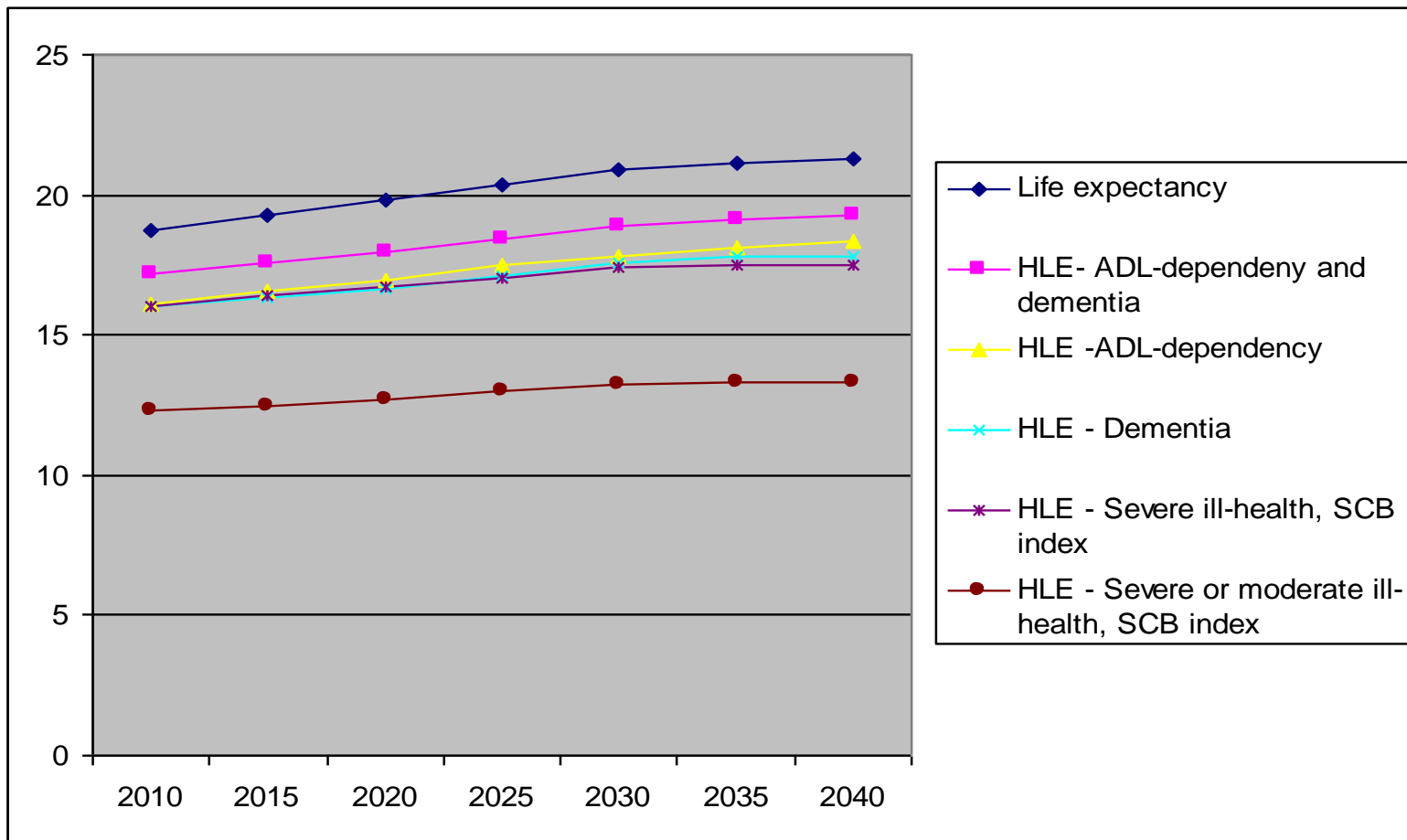
Gender gap in life expectancy from 65, ..., 85 years 2010- 2040



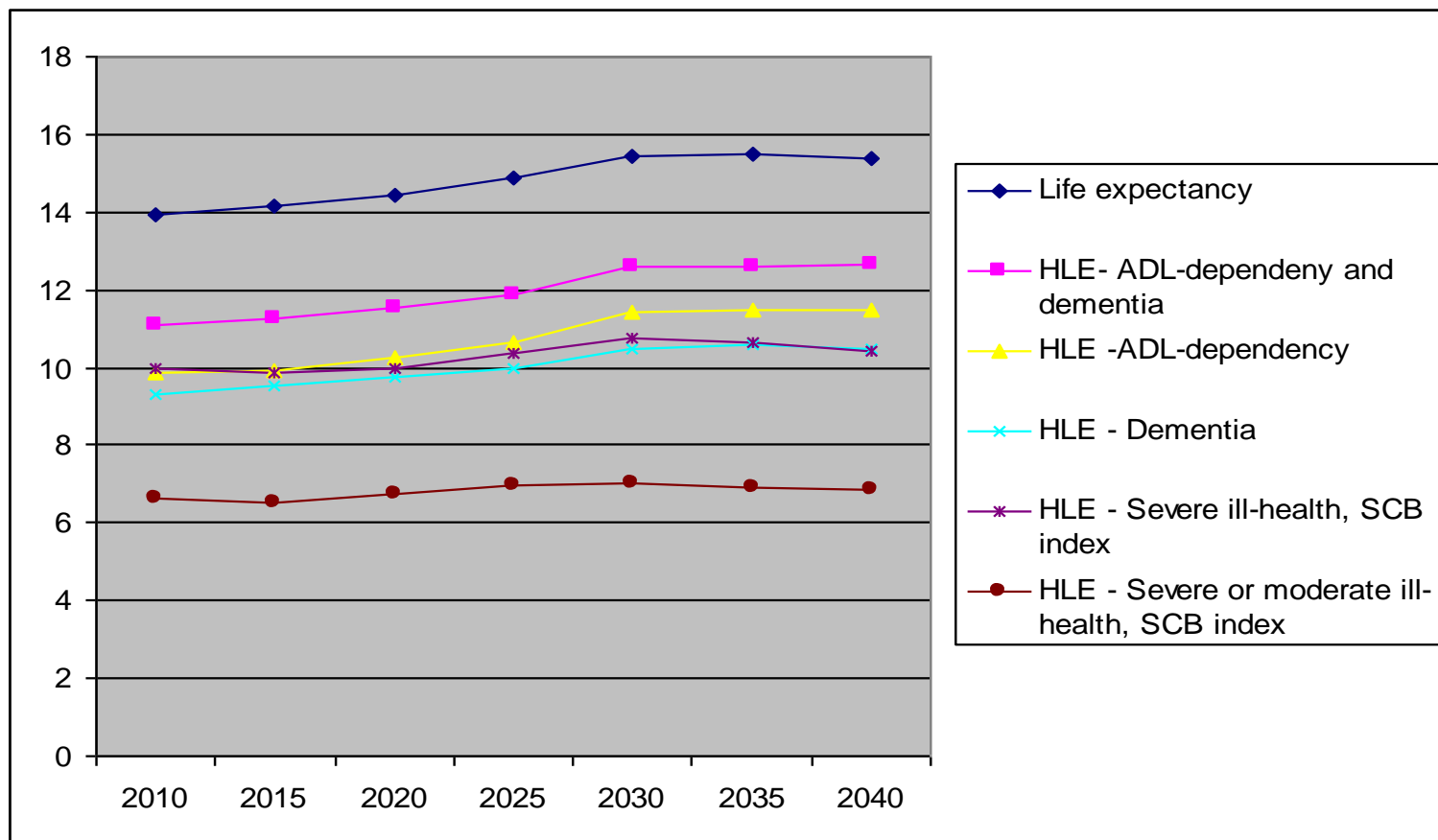
Life expectancy and healthy life expectancy from 65 according to different ill-health definitions, women 2010- 2040



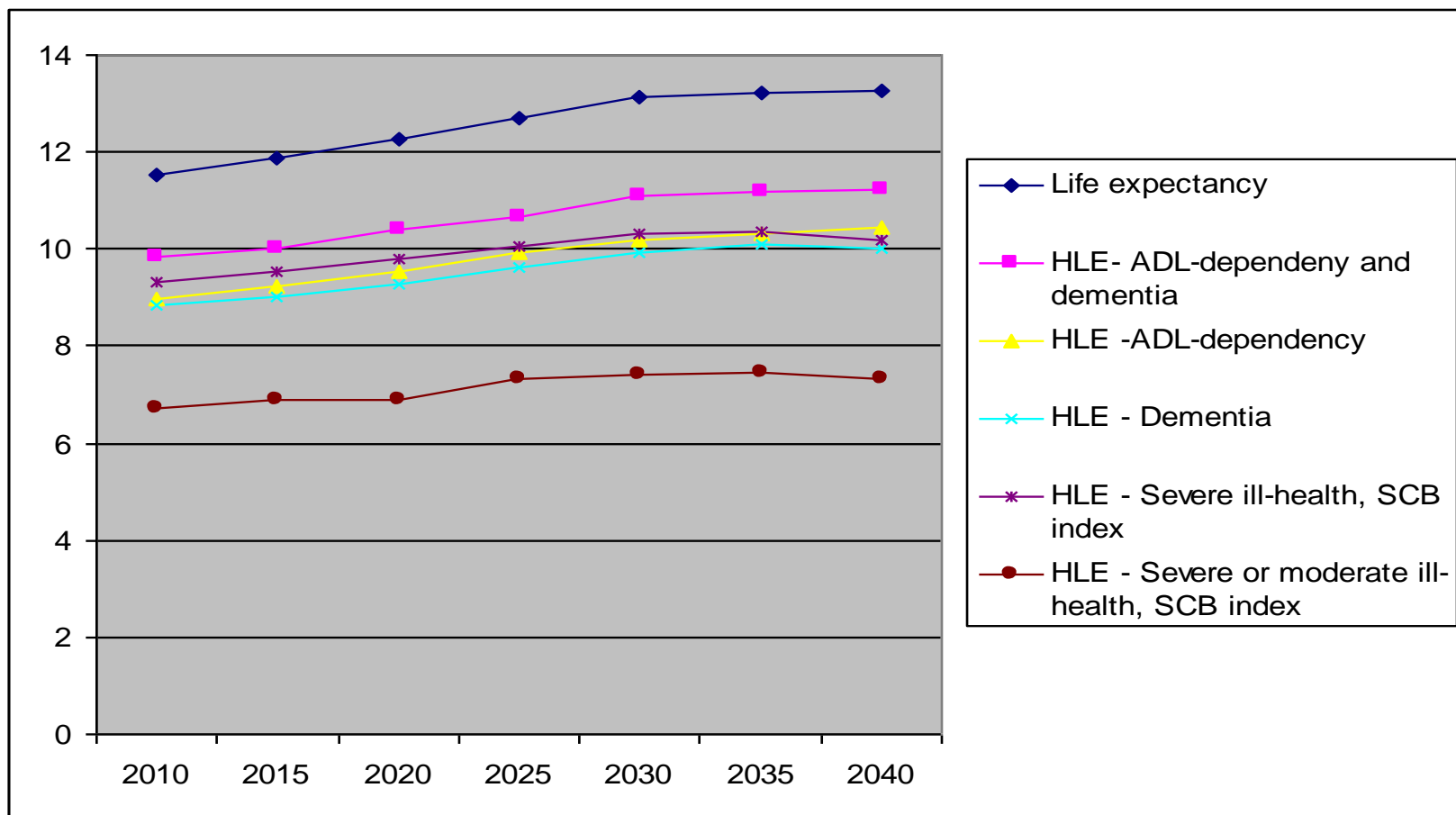
Life expectancy and healthy life expectancy from 65 according to different ill-health definitions, men 2010- 2040



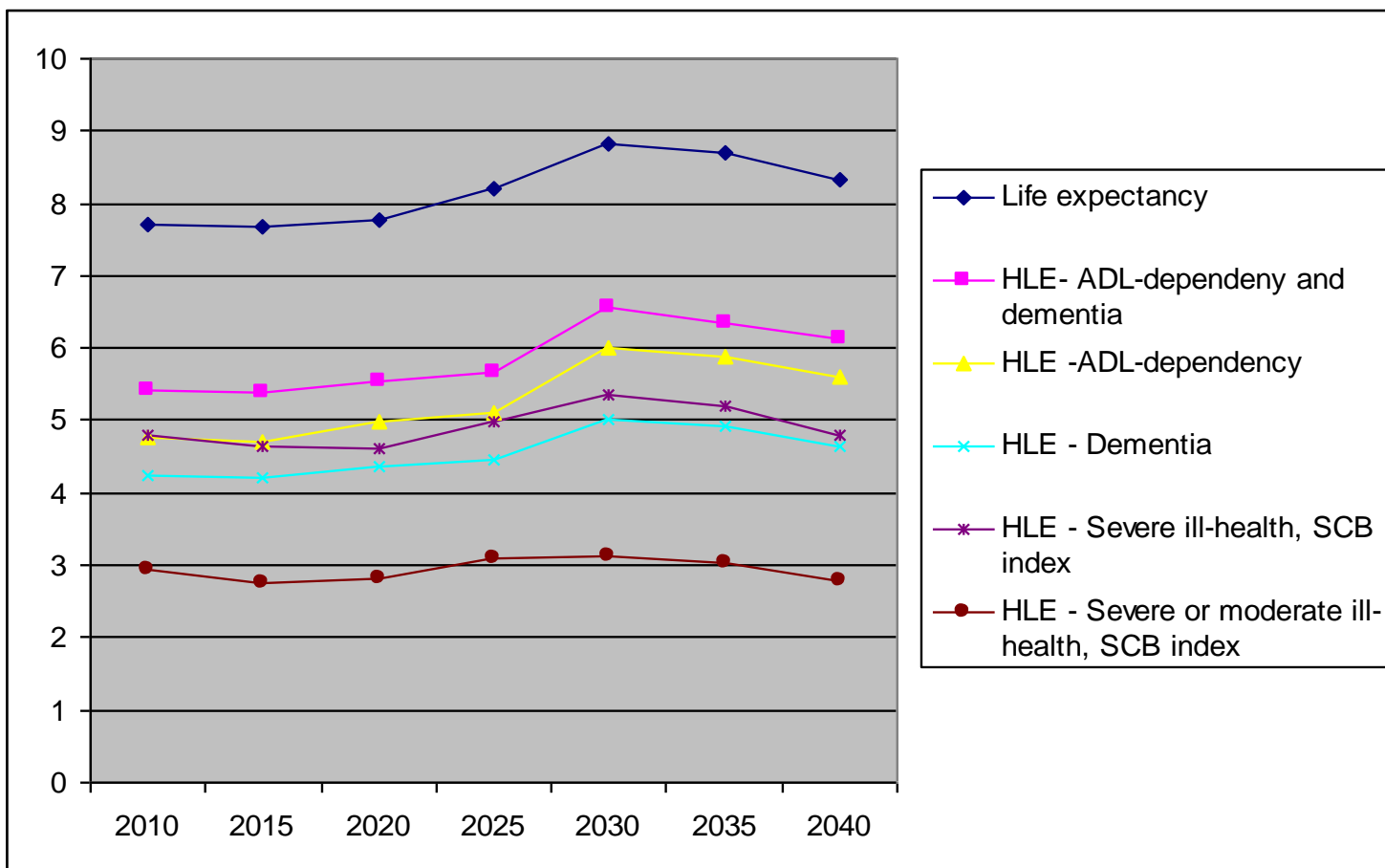
Life expectancy and healthy life expectancy from 75 according to different ill-health definitions, women 2010- 2040



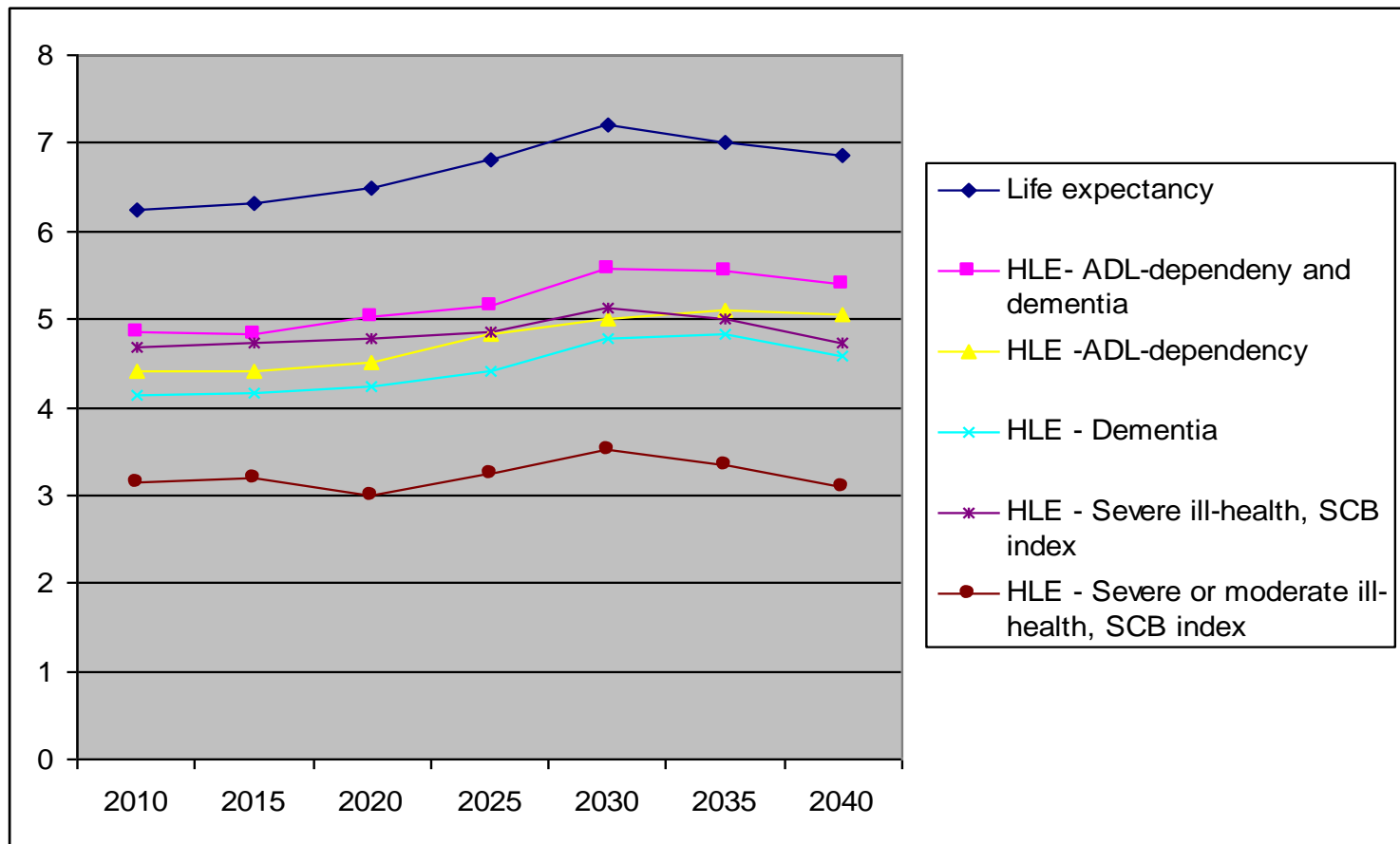
Life expectancy and healthy life expectancy from 75 according to different ill-health definitions, men 2010- 2040



Life expectancy and healthy life expectancy from 85 according to different ill-health definitions, women 2010- 2040

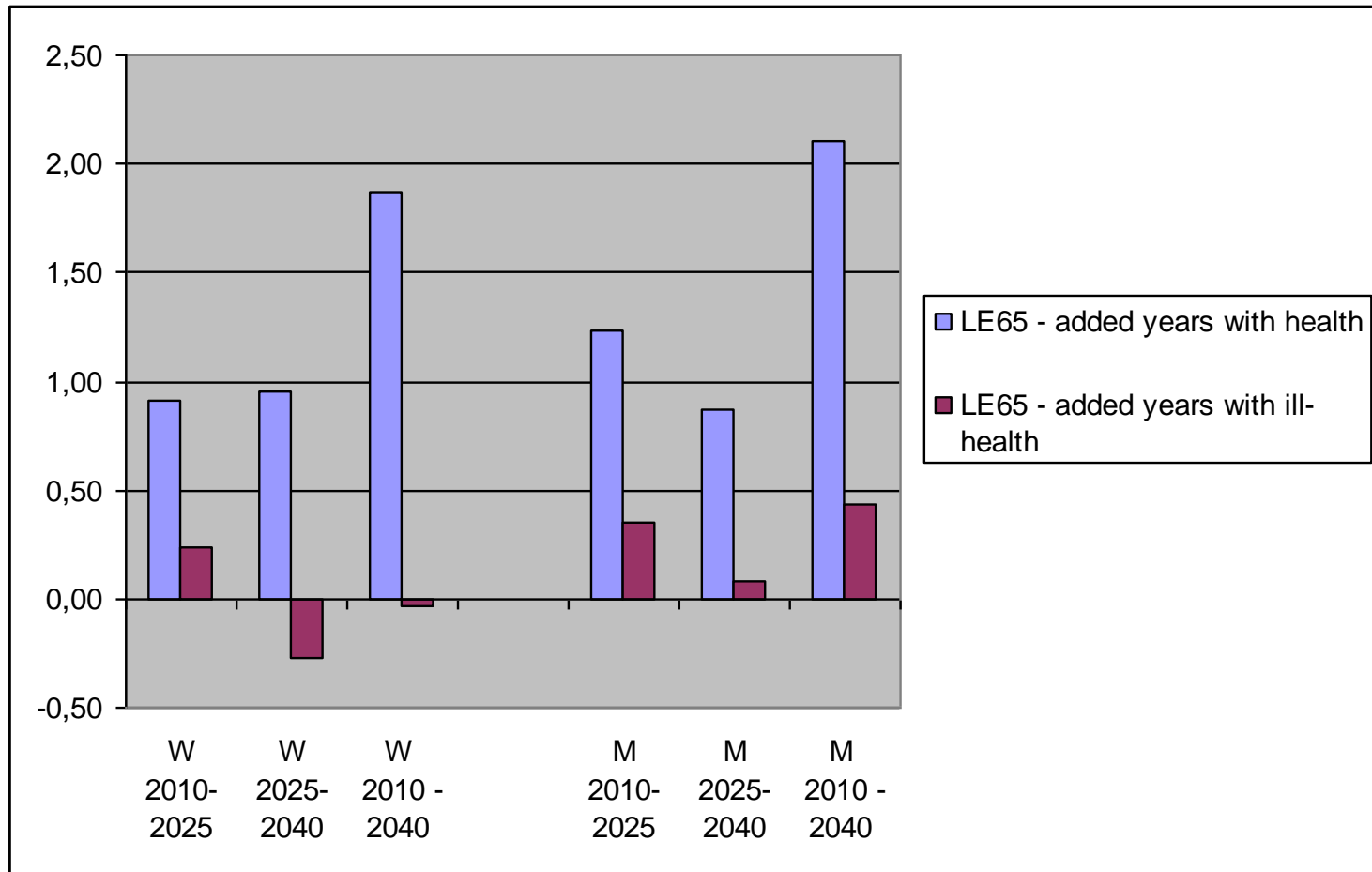


Life expectancy and healthy life expectancy from 85 according to different ill-health definitions, men 2010 - 2040

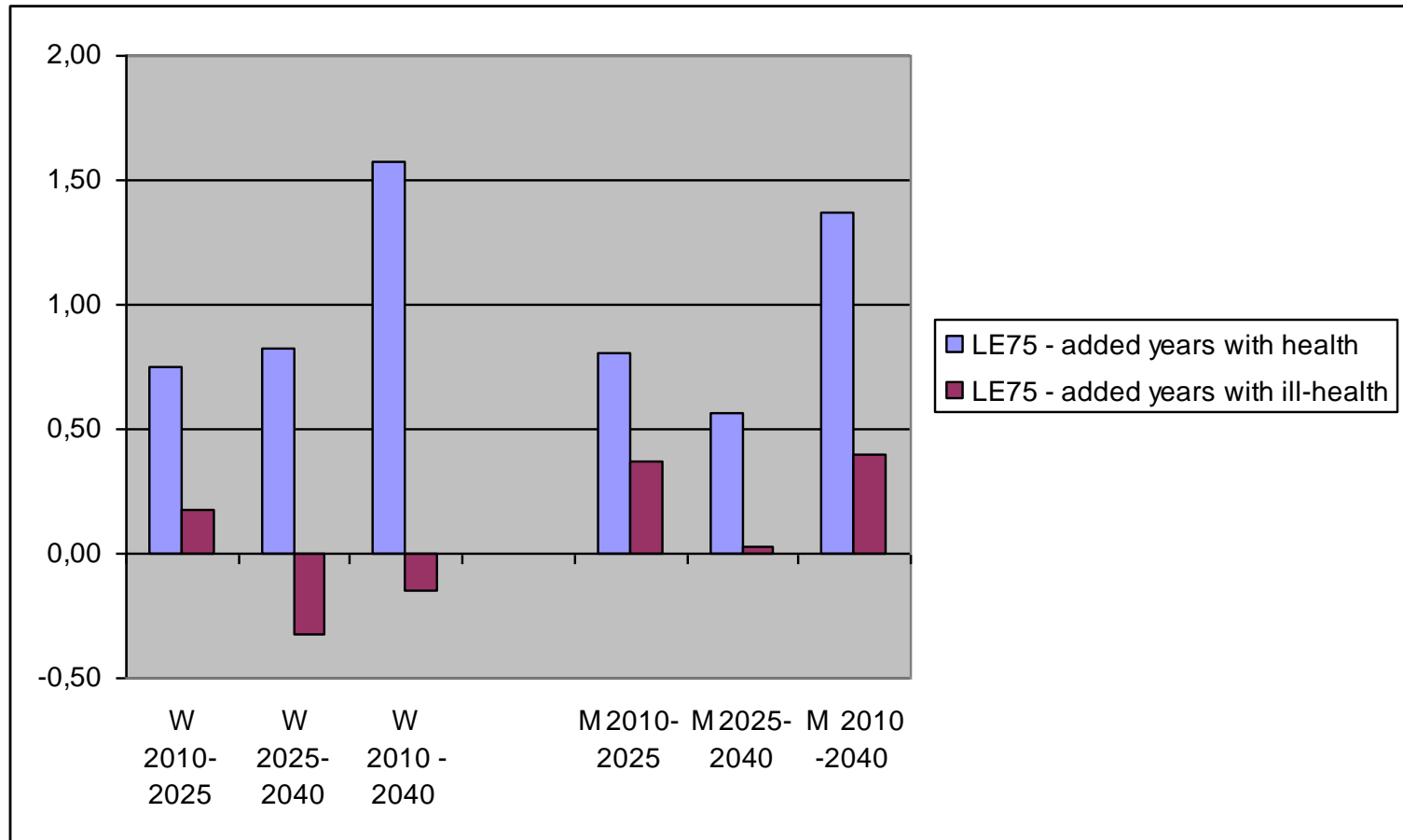


Added years of life from 65 by period

ill-health defined as ADL-dependent and dementia

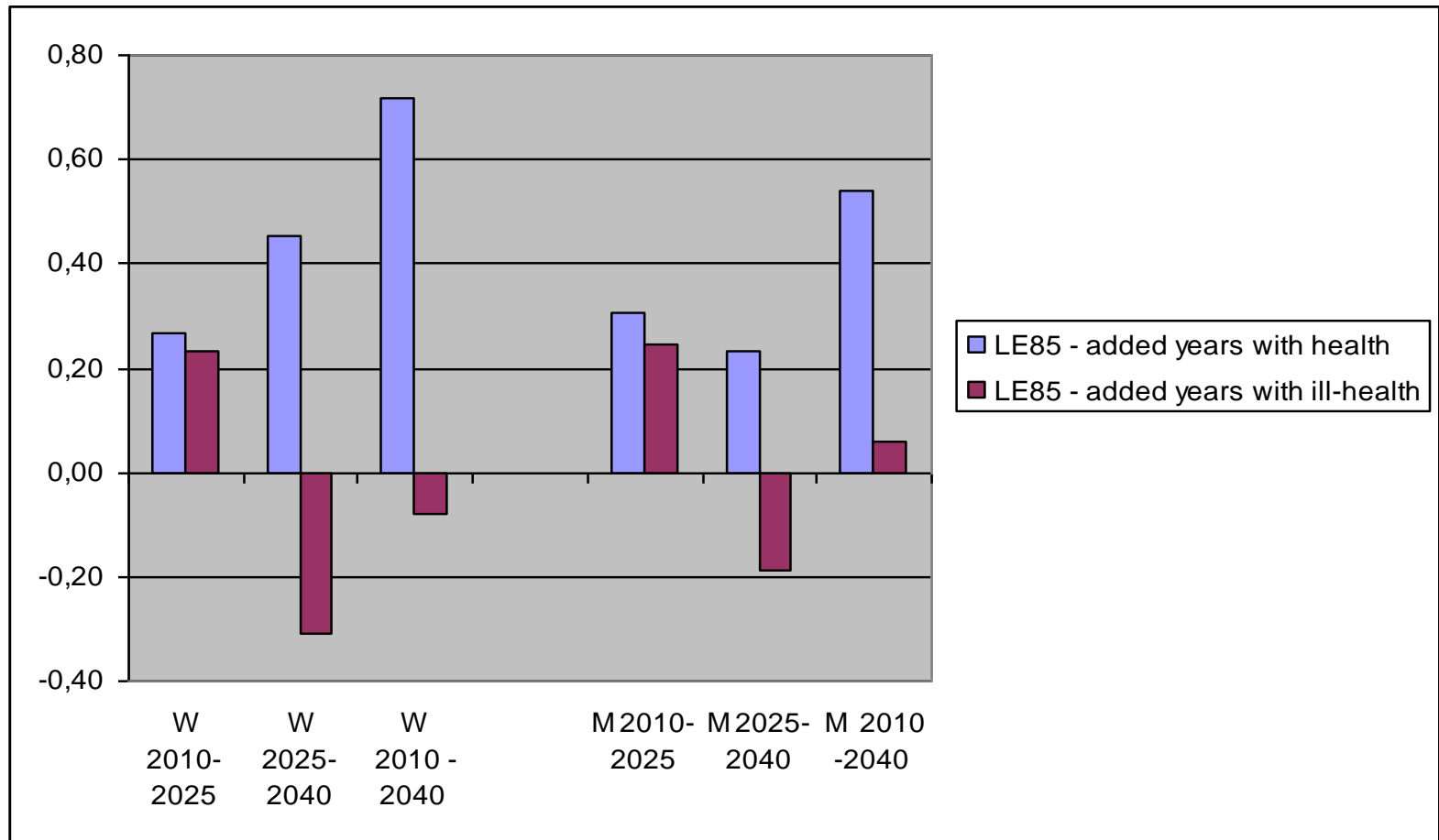


Added years of life from 75 by period ill-health defined as ADL-dependent and dementia



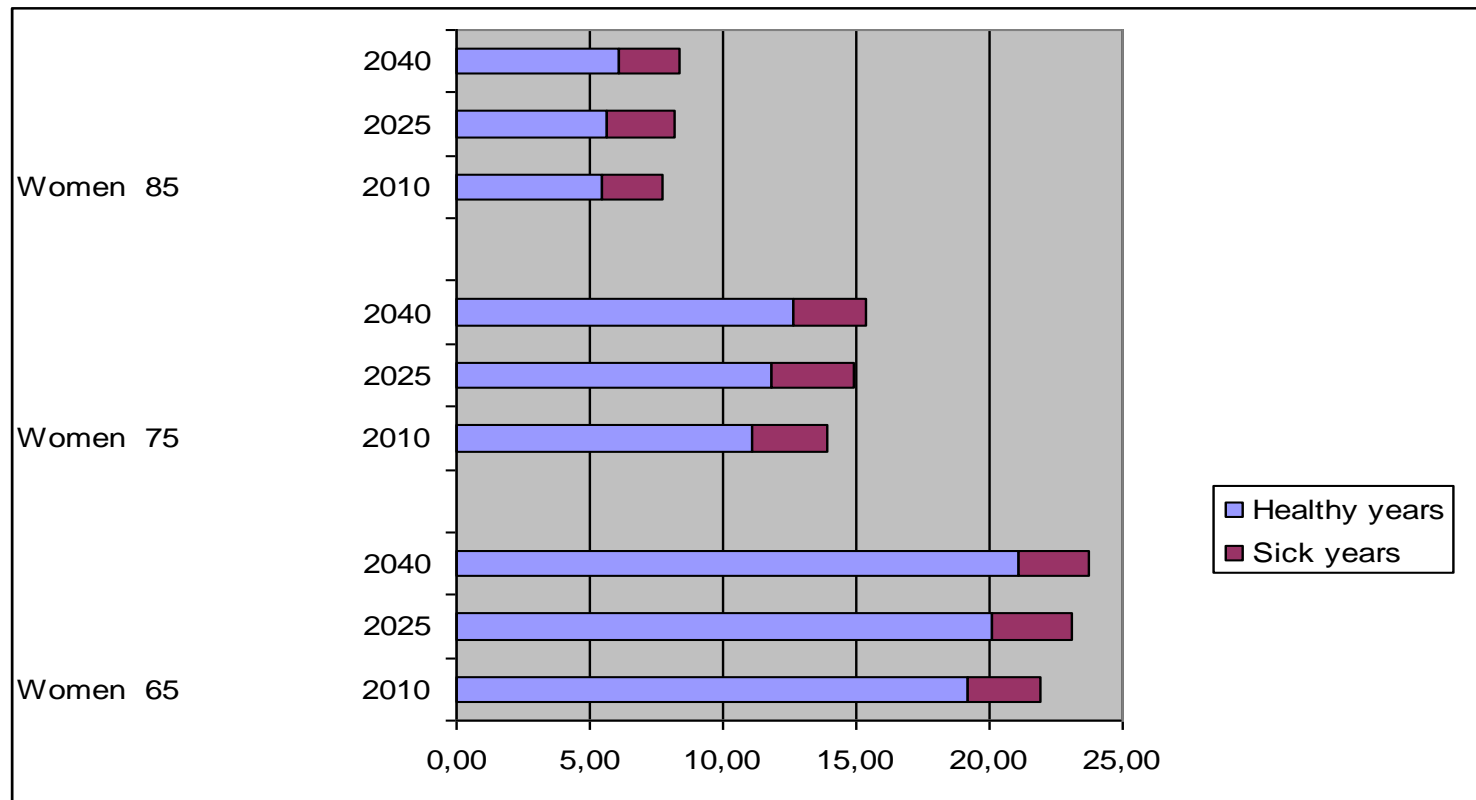
Added years of life from 85 by period

ill-health defined as ADL-dependency and dementia



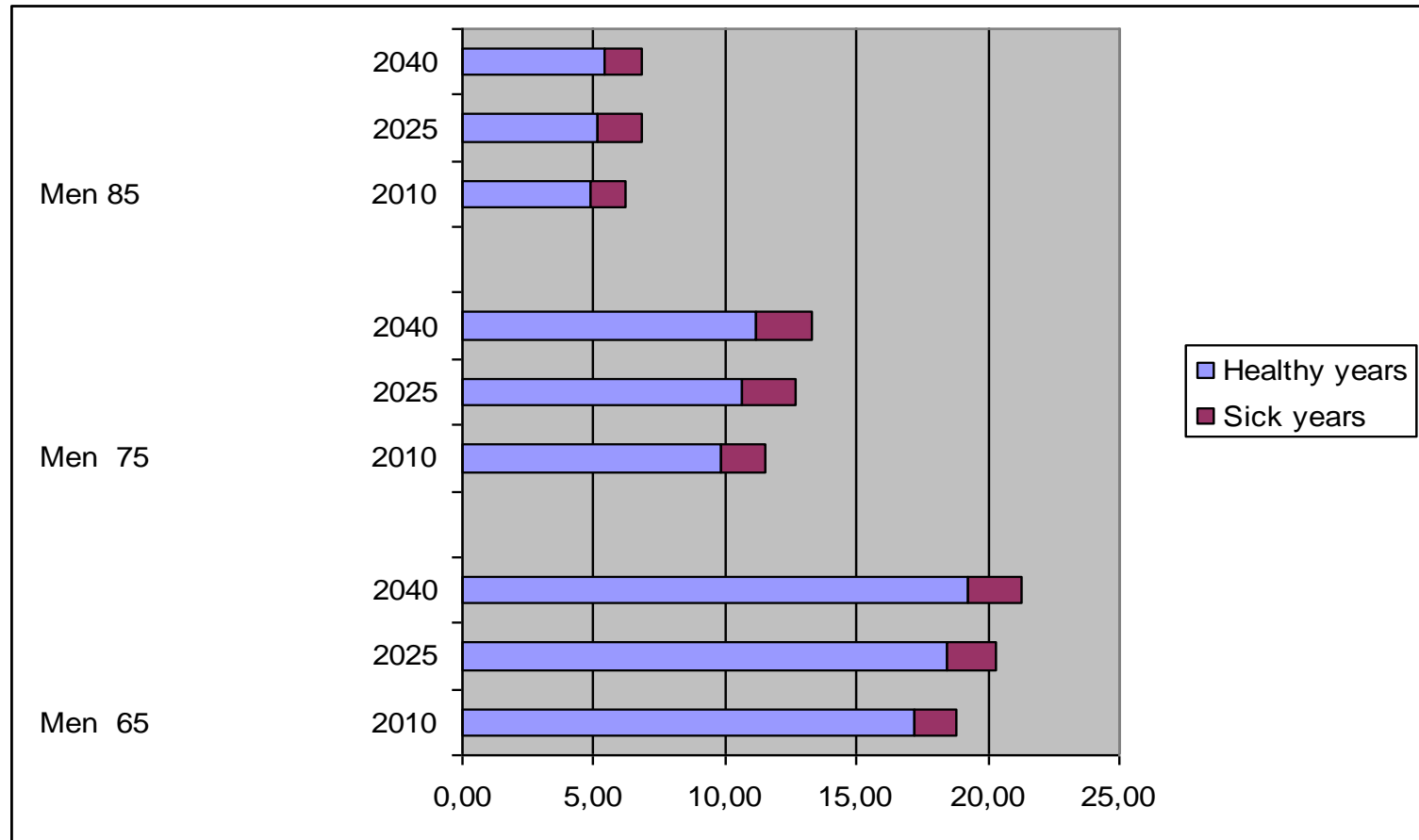
Expected healthy and sick years of life, women 2010, 2025 and 2040

ill-health defined as ADL-dependency and dementia



Expected healthy and sick years of life, Men 2010, 2025 and 2040

ill-health defined as ADL-dependency and dementia



That's all
Thanks for listening