

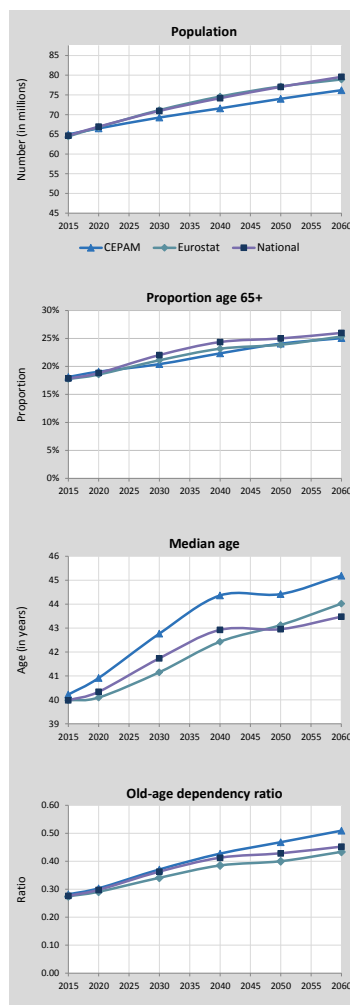
United Kingdom

Detailed Human Capital projections to 2060

Comparison of CEPAM projections with other sources

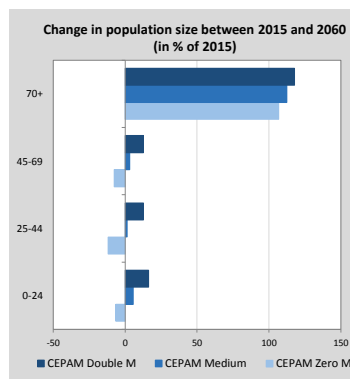
Demographic indicators - CEPAM Medium Scenario (SSP2), Eurostat and national projections		2015	2020	2030	2040	2050	2060
Population (in millions)	CEPAM	65.40	66.92	69.68	72.00	74.44	76.61
	Eurostat	64.88	67.24	71.56	75.00	77.57	79.34
	National	65.10	67.36	71.35	74.59	77.46	80.00
Proportion age 65+	CEPAM	18.1%	19.1%	20.4%	22.3%	24.1%	25.1%
	Eurostat	17.7%	18.6%	21.1%	23.2%	23.9%	25.4%
	National	17.8%	18.8%	22.0%	24.4%	25.0%	26.0%
Proportion below age 20	CEPAM	23.4%	23.4%	23.3%	22.1%	21.6%	21.5%
	Eurostat	23.6%	23.1%	22.8%	22.2%	21.9%	21.6%
	National	23.5%	23.4%	23.2%	22.4%	22.1%	22.1%
Median age	CEPAM	40.2	40.9	42.8	44.4	44.4	45.2
	Eurostat	40.0	40.1	41.2	42.4	43.1	44.0
	National	40.0	40.3	41.7	42.9	43.0	43.5
Old-age dependency ratio (65+/15-64)	CEPAM	0.28	0.30	0.37	0.43	0.47	0.51
	Eurostat	0.27	0.29	0.34	0.39	0.40	0.43
	National	0.28	0.30	0.36	0.41	0.43	0.45
Young-age dependency ratio (0-14/15-64)	CEPAM	0.27	0.29	0.29	0.28	0.29	0.29
	Eurostat	0.27	0.28	0.27	0.28	0.28	0.28
	National	0.27	0.28	0.28	0.28	0.29	0.29
Parent support ratio (85+/50-64)	CEPAM	0.13	0.14	0.18	0.26	0.36	0.47
	Eurostat	0.13	0.13	0.17	0.24	0.28	0.34
	National	0.13	0.13	0.20	0.29	0.36	0.43

Demographic assumptions underlying projections		2010-2015	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total fertility rate	CEPAM	1.92	1.95	1.94	1.94	1.93	1.90
	Eurostat	1.80	1.81	1.81	1.82	1.84	1.85
	National	1.83	1.87	1.88	1.89	1.89	1.89
Life expectancy at birth (in years)							
Male	CEPAM	80.0	81.0	82.0	84.0	86.0	88.0
	Eurostat	79.8	80.6	81.3	82.6	83.9	85.1
	National	80.2	81.4	82.4	83.9	85.2	86.4
Female	CEPAM	83.5	84.5	85.6	87.7	89.7	91.8
	Eurostat	83.5	84.3	85.0	86.3	87.6	88.8
	National	83.7	84.6	85.4	86.8	87.9	89.1
Five-year net migration flow (in thousands)							
	CEPAM	412.5	460.3	504.3	584.6	647.5	688.1
	Eurostat	1361.4	1228.8	1151.1	860.7	744.7	628.0
	National	1080.5	925.1	925.1	925.1	925.1	925.1



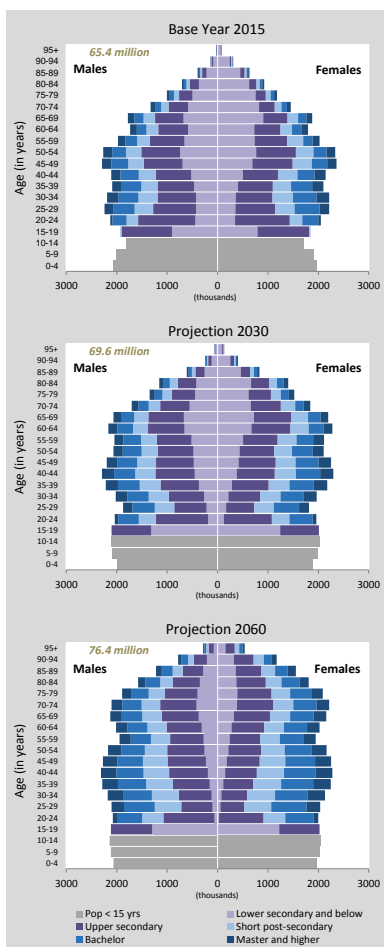
Changes in population size and structure according to CEPAM scenarios (impact of migration)

Population size according to CEPAM projections to 2060		2015	2020	2030	2040	2050	2060
Population (in millions)	Zero M	65.40	66.47	68.00	68.74	69.27	69.24
	Medium	65.40	66.92	69.68	72.00	74.44	76.61
	Double M	65.40	67.37	71.30	75.05	79.10	83.06
Population 0-24 (in millions)	Zero M	19.46	19.32	19.66	18.95	18.38	18.18
	Medium	19.46	19.46	20.24	20.11	20.15	20.57
	Double M	19.46	19.61	20.81	21.20	21.75	22.64
Population 25-44 (in millions)	Zero M	17.31	17.18	15.83	15.16	15.85	15.25
	Medium	17.31	17.43	16.65	16.41	17.57	17.57
	Double M	17.31	17.68	17.43	17.56	19.08	19.53
Population 45-69 (in millions)	Zero M	20.44	20.60	21.23	20.63	19.60	18.88
	Medium	20.44	20.64	21.49	21.42	21.11	21.08
	Double M	20.44	20.69	21.74	22.18	22.51	23.05
Population 70+ (in millions)	Zero M	8.19	9.38	11.28	14.00	15.44	16.93
	Medium	8.19	9.38	11.30	14.06	15.60	17.40
	Double M	8.19	9.39	11.32	14.12	15.76	17.83



United Kingdom (Continued)

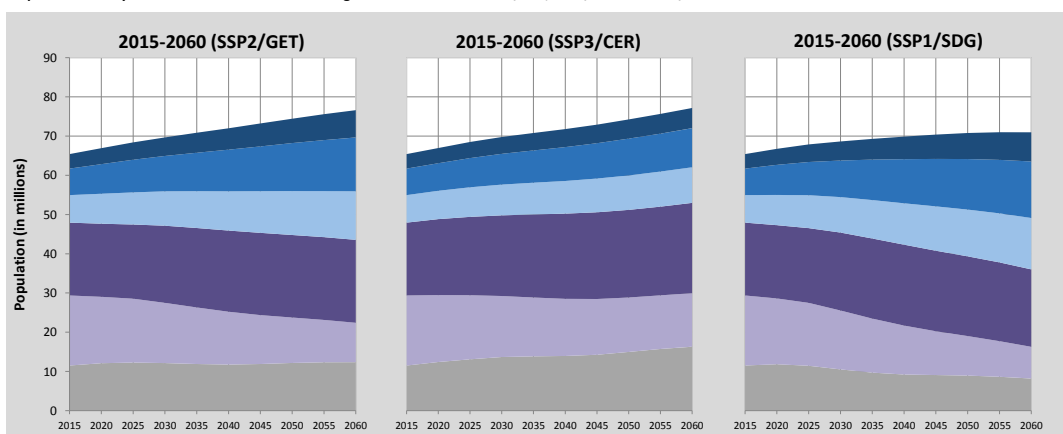
Pyramids by education, CEPAM Medium



Detailed Human Capital projections to 2060

Human Capital indicators, CEPAM Medium (SSP2)						
	2015	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment (columns sum to 100%)						
E1-E4 - lower secondary and below	33.5%	30.5%	25.3%	20.6%	16.6%	13.3%
E5 - upper secondary	31.2%	31.8%	32.6%	32.8%	32.4%	31.4%
E6 - short post-secondary	14.1%	14.9%	16.4%	17.8%	19.2%	20.6%
E7 - bachelor	13.4%	14.5%	16.5%	18.6%	20.7%	22.6%
E8 - master and higher	7.8%	8.3%	9.3%	10.2%	11.2%	12.1%
Mean years of schooling (in years)	12.79	12.96	13.26	13.56	13.84	14.10
Age gap: highest educational attainment (ratio 35-44/50-64)						
E1-E4 - lower secondary and below	0.65	0.62	0.65	0.63	0.55	0.52
E5 - upper secondary	1.01	1.00	1.01	0.99	0.94	0.91
E6 - short post-secondary	1.20	1.17	1.15	1.17	1.19	1.17
E7 - bachelor	1.64	1.61	1.25	1.16	1.19	1.17
E8 - master and higher	1.30	1.33	1.24	1.19	1.19	1.17
Mean years of schooling (35-44 minus 50-64)	0.97	0.92	0.69	0.70	0.78	0.72
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1-E4 - lower secondary and below	0.88	0.90	0.95	1.00	1.05	1.08
E5 - upper secondary	1.12	1.10	1.07	1.07	1.08	1.11
E6 - short post-secondary	0.98	0.97	0.96	0.96	0.96	0.96
E7 - bachelor	1.06	1.03	0.99	0.95	0.93	0.90
E8 - master and higher	1.02	1.00	0.97	0.95	0.93	0.91
Mean years of schooling (male minus female)	0.19	0.13	0.03	-0.05	-0.12	-0.16
Women age 20-39: highest educational attainment (columns sum to 100%)						
E1-E4 - lower secondary and below	17%	15%	10%	7%	5%	3%
E5 - upper secondary	38%	37%	36%	34%	32%	29%
E6 - short post-secondary	16%	18%	20%	22%	23%	25%
E7 - bachelor	20%	21%	24%	26%	28%	30%
E8 - master and higher	8%	9%	10%	11%	12%	13%
Mean years of schooling (in years)	13.69	13.82	14.17	14.45	14.71	14.91
Age gap among women: highest educational attainment (ratio 35-44/50-64)						
E1-E4 - lower secondary and below	0.59	0.57	0.60	0.61	0.53	0.49
E5 - upper secondary	1.02	0.98	1.00	0.97	0.90	0.87
E6 - short post-secondary	1.22	1.13	1.10	1.17	1.20	1.18
E7 - bachelor	1.75	1.83	1.36	1.17	1.20	1.18
E8 - master and higher	1.46	1.47	1.25	1.18	1.20	1.18
Mean years of schooling (35-44 minus 50-64)	1.40	1.28	1.04	0.90	1.02	0.98

Population size by educational attainment according to three scenarios: SSP2/GET, SSP3/CER and SSP1/SDG



Colour legend as in pyramids above

Education scenarios

SSP2/GET : Global Education Trend Scenario (Medium assumption)

SSP3/CER : Constant Enrollment Rates Scenario (assumption of no future improvements)

SSP1/SDG : Sustainable Development Goal Scenario (universal primary and secondary education by 2030)

United Kingdom (Continued)

Alternative scenarios to 2100

Projection results by scenario (SSP1-SSP3)

	2015	2020	2030	2050	2060	2075	2100
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Population (in millions)

SSP1 - Rapid Development	65.40	66.75	68.63	70.79	70.96	70.49	68.52
SSP2 - CEPAM Zero Migration	65.40	66.47	68.00	69.27	69.24	68.88	68.70
SSP2 - CEPAM Medium	65.40	66.92	69.68	74.44	76.61	79.94	86.08
SSP2 - CEPAM Double Migration	65.40	67.37	71.30	79.10	83.06	89.12	99.20
SSP3 - Stalled Development	65.40	66.96	69.76	74.25	77.17	82.73	97.65

Proportion age 65+

SSP1 - Rapid Development	18.1%	19.3%	23.4%	30.9%	34.8%	39.5%	48.7%
SSP2 - CEPAM Zero Migration	18.1%	19.2%	22.8%	28.2%	30.2%	31.2%	35.6%
SSP2 - CEPAM Medium	18.1%	19.1%	22.3%	26.7%	28.3%	29.2%	33.3%
SSP2 - CEPAM Double Migration	18.1%	18.9%	21.9%	25.5%	27.0%	28.1%	32.5%
SSP3 - Stalled Development	18.1%	18.9%	21.5%	23.8%	23.7%	21.3%	21.7%

Proportion below age 20

SSP1 - Rapid Development	23.4%	23.0%	21.3%	17.0%	15.9%	13.8%	11.7%
SSP2 - CEPAM Zero Migration	23.4%	23.4%	23.2%	21.2%	21.0%	19.8%	18.4%
SSP2 - CEPAM Medium	23.4%	23.4%	23.3%	21.6%	21.5%	20.5%	19.1%
SSP2 - CEPAM Double Migration	23.4%	23.4%	23.5%	22.0%	21.9%	20.9%	19.4%
SSP3 - Stalled Development	23.4%	23.8%	25.4%	26.3%	27.6%	27.8%	27.9%

Proportion of women age 20-39 with post-secondary education

SSP1 - Rapid Development	42.0%	46.7%	54.1%	68.4%	73.1%	78.8%	82.5%
SSP2 - CEPAM Zero Migration	42.0%	46.6%	52.7%	61.9%	65.7%	70.6%	76.3%
SSP2 - CEPAM Medium	42.0%	45.6%	51.2%	60.0%	63.7%	68.7%	74.7%
SSP2 - CEPAM Double Migration	42.0%	44.7%	49.7%	58.6%	62.3%	67.4%	73.7%
SSP3 - Stalled Development	42.0%	38.9%	38.1%	37.8%	38.1%	37.7%	37.7%

Mean years of schooling, age 25+

SSP1 - Rapid Development	12.8	13.0	13.3	14.0	14.4	14.8	15.3
SSP2 - CEPAM Zero Migration	12.8	13.0	13.4	14.1	14.4	14.8	15.2
SSP2 - CEPAM Medium	12.8	13.0	13.3	13.8	14.1	14.5	15.0
SSP2 - CEPAM Double Migration	12.8	12.9	13.1	13.6	13.9	14.2	14.8
SSP3 - Stalled Development	12.8	12.9	13.1	13.5	13.6	13.6	13.6

Demographic assumptions underlying SSPs

	2015-2020	2020-2025	2030-2035	2050-2055	2060-2065	2075-2080	2095-2100
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Total fertility rate

SSP1 - Rapid Development	1.79	1.68	1.52	1.43	1.42	1.41	1.39
SSP2 - CEPAM Zero Migration	1.92	1.95	1.95	1.92	1.89	1.88	1.85
SSP2 - CEPAM Medium	1.92	1.95	1.94	1.91	1.89	1.88	1.85
SSP2 - CEPAM Double Migration	1.92	1.95	1.94	1.91	1.89	1.88	1.85
SSP3 - Stalled Development	2.06	2.26	2.44	2.50	2.48	2.48	2.50

Life expectancy at birth for females (in years)

SSP1 - Rapid Development	84.0	85.5	88.6	94.8	97.9	102.5	108.7
SSP2 - CEPAM Zero Migration	83.5	84.5	86.6	90.9	93.0	96.1	100.3
SSP2 - CEPAM Medium	83.5	84.5	86.6	90.8	92.9	96.0	100.2
SSP2 - CEPAM Double Migration	83.5	84.5	86.6	90.7	92.8	95.9	100.1
SSP3 - Stalled Development	83.0	83.5	84.6	86.8	87.9	89.4	91.5

Migration – net flow over five years (in thousands)

SSP1 - Rapid Development	412.5	455.8	520.6	603.5	612.9	589.4	502.3
SSP2 - CEPAM Zero Migration	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSP2 - CEPAM Medium	412.5	460.3	546.0	670.7	699.4	697.9	627.1
SSP2 - CEPAM Double Migration	825.0	905.1	1038.1	1197.9	1207.2	1136.8	922.6
SSP3 - Stalled Development	275.2	156.7	0.5	0.7	0.8	0.9	1.1

Ageing indicators by scenario

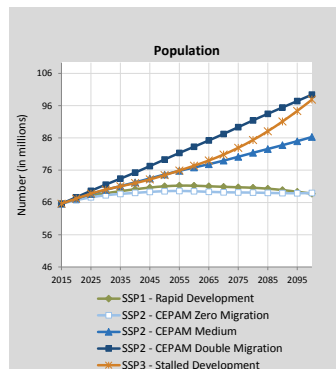
	2015	2020	2030	2050	2060	2075	2095
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Median age

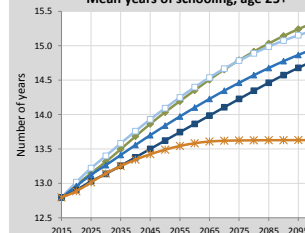
SSP1 - Rapid Development	40.2	41.1	44.0	49.4	51.8	56.7	62.4
SSP2 - CEPAM Zero Migration	40.2	41.1	43.3	45.6	46.5	48.4	50.6
SSP2 - CEPAM Medium	40.2	40.9	42.8	44.4	45.2	46.8	48.8
SSP2 - CEPAM Double Migration	40.2	40.7	42.3	43.6	44.4	45.9	48.1
SSP3 - Stalled Development	40.2	40.7	41.8	39.9	38.7	37.9	37.9

Proportion with less than 15 years of remaining life expectancy (RLE)

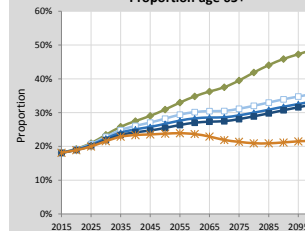
SSP1 - Rapid Development	8.6%	8.5%	9.3%	11.2%	11.5%	11.8%	12.2%
SSP2 - CEPAM Zero Migration	8.9%	9.1%	10.1%	12.2%	12.0%	12.4%	11.1%
SSP2 - CEPAM Medium	8.9%	9.0%	9.9%	11.5%	11.1%	11.2%	10.1%
SSP2 - CEPAM Double Migration	8.9%	9.0%	9.7%	10.8%	10.3%	10.5%	9.7%
SSP3 - Stalled Development	9.2%	9.6%	10.6%	12.0%	11.3%	10.5%	8.6%



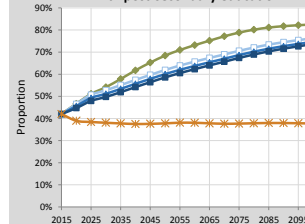
Mean years of schooling, age 25+



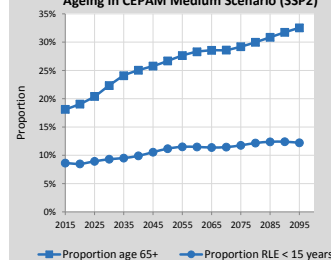
Proportion age 65+



Proportion of women age 20-39 with post-secondary education



Ageing in CEPAM Medium Scenario (SSP2)



United Kingdom (Continued)

Labour force projections to 2060

Labour force indicators

	2015	2020	2030	2040	2050	2060
Labour force size, by participation and migration scenario (in millions)						
Constant (CEPAM Zero Migration)	33.38	33.28	32.75	32.53	31.91	31.38
Constant (CEPAM Medium)	33.38	33.52	33.64	34.29	34.75	35.33
Constant (CEPAM Double Migration)	33.38	33.75	34.49	35.92	37.29	38.73
Swedish (CEPAM Zero Migration)	33.38	33.60	33.68	34.02	33.99	33.88
Swedish (CEPAM Medium)	33.38	33.83	34.59	35.86	37.00	38.14
Swedish (CEPAM Double Migration)	33.38	34.07	35.47	37.57	39.70	41.82
Equalization (CEPAM Zero Migration)	33.38	33.56	33.51	33.69	33.47	33.22
Equalization (CEPAM Medium)	33.38	33.80	34.43	35.55	36.50	37.49
Equalization (CEPAM Double Migration)	33.38	34.04	35.33	37.28	39.22	41.18
Constant (CEPAM Medium-low fertility)	33.38	33.52	33.63	33.81	32.95	31.77
Swedish (CEPAM Medium-low fertility)	33.38	33.83	34.58	35.34	35.10	34.35
Equalization (CEPAM Medium-low fertility)	33.38	33.80	34.42	35.07	34.65	33.77

Labour force participation rates, age 15+, by participation scenario (CEPAM Medium)

TOTAL (Constant)	61.9%	61.2%	58.4%	56.9%	55.8%	55.0%
TOTAL (Swedish)	61.9%	61.7%	60.1%	59.5%	59.4%	59.3%
TOTAL (Equalization)	61.9%	61.7%	59.8%	59.0%	58.6%	58.3%
MALE (Constant)	67.9%	66.8%	63.7%	61.9%	60.8%	59.8%
MALE (Swedish)	67.9%	67.2%	64.8%	63.8%	63.4%	62.9%
MALE (Equalization)	67.9%	66.8%	63.7%	61.9%	60.8%	59.8%
FEMALE (Constant)	56.2%	55.7%	53.4%	52.1%	51.0%	50.3%
FEMALE (Swedish)	56.2%	56.5%	55.6%	55.4%	55.6%	56.0%
FEMALE (Equalization)	56.2%	56.7%	56.2%	56.2%	56.5%	57.0%

Labour force (15+) by highest level of educational attainment. Columns sum to 100%.

(CEPAM Medium; Constant participation)

TOTAL E1-E4 - lower secondary and below	22.8%	20.8%	17.1%	13.7%	10.8%	8.8%
TOTAL E5 - upper secondary	37.4%	36.4%	35.5%	34.7%	33.4%	31.9%
TOTAL E6 - short post-secondary	15.2%	16.1%	17.3%	18.6%	20.0%	21.3%
TOTAL E7 - bachelor	16.1%	17.7%	20.2%	22.2%	23.9%	25.5%
TOTAL E8 - master and higher	8.4%	9.0%	10.0%	10.8%	11.8%	12.6%
MALE E1-E4 - lower secondary and below	24.6%	22.7%	19.0%	15.4%	12.3%	10.0%
MALE E5 - upper secondary	37.7%	36.8%	36.2%	36.0%	35.2%	34.2%
MALE E6 - short post-secondary	14.5%	15.4%	16.8%	18.2%	19.7%	21.0%
MALE E7 - bachelor	15.4%	16.7%	18.7%	20.3%	21.8%	23.2%
MALE E8 - master and higher	7.9%	8.5%	9.3%	10.1%	10.9%	11.7%
FEMALE E1-E4 - lower secondary and below	20.9%	18.7%	14.9%	11.7%	9.2%	7.4%
FEMALE E5 - upper secondary	37.1%	35.9%	34.6%	33.3%	31.4%	29.2%
FEMALE E6 - short post-secondary	16.1%	16.9%	17.9%	18.9%	20.3%	21.6%
FEMALE E7 - bachelor	17.0%	18.8%	21.8%	24.3%	26.4%	28.1%
FEMALE E8 - master and higher	9.0%	9.7%	10.8%	11.7%	12.8%	13.6%

Labour force size by educational attainment according to three migration scenarios, 2015-2060

(Labour force participation = Constant scenario)

