

Appendix 9.A: Demographic life events

Events	Transition probabilities	Key assumptions (years 2005, 2030, 2050, and 2100)	Source
Marriage	Probability of first marriage (remarriages), by age, sex and employment status	Crude marriage rate (per 1000 population): 5.4, 4.8, 4.1, 4.2	Vital statistics 2005
	Probability of co-residency with parents at marriage	Groom's parents: 0.2 Bride's parents: 0.05	CSLC 2001*
Birth	Probability of marital fertility, by mother's age and number of ever-born children	Total fertility rate: 1.29, 1.20, 1.21, 1.19	Vital statistics 2005
Death	Probability of death by age, sex, and health status	Life expectancy: Male: 78.53, 81.88, 83.37, 83.37 Female: 85.49, 88.66, 90.07, 90.07	Official population projections (Kaneko et al. 2008)
Divorce	Probability of divorce, by wife's age, with or without children	Crude divorce rate (per 1000 population): 1.87, 1.49, 1.32, 1.30	Vital statistics 2005
	Probability of divorced individuals returning to their parents' home after divorce, by sex	Male: 0.43 Female: 0.35	CSLC 2001*
	Probability of custody by sex	Male: 0.2; Female: 0.8	Vital statistics 2005
International migration	Number of immigrants by sex and age	Number of immigrants per 1000 population: 0.30, 0.44, 0.56, 1.28	Official population projections (Kaneko et al. 2008)

(*) CSLC: Comprehensive Survey of Living Conditions (Ministry of Health, Labour and Welfare)

Appendix 9.B: Life events other than demography

Events	Transition probabilities	Note	Source
Change in health status	Transition probability of health status (good or poor) by age and sex	Estimate the probabilities of keeping the percentages of health status, by sex and age	CSLC 2001*
Change in employment status	Transition probability of employment status, by sex, age, and marital status	Relative risks are considered for women who have a first baby, who are living with their parents, or who just got married.	Actuarial revaluation 2009**
Estimating earnings	Distribution of earnings by age, sex and marital status	Estimate of the parameters of log-normal distribution	CSLC 2004*
Determining pensions	Distribution of newly awarded pension amounts by age and sex of subscription category at age 35	Estimate based on individual records from the regular pension coverage report.	Inagaki (2012)
Young people leaving home	Probabilities of leaving/ returning home, by age, sex, and employment status	Estimate of probabilities that percentages of young, never-married children co-resident with their parents will remain constant.	CSLC 2001*
Living with elderly parents	Probability of living with children, by age and sex	Estimate of probabilities that percentages of children co-resident with elderly parents will remain constant.	CSLC 2001*
Entering an institution	Probability of entering an institution, by sex, age, and marital status	Estimate of probabilities that percentages of the elderly in institutions will remain constant.	Population Census 2005

(*) CSLC: Comprehensive Survey of Living Conditions (Ministry of Health, Labour and Welfare)

(**) Ministry of Health, Labour and Welfare, Pension Bureau, Actuarial Division (2010)