

Appendix A. Data sources

Country	Current population		Current labour force participation rates		Circa 1971 male labour force participation rates	
	Year	Source	Year	Source	Year	Source
New Zealand	1995	United Nations ¹	1995	ILO ³	1971	ILO ² ; United Nations ⁷
USA	1999	U.S. Census Bureau. <i>Resident population estimates of the United States by age and sex.</i> http://www.census.gov/population/estimates/nation/intfile2-1.txt , February 2000.	1998	Bureau of Labor Statistics. <i>Civilian labor force participation rates by sex, age, race, and Hispanic origin.</i> http://stats.bls.gov/emplt983.htm , February 2000.	1970	United Nations ⁵
Australia	1999	Australian Bureau of Statistics. 1999. <i>Australian Demographic Statistics.</i> ABS Catalogue No. 3101.0. Canberra: Australian Bureau of Statistics.	1996	Australian Bureau of Statistics. 1997. <i>Labour Statistics Australia.</i> ABS Catalogue No. 6101.0. Canberra: Australian Bureau of Statistics.	1971	United Nations ⁵
Canada	1999	Statistics Canada. <i>Population by sex and age.</i> http://www.statcan.ca/english/Pgdb/People/Population/demo10a.htm , February 2000.	1999	Statistics Canada. <i>Labour force characteristics by age and sex.</i> http://www.statcan.ca/english/Pgdb/People/Labour/labor20b.htm , February 2000.	1971	ILO ²
Singapore	1995	United Nations ¹	1995	ILO ³	1970	United Nations ⁵
United Kingdom	1997	Government Statistical Service. <i>Population by gender and age 1997.</i> http://www.statistics.gov.uk/statbase/xsdataset.asp?vlnk=665 , February 2000.	1997	Government Statistical Service. <i>Labour force by gender and age.</i> http://www.statistics.gov.uk/statbase/xsdataset.asp?vlnk=577 , February 2000.	1971	United Nations ⁵
France	1995	United Nations ¹	1995	ILO ³	1971	ILO ⁵ ; United Nations ⁶
Germany	1995	United Nations ¹	1995	ILO ³	1971	ILO ²
Japan	1999	Statistics Bureau and Statistics Center. <i>Estimates on all Japan population by age group and sex.</i> http://www.stat.go.jp/15k2.htm , February 2000.	1995	ILO ³	1970	United Nations ⁵
Sweden	1995	United Nations ¹	1995	ILO ³ ; Gruber and Wise ⁷ ; U.S. Census Bureau International Data Base. <i>Economically active population by age and sex, Sweden.</i> http://www.census.gov/ftp/pub/ipc/www/idbnew.html , February 2000.	1970	United Nations ⁵
Italy	1995	United Nations ¹	1996	U.S. Census Bureau International Data Base. <i>Economically active population by age and sex, Italy.</i> http://www.census.gov/ftp/pub/ipc/www/idbnew.html , February 2000.	1971	ILO ²
Greece	1995	United Nations ¹	1995	ILO ³	1971	ILO ²
Spain	1998	Spanish Statistical Institute. <i>Projected population as of 1-7-1998.</i> http://www.ine.es/escpif/escpifin/demo98in.pdf , February 2000.	1995	ILO ³	1970	United Nations ⁴
The Netherlands	1998	Statistics Netherlands. <i>Population on 1 January by sex and age group.</i> http://www.cbs.nl/en/figures/keyfigures/sbv0614x1.htm , February 2000.	1995	ILO ³ ; Gruber and Wise ⁷ ; Statistics Netherlands. <i>Labour force by some features.</i> http://www.cbs.nl/en/figures/keyfigures/sip_110z.htm , February 2000.; U.S. Census Bureau International Data Base. <i>Economically active population by age and sex, Netherlands.</i> http://www.census.gov/ftp/pub/ipc/www/idbnew.html , February 2000.	1971	ILO ²
Thailand	1995	United Nations ¹	1990	United Nations. 1996. <i>Women in Thailand: A Country Profile.</i> New York: United Nations.		
South Korea	1995	United Nations ¹	1995	ILO ³		

1. United Nations. 1999. *World Population Prospects. The 1998 Revision. Volume II: Sex and Age.* New York: United Nations.2. International Labour Organization. 1977. *Yearbook of Labour Statistics.* Geneva: International Labour Office.3. International Labour Organization. 1996. *Yearbook of Labour Statistics.* Geneva: International Labour Office.

4. United Nations. 1973. *Demographic Yearbook 1972*. New York: United Nations.
5. United Nations. 1974. *Demographic Yearbook 1973*. New York: United Nations.
6. United Nations. 1980. *Demographic Yearbook 1979*. New York: United Nations.
7. Gruber, J. and D. Wise. 1997. *Social Security Programs and Retirement around the World*. Working Paper 6134. Cambridge, Mass.: National Bureau of Economic Research.

Appendix B. Projection assumptions

Country	Initial life expectancy increases 1yr every 10 yrs		1. Zero ANM			2. Current ANM			3. ANM = 0.5% pop'n			4. Increasing LFPRs			5. TFR = 1.80 (over 10-15 yrs)			6. The most optimistic possibility				
	Males	Females	ANM		LFPRs	ANM		LFPRs	ANM		LFPRs	ANM		LFPRs	TFR (changes over 10-15 yrs)		ANM ('000)	LFPRs	TFR (changes over 10-15 yrs)		ANM ('000)	LFPRs
			TFR ('000)	LFPRs		TFR ('000)	LFPRs		TFR ('000)	LFPRs		TFR ('000)	LFPRs		over 10-15 yrs	LFPRs			over 10-15 yrs	LFPRs		
New Zealand	74	79	2.00	0	Current	2.00	10	Current	2.00	18	Current	2.00	10		2.00 - 1.80	10	Current	2.00 - 1.80	20			
USA	73	80	2.07	0	Current	2.07	760	Current	2.07	1369	Current	2.07	760		2.07 - 1.80	760	Current	2.07 - 1.80	900			
Australia	76	82	1.76	0	Current	1.76	80	Current	1.76	95	Current	1.76	80		1.76 - 1.80	80	Current	1.76 - 1.80	95			
Canada	76	82	1.55	0	Current	1.55	170	Current	1.55	152	Current	1.55	170		1.55 - 1.80	170	Current	1.55 - 1.80	170			
Singapore	75	80	1.70	0	Current	1.70	10	Current	1.70	17	Current	1.70	10		1.70 - 1.80	10	Current	1.70 - 1.80	17			
United Kingdom	75	80	1.72	0	Current	1.72	40	Current	1.72	293	Current	1.72	40		1.72 - 1.80	40	Current	1.72 - 1.80	100			
France	75	82	1.75	0	Current	1.75	30	Current	1.75	290	Current	1.75	30		1.75 - 1.80	30	Current	1.75 - 1.80	100			
Germany	73	80	1.34	0	Current	1.34	200	Current	1.34	408	Current	1.34	200		1.34 - 1.80	200	Current	1.34 - 1.80	250			
Japan	77	84	1.45	0	Current	1.45	20	Current	1.45	632	Current	1.45	20		1.45 - 1.80	20	Current	1.45 - 1.80	200			
Sweden	77	82	1.51	0	Current	1.51	15	Current	1.51	44	Current	1.51	15		1.51 - 1.80	15	Current	1.51 - 1.80	30			
Italy	75	82	1.19	0	Current	1.19	100	Current	1.19	287	Current	1.19	100		1.19 - 1.80	100	Current	1.19 - 1.80	150			
Greece	75	80	1.30	0	Current	1.30	30	Current	1.30	52	Current	1.30	30		1.30 - 1.80	30	Current	1.30 - 1.80	40			
Spain	75	82	1.15	0	Current	1.15	30	Current	1.15	197	Current	1.15	30		1.15 - 1.80	30	Current	1.15 - 1.80	100			
The Netherlands	75	81	1.61	0	Current	1.61	35	Current	1.61	78	Current	1.61	35		1.61 - 1.80	35	Current	1.61 - 1.80	50			
Thailand	66	72	1.75	0	Current	1.75	-30	Current	1.75	293	Current				1.75 - 1.80	-30	Current	1.75 - 1.80	50	Current		
South Korea	69	76	1.70	0	Current	1.70	-20	Current	1.70	225	Current				1.70 - 1.80	-20	Current	1.70 - 1.80	50	Current		

Age 15-34 - current
Age 35+ - to 1970 LFPRs over 30 yrs

Age 15-24 - current
Age 25-59 - to Sweden LFPRs over 30 yrs
Age 60+ - higher of current and Sweden over 30 yrs

Age 15-34 - current
Age 35+ - to 1970 LFPRs over 30 yrs
Japan - Age 65+ - current

Age 15-24 - current
Age 25-59 - to Sweden LFPRs over 30 yrs
Age 60+ - higher of current and Sweden over 30 yrs

Appendix C. Age-specific labour force participation rates

Male labour force participation rates

Country	NZ	USA	Australia	Canada	Singapore	UK	France	Germany	Japan	Sweden	Italy	Greece	Spain	Netherlands	Thailand	Sth Korea
Year	1995	1998	1996	1999	1995	1997	1995	1995	1995	1995	1996	1995	1995	1995	1990	1995
Age group	Labour force participation rates (%)															
15-19	57	43 ¹	58	51	21	52 ¹	8	36	18	22 ¹	22	17	22 ¹	49	66	9
20-24	85	82	87	80	76	83	58	78	74	67	57	71	64	79	87	58
25-29	92		93	92	95	93	93	87	96	87	81	94	89	92	94	90
30-34	92				97	93	97	96	98	90	94	98	95	95	96	97
35-39	92				98	92	97	97	98	91	96	98	95	95	96	97
40-44	92				98	92	97	97	98	93	96	97	95	95	96	97
45-49	92				96	89	95	96	98	93	93	94	93	92	95	95
50-54	91	89	88	89	91	89	92	93	97	90	79	88	88	86	92	91
55-59	82		73		74	75	69	76	94	82	59	75	71	61	86	84
60-64	47	68	45	61	46	52	17	30	75	57	31	47	41	21	66	72 ²
65-69	16 ³		16 ³	17 ³	30	14	3	7	54	15 ⁵	11	22	6	6 ⁵	52 ³	56 ²
70-74	11 ³	23	11 ³	11 ³	17	9 ⁴	2	4	37	10 ⁵	5	9	2	3 ⁵	35 ³	38 ²
75+	2 ³	8	2 ³	2 ³	6	1 ⁴	1	2	18	5 ⁵	2	3	1	1 ⁵	17 ³	20 ²

Female labour force participation rates

Country	NZ	USA	Australia	Canada	Singapore	UK	France	Germany	Japan	Sweden	Italy	Greece	Spain	Netherlands	Thailand	Sth Korea
Year	1995	1998	1996	1999	1995	1997	1995	1995	1995	1995	1996	1995	1995	1995	1990	1995
Age group	Labour force participation rates (%)															
15-19	54	42 ¹	57	50	19	49 ¹	5	29	16	24 ¹	17	15	18 ¹	46	62	15
20-24	72	73	77	73	77	70	48	71	74	64	48	55	58	78	75	66
25-29	69				79	74	82	76	66	79	60	66	72	78	77	48
30-34	64	76	67	79	64		81	74	54	83	61	63	64	70	78	48
35-39	71				58	77	81	76	61	88	60	61	60	68	79	59
40-44	77	77	72	80	54		80	79	70	89	57	56	54	66	78	66
45-49	80				51	76	80	76	71	91	49	46	44	61	77	61
50-54	73	76	67	75	37		70	69	67	88	37	39	35	49	72	58
55-59	52		42		25	53	51	50	57	77	22	29	25	28	64	54
60-64	24	51	18	39	12		15	11	40	48	8	20	15	8	45	45 ²
65-69	6 ³		6 ³	7 ³	7	7 ³	3	3	27	10 ⁵	3	7	3	1 ⁵	31 ³	31 ²
70-74	3 ³	14	3 ³	4 ³	4	4 ³	1	2	17	3 ⁵	1	3	1	1 ⁵	19 ³	20 ²
75+	1 ³	3	1 ³	1 ³	2	1 ³	0	1	6	1 ⁵	1	1	0	0 ⁵	8 ³	9 ²

1. Estimated from labour force participation rates for age group 16-19

2. Estimated from labour force participation rates for age group 60+

3. Estimated from labour force participation rates for age group 65+

4. Estimated from labour force participation rates for age group 70+

5. Estimated