

Table 2.1: Fertility rates, 1960-93

	1960	1970	1980	1990	1993
Belgium	2.6	2.3	1.7	1.6	1.6
Denmark	2.5	2.0	1.6	1.7	1.8
Germany	2.4	2.0	1.6	1.5	1.3
Greece	2.3	2.4	2.2	1.4	1.3
Spain	2.9	2.9	2.2	1.3	1.3
France	2.7	2.5	2.0	1.8	1.7
Ireland	3.8	3.9	3.3	2.1	1.9
Italy	2.4	2.4	1.6	1.3	1.2
Luxembourg	2.3	2.0	1.5	1.6	1.7
Netherlands	3.1	2.6	1.6	1.6	1.6
Austria	2.7	2.3	1.6	1.5	1.5
Portugal	3.2	3.0	2.2	1.6	1.5
Finland	2.7	1.8	1.6	1.8	1.8
Sweden	2.2	1.9	1.7	2.1	2.0
UK	2.7	2.5	1.9	1.8	1.8
EU-15	2.7E	2.4E	1.8	1.5	1.4

Source: Eurostat (1995c).

Table 2.2: The size of generations born in the twentieth century

	1900s	1910s	1920s	1930s	1940s	1950s	1960s	1970s	1980s
Belgium	100	87	108	104	110	133	137	117	110
Denmark	100	103	102	102	141	136	147	130	107
Germany	100	74	90	103	101	113	129	86	84
Greece	100	113	124	153	138	151	170	161	144
Spain	100	112	143	142	154	182	220	212	169
France	100	78	113	109	128	151	154	143	138
Ireland	100	113	107	109	142	183	227	258	251
Italy	100	97	128	131	135	143	172	149	112
Luxembourg	100	86	103	111	123	146	141	110	113
Netherlands	100	109	126	134	182	206	222	175	158
Portugal	100	113	139	143	145	175	209	205	168
UK	100	97	99	93	114	120	140	109	111
EU-12	100	90	110	113	123	138	157	130	118

Source: Besseling and Zeeuw (1993).

Table 2.3 Life expectancy at birth in 1960 and 1993

	Males		Females	
	1960	1993	1960	1993
Belgium	67.7	73.0	73.5	79.9
Denmark	70.4	72.6	74.4	77.8
Germany		72.7		79.2
Greece	67.3	75.0	72.4	79.9
Spain	67.4	73.7	72.2	81.0
France	66.9	73.3	73.6	81.5
Ireland	68.1	72.7	71.9	78.2
Italy	67.2	73.4	72.3	80.2
Luxembourg	66.5	72.2	72.2	79.4
Netherlands	71.5	74.0	75.3	80.0
Austria	66.2	72.9	72.7	79.4
Portugal	61.2	70.6	66.8	77.8
Finland	65.5	72.1	72.4	79.5
Sweden	71.2	75.5	74.9	80.8
UK	67.9	73.6	73.7	79.0
EU-15	67.5E	73.0	72.8E	79.4

Source: Eurostat (1995c).

Table 2.4 Migration, 1960-93

per 1000 population	1960	1970	1980	1990	1993
Belgium	0.9	-3.4	-0.2	2.0	1.8
Denmark	-0.9	4.3	0.1	1.7	2.2
Germany	2.2	-3.5	3.9	8.3	5.7
Greece	-3.7	-5.3	5.2	7.0	5.4
Spain	-4.6	2.2	3.0	-0.1	0.7
France	3.1	3.6	0.8	1.4	1.2
Ireland	-14.8	-0.9	-0.1	-2.2	-2.5
Italy	-1.6	-2.0	0.1	0.5	3.2
Luxembourg	1.7	3.2	3.7	10.3	10.7
Netherlands	-1.1	2.5	3.6	3.3	2.9
Austria	-0.3	1.4	1.2	16.0	5.0
Portugal	-6.3	-14.0	4.3	-6.1	1.6
Finland	-2.1	-7.9	-0.5	1.7	1.8
Sweden	-0.1	5.8	1.2	4.1	3.7
UK	2.1	-0.3	-0.6	1.2	1.2
EU-15	0.1	-0.8	1.7	3.0	2.8

Source: Eurostat (1995c).

Table 2.5: Projections of elderly dependency ratio, 1990-2030

Population 65 and over as % population 15-64	1990	2010	2030
Belgium	22.4	25.6	41.1
Denmark	22.7	24.9	37.7
Germany	21.7	30.3	49.2
Greece	21.2	28.8	40.9
Spain	19.8	25.9	41.0
France	20.8	24.6	39.1
Ireland	18.4	18.0	25.3
Italy	21.6	31.2	48.3
Luxembourg	19.9	25.9	44.2
Netherlands	19.1	24.2	45.1
Austria	22.4	27.7	44.0
Portugal	19.5	22.0	33.5
Finland	19.7	24.3	41.1
Sweden	27.6	29.1	39.4
UK	24.0	25.8	38.7
EU average	21.4	25.9	40.3

Source: Bos et al. (1994).

Table 2.6: Projections of total population, 1990-2030

Millions	1990	2010	2030	% change 2030/1990
Belgium	10.0	10.1	9.8	-2.0%
Denmark	5.1	5.3	5.2	+2%
Germany	79.5	78.9	73.5	-7.5%
Greece	10.1	10.7	10.4	+3.0%
Spain	39.0	39.1	37.8	-3.1%
France	56.7	61.0	62.7	+10.6%
Ireland	3.5	4.0	4.5	+28.6%
Italy	57.7	56.8	53.2	-7.8%
Luxembourg	0.4	0.4	0.4	0.0%
Netherlands	15.0	16.0	15.9	+6.0%
Austria	7.7	8.2	8.1	+5.2%
Portugal	9.9	9.9	9.8	-1.0%
Finland	5.0	5.3	5.3	+6.0%
Sweden	8.6	9.1	9.4	+9.3%
UK	57.4	59.6	60.6	+5.6%
EU-15	365.6	374.4	366.6	

Source: Bos et al. (1994).

Table 2.7: Projections of total dependency ratios, 1990-2030

Population 65 and over and 15 and under as % of population 15-64	1990	2010	2030
Belgium	49.2	49.3	68.9
Denmark	47.9	51.3	67.0
Germany	45.3	50.0	75.1
Greece	49.6	51.7	66.3
Spain	49.3	46.9	64.8
France	51.1	51.2	67.9
Ireland	61.4	51.3	54.4
Italy	45.5	51.5	72.7
Luxembourg	44.8	48.7	73.1
Netherlands	44.5	47.5	73.2
Austria	48.2	51.3	71.3
Portugal	50.7	46.7	59.8
Finland	48.5	50.5	70.9
Sweden	55.3	58.5	70.4
UK	52.9	52.3	68.0
EU average	49.9	50.6	68.3
EU average youth dependency ratio	28.8	24.7	28.0

Source: Bos et al. (1994).

Table 3.1: Old-age benefits in EU countries, 1988

% of total	Belgium	Denmark	Germany	Greece	Spain	France	Ireland	Italy	Luxembourg	Netherlands	Portugal	United Kingdom	EU-12
Basic PAYG	93	84	88	90	98	75	55	95	98	63	91	71	83
Supplementary compulsory PAYG	0	11	0	9	0	17	0	1	0	0	0	18	7
Supplementary compulsory funded	0	1	0	0	0	0	0	0	0	20	0	0	1
Voluntary, funded	0	4	4	0	0	1	17	0	0	6	0	6	3
Voluntary, insured	4	0	0	0	0	0	2	0	0	4	0	0	0
Voluntary, book-reserve	0	0	8	0	0	0	0	0	0	0	0	0	2
Voluntary, other	0	0	0	0	0	0	0	0	0	0	0	0	0
Means-tested	3	0	0	1	2	5	26	4	2	7	9	4	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100
Total as % of GDP	8.1	10.2	8.5	10.3	6.6	9.9	6.0	10.6	8.6	9.0	5.4	8.4	9.0

Source: Eurostat (1992).

Table 3.2 Sources of income for the elderly, 1988

% of total	Denmark	Germany	Greece	Spain	France	Ireland	Luxembourg	Netherlands	Portugal	United Kingdom
Salary and wages	66	1	3	12	2	3	-	5	45	6
Self-employment	8	7	12	14	4	6	-	0	43	2
Insurance and other social transfers	5	37	0	34	21	52	-	52	5	33
Pension	8	44	56	39	72	25	-	35	8	59
Property and other sources	14	11	29	2	1	14	-	8	0	0
Total	100	100	100	100	100	100	-	100	100	100
Mean income per person as % of national mean	-	102	37	122	94	-	108	115	102	79

Source: Eurostat (1993b).

Table 4.1: Characteristics of social security pension systems in the EU

	Type of old-age system ¹	Form of indexation of benefits	Net social-security replacement rate (Eurostat) at 1x and 2x average (%) earnings (%) ²	Social-security replacement rate (1992), (Wyatt) based on final salary of \$20,000 and \$50,000 (%) ³	Social-security contributions as % of GDP	Social-security contributions as % of earnings (at a salary of \$20,000 and \$50,000) ⁴	Employers' social-security contribution rate (at a salary of \$20,000 and \$50,000) (%) ⁴
Belgium	Insurance	Prices	80-62	63-40	18.4	47-47	34-34
Germany	Insurance	Net wages	69-55	70-59	18.9	37-37	18-18
Denmark	Mixed	Wages	77-48	83-33	2.8	3%-1 ⁵	1-1
Greece	Insurance	Wages	114-99	63-39	12.3	47-23	30-14
Spain	Insurance	Prices	98-97	90-60	14.3	38-27	32-22
France	Insurance ⁶	Prices	83-73	67-45 ⁷	21.5	59-59	41-41
Ireland	Basic	Prices (discretionary)	62-35	47-19	5.6	20-14	12-8
Italy	Insurance	Prices	89-94	77-73	15.5	56-54	46-43
Luxembourg	Insurance	Wages	77-65	82-57	12.5	23-23	12-12
Netherlands	Basic	Net wages	67-37	66-26	18.6	32-26	25-16
Austria	Insurance	Net wages	n/a	70-59	15.8	35-29	19-16
Portugal	Insurance	Prices (discretionary)	98-103	69-68	10.7	36-36	25-25
Finland	Mixed	Prices/net wages	n/a	71-51	15.4	32-33	25-25
Sweden	Mixed	Prices	n/a	69-49	14.3	30-30	30-30
UK	Mixed	Prices	59-39	50-26 ⁸	6.2	18-16 ⁹	10-10

(1) Source: OECD (1988); (2) For married couple, source Eurostat (1993a);

(3) Source: Wyatt Data Services (1993); for married man; tax treatment of benefits varies across countries;

(4) Source: Wyatt Data Services (1993);

(5) Contributions to social security are included in state income tax.;

(6) Complemented by mandatory occupational pensions;

(7) Includes ARRCO;

(8) Includes state earnings-related pension scheme (SERPS); for those contracted out, the ratios are 35% and 14%;

(9) Contributions are 5% lower for those contracted out of SERPS.

Table 4.2: Social-security pension systems and public finance

	Old-age pension expenditure/GDP (1994)	Old-age pension expenditure/government expenditure (1994)	Total pension spending/GDP (1994)¹	Total pension spending/government expenditure (1994)¹
Belgium	8.6	15.5	13.6	24.6
Germany	9.2	18.6	14.8	30.1
Denmark	12.1	19.3	15.0	24.1
Greece	8.3	17.4	11.3	23.6
Spain	7.4	15.3	11.5	23.9
France	10.7	19.6	14.3	26.2
Ireland	4.2	10.5	6.7	16.9
Italy	12.8	23.7	17.2	31.8
Luxembourg	7.6	18.0	13.8	32.5
Netherlands	9.6	17.8	18.0	33.3
Portugal	6.1	13.9	9.6	21.6
Austria	10.8	20.1	-	-
Finland	10.0	16.2	16.1	26.0
Sweden	12.3	16.9	-	-
UK	10.7	24.5	14.2	32.4
EU-12	10.1	19.9	14.7	29.0

¹Includes survivors' and disability pensions.

Data for Austria, Finland Sweden and the United Kingdom refer to 1993.

Source: Eurostat (1997), Eurostat (1995b) and Franco and Munzi (1996).

Table 4.2: Social-security pension systems and public finance (1993 corrected)

	Old-age pension expenditure/GDP (1993)	Old-age pension expenditure/government expenditure (1993)	Total pension spending/GDP (1993)¹	Total pension spending/government expenditure (1993)¹
Belgium	9.1	16.2	14.3	25.4
Germany	9.1	16.0	14.3	28.6
Denmark	11.0	17.7	13.8	22.0
Greece	8.6	18.3	11.8	25.9
Spain	7.1	16.2	11.2	22.7
France	10.7	19.3	14.4	25.9
Ireland	4.5	7.9	7.1	17.2
Italy	12.7	22.3	17.1	30.0
Luxembourg	9.4	21.5	17.1	39.1
Netherlands	10.2	18.1	19.1	33.9
Portugal	5.8	13.4	9.1	21.0
Austria	10.8	20.1	-	-
Finland	10.0	16.2	16.1	26.0
Sweden	12.3	16.9	-	-
UK	10.7	25.3	14.2	32.8

EU-12	10.0	19.0	14.7	28.0
-------	------	------	------	------

¹Includes survivors' and disability pensions.

Source: Eurostat (1995b), Franco and Munzi (1996).

Table 5.1: Unemployment rates (%)

	1970	1980	1990	1995	Labour force participation 1993 (%)
Belgium	1.8	7.4	6.7	10.2	50
Denmark	0.6	5.2	7.7	6.9	67
Germany	0.5	2.7	4.8	8.3	58
Greece	4.2	2.7	6.4	8.9	49
Spain	2.6	11.6	16.2	22.5	48
France	2.4	6.2	9.0	11.5	56
Ireland	6.3	8.0	13.4	14.9	53
Italy	5.1	7.1	9.1	11.7	48
Luxembourg	0.0	2.4	1.7	3.8	53
Netherlands	1.0	6.4	6.2	6.7	58
Austria	1.6	1.9	3.2	4.5	
Portugal	2.6	7.6	4.6	7.2	59
Finland	1.9	5.2	3.4	17.2	
Sweden	1.5	2.2	1.8	9.1	
UK	2.2	5.6	7.0	8.5	62
EU-15	2.3	5.8	7.8	10.7	55 (EU-12)

Source: EU Commission, Eurostat (1995a).

Table 5.2: Activity rates and actual retirement age in the EU-12, males and females 1990

	Activity rates					Retirement age	
	Age 50-54	Age 55-59	Age 60-64	Age 65-69	Age 70+	Actual	Statutory
Belgium	53.5	32.5	11.2	2.2	0.5	59.3	65/60
Denmark	85.6	74.4	39.3	17.4	3.0	62.7	67
France	74.5	50.4	14.3	3.8	1.0	59.6	60
Germany	75.7	61.4	22.7	5.6	1.8	61.0	65
Greece	62.0	49.7	32.7	15.1	4.2	63.0	65/60
Ireland	59.3	51.2	34.0	15.3	6.2	63.7	66
Italy	59.5	42.8	21.8	7.9	2.5	61.2	65
Luxembourg	58.7	40.4	16.2	3.5	0.0	60.0	65
Netherlands	61.4	44.8	15.0	5.5	2.7	60.4	65
Portugal	66.8	55.9	38.2	22.3	7.6	63.9	65/62
Spain	57.9	49.0	30.3	5.4	1.0	62.3	65
United Kingdom	78.7	68.0	38.0	10.8	3.0	62.5	65/60
EU-12	69.1	53.4	25.1	7.6	2.2	61.3	65
EU-12 (1993)	71.4	52.3	23.3	6.8	2.1		

Sources: Eurostat (1995a); Besseling and Zeeuw (1993).

Table 6.1: Projections of pension costs (results of latest national estimates)

Pension expenditure/ GDP (%)	1995	2000	2010	2020	2030	2040
Belgium	10.5	11.6	12.3	14.0	15.7	15.7
Denmark	9.3	9.2	10.9	11.6	12.7	-
Spain	9.1	9.2	9.2	9.3	9.5	-
Italy	8.2	7.8	7.6	7.8	8.3	-
Finland	14.5	13.9	15.2	17.2	17.7	-
Contribution rate (%)	1995	2000	2010	2020	2030	2040
Germany	18.6	19.7	21.5	23.1	27	-
France	18.9	20.9	-	28	-	40.8
Ireland	13.6	13.3	13.7	17.1	23.5	-
Luxembourg	22.3	23.9	25.8	-	-	-
Netherlands	11.0	11.0	11.0	12.0	13.0	-
Portugal	25.8	26.9	28.1	31.4	-	-
Sweden	17	16.3	16.7	17.5	17.5	-
UK	-	17.7	17.4	16.8	17.2	-

Source: Franco and Munzi (1996). The principal estimates show the most favourable official scenarios in each case, based on the most recent reforms of the social security pension systems; the authors note that there are significant differences with the least favourable projections, and that expenditure projections are usually revised upwards. The pension systems covered in the table are as follows: for Belgium, the Social Security System; for Denmark, the Public Welfare System; for Spain, the Social Security System; for Italy, Private Employees, Self-Employed Artisans and Businessmen; for Finland, the Statutory Pension Scheme; for Germany, the Statutory Pension Insurance Scheme; for France, all basic and supplementary pensions; for Ireland, Social Insurance and Social Assistance Pensions; for Luxembourg, the Private-Sector Employees and Self-Employed Scheme; for the Netherlands, the Basic Pension Scheme; for Portugal, the Social Security System; for Sweden, the National Pension System; for the UK, National Insurance Pensions (including SERPS).

Table 6.2: Projections of pension costs (OECD estimates)

Pension expenditure/ GDP	1995	2000	2010	2020	2030	2040
Belgium	10.4	9.7	8.7	10.7	13.9	15.0
Denmark	6.8	6.4	7.6	9.3	10.9	11.6
Spain	10.0	9.8	10.0	11.3	14.1	16.8
Italy	13.3	12.6	13.2	15.3	20.3	21.4
Finland	10.1	9.5	10.7	15.2	17.8	18.0
Germany	11.1	11.5	11.8	12.3	16.5	18.4
France	10.6	9.8	9.7	11.6	13.5	14.3
Ireland	3.6	2.9	2.6	2.7	2.8	2.9
Netherlands	6.0	5.7	6.1	8.4	11.2	12.1
Portugal	7.1	6.9	8.1	9.6	13.0	15.2
Sweden	11.8	11.1	12.4	13.9	15.0	14.9
UK	4.5	4.5	5.2	5.1	5.5	5.0

Source: Roseveare et al. (1996).

Table 6.3: Present value of public pension liabilities as % of 1994 GDP (OECD estimates)

	Pension payments	Contributions	Balance
UK	142	118	-24
Germany	348	286	-62
France	318	216	-102
Italy	401	341	-60
Belgium	300	147	-153
Denmark	234	n/a	n/a
Spain	323	214	-109
Finland	384	294	-65
Ireland	107	88	-19
Netherlands	214	161	-53
Portugal	277	168	-109
Sweden	369	219	-132

Source: Roseveare et al. (1996). French estimates exclude 'fictive contributions', German estimates exclude statutory transfers from the federal government. Finnish estimates exclude assets of 25% of GDP; Swedish estimates exclude assets of 30% of GDP.

Table 6.4: Effects of policy adjustments in OECD calculations

Net liabilities as % of 1994 GDP	Contribution rates 3 percentage points higher	Replacement rate 10 percentage points lower	Retirement age 5 years later
UK	12	32	18
Germany	-14	9	32
France	-25	-12	27
Italy	-98	-85	-46

Source: OECD (1995).

Table 6.5: Present value of gross unfunded pension liabilities as % of 1990 GDP (ABP estimates)

	Accrued rights (Accrued benefit obligation)	Total liabilities (Projected benefit obligation)
Belgium	75	101
Denmark	87	117
France	83	112
Germany (west)	138	186
Greece	185	245
Ireland	55	78
Italy	157	207
Luxembourg	156	219
Netherlands	103	144
Portugal	93	128
Spain	93	129
UK	68	92
EU-12	109	147

Source: Kuné (1996).

Table 6.6 Present value of net pension liability 1995-2050 (IMF estimates)

As % of 1994 GDP	Net pension liability	Contribution gap
UK	5	0.1
Germany	111	3.4
France	114	3.3
Italy	76	2.5
Sweden	20	0.9

Source: IMF (1996). The contribution gap is the difference between the contribution rate needed to reduce the net asset position to zero and the current contribution rate.

Table 7.1: Selected recent pension reforms in the EU

	Change to benefit indexation rules	Increase in retirement age	Cut in replacement ratio	Increase in contribution period	Lower incentive to early retirement	Lower credits for higher education	Public employee privileges reduced	Lower eligibility for disabled pension
Belgium (1993)				*	*			
Germany (1989)	*	*			*	*		
Denmark			*					
Greece (1990/2)	*	*	*	*	*		*	*
Spain (1984/5)			*	*				*
France (1993)	*		*					
Italy (1992/5)	*	*	*		*		*	
Netherlands	*		*					*
Austria (1985/88/93)	*		*			*		
Portugal (1993)		*	*				*	
Finland	*		*				*	*
Sweden (1994)	*							
UK (1986/95)	*	*	*					

Source: Franco and Munzi (1996).

Table 8.1: Private funded pension systems in the EU

	Coverage of labour force (%)	Type of benefit	Funding
Belgium	31% (voluntary)	Defined benefit	External
Germany	46% (voluntary)	Defined benefit	Largely internal
Denmark	80% (compulsory)	Defined contribution	External
Greece	5% (voluntary)	Defined benefit	External
Spain	4% pension funds, 11% personal pensions (voluntary)	Defined benefit	External
France	Under 10% (voluntary)	Defined benefit	External
Ireland	40% (voluntary)	Defined benefit	External
Italy	5% (voluntary)	Defined benefit	External
Luxembourg	30% (voluntary)	Defined benefit	Internal
Netherlands	85% (voluntary)	Defined benefit	External
Portugal	15% (voluntary)	Defined benefit	External
Sweden	90% (ITP/STP voluntary)	Defined benefit	Partly internal
United Kingdom	50% company, 25% personal; (voluntary)	Defined benefit (most occupational), defined contribution (personal)	External

Source: EFRP (1996). Includes only independent (private - and public-sector) funded schemes. Note that in the Netherlands the private schemes are voluntary; the ABP scheme for public employees is compulsory.

Table 8.2: Private pension financing in the EU, end-1994

	\$ US bn	% of GDP
UK	706	68
Germany	111	6
France	50	4
Netherlands	287	82
Italy	23	2
Sweden	51	25
Denmark	28	18
Ireland	21	42
Spain	11	2
Finland	11	10
Belgium	7	3
Portugal	6	8
Austria	1	1
Luxembourg	1	3
Memo items:		
US	4527	67
Japan (March 1994)	260	6
Canada (1992)	183	34
Australia	139	41

Source: EFRP (1996), national data.

Table 8.3: Tax treatment and asset regulations¹

	Form of taxation	Portfolio regulations	Regulation of funding²
United Kingdom	EET - Contributions and asset returns tax-free. Benefits taxed, except for tax-free lump sum.	Prudent man concept; 5% self-investment limit, concentration limit for defined-contribution plans	Maximum 5% overfund of PBO or IBO. Funding only obligatory for contracted-out part of social security.
Germany	TET - Employers' contributions taxed as wages; employees' contributions and asset returns tax-free. Benefits taxed at low rate. (For booked benefits, employers' contributions tax-free, benefits taxed at normal rate.)	Guidelines; maximum 30% EU equity, 25% EU property, 6% non-EU shares, 6% non-EU bonds, 20% overall foreign assets, 10% self-investment limit	Funding obligatory up to PBO. Option of book-reserve funding.
Netherlands	EET - Contributions and asset returns tax free. Benefits taxed.	Prudent man concept, 5% self-investment limit.	Funds are expected to cover PBO; maximum 15% overfund of ABO, minimum is ABO itself.
Sweden	ETT - Contributions to ATP tax-free; contributions to ITP/STP subject to social security tax. Tax on asset returns of ITP/STP. Benefits taxed at low rate.	Majority to be in listed bonds, debentures and retroverse loans to contributors.	For ATP, IBO is funded. Contribution rate adjusted 5-yearly to balance fund.
Denmark	ETT - Contributions tax-free. Tax on real asset returns. Benefits taxed, including 40% of lump sum payments.	Property loans, shares and investment trust holdings limited to 40%, foreign assets to 20%; 60% to be in domestic debt. No self-investment.	Irrelevant as defined contribution; benefits must be funded externally.
France	E(E)T - Contributions to unfunded ARRCO/AGIRC tax-free; separate funded schemes discouraged; insured pension contributions tax-free.	Assets of supplementary funds (ARRCO/AGIRC) to be invested 50% in EU government bonds and less than 33% in loans to sponsors. Insured funds maximum 40% property and 15% Treasury deposits.	Funded company schemes discouraged; book-reserve funding subject to tax discrimination.
Italy	EET - Contributions and asset returns tax-free, benefits taxed.	No pension law for self-administered schemes. Most schemes are insured, investments may be in state bonds (maximum 90%), bank deposits, property, mortgages, securities, investment funds.	No pension law for self-administered schemes; draft law proposes payments equal to 7% of salary. Insured plans must be fully funded on a 15-year projection.
Ireland	EET - Contributions and asset returns tax-free, benefits taxed	Schemes must diversify prudently, any self-investment to be declared	Funding of ABO required; deferred rights indexed.
Belgium	EET - Contributions and asset returns tax-free, benefits taxed.	15% to be invested in government bonds, no more than 15% in sponsor, 40% limit on real estate, 10% deposits.	Funding obligatory of ABO based on current salary, interest rate 7%.
Spain	TTT - Asset returns taxed, benefits taxed, employee contributions partly tax-deductible.	90% in stocks, bonds, mortgages, property, deposits.	Funding obligatory of ABO plus 4% margin; maximum interest rate 6%.
Portugal	EET - Contributions and asset returns tax free, benefits taxed.	Maxima of 50% real estate, 15% self investment, 40% equities and bonds not listed in Portugal, but limited to large markets.	Funding obligatory of ABO.

Notes: (1) Although the table reflects information available to the author at the time of writing, regulations are not infrequently subject to amendment.

(2) ABO refers to the accrued benefit obligation; PBO the projected benefit obligation.

Source: Davis (1995), EFRP (1996).

Table 9.1: Portfolios of EU pension funds, 1994 (% of assets)

%	Equities	Bonds and loans	Property	Liquidity and deposits	Total foreign assets
UK	80	11	6	3	30
Germany	11	75	11	3	6
France	14	39	7	40	5
Netherlands	23	67	9	2	17
Italy	9	62	23	6	5
Sweden	32	47	8	13	12
Denmark	22	65	9	4	7
Ireland	55	35	6	4	37
Spain	4	82	1	13	5
Finland	5	73	12	10	n/a
Belgium	36	47	7	10	35
Portugal	10	72	3	15	n/a
Austria	11	75	2	12	20
Luxembourg	20	70	0	10	n/a
Memo items:					
US	48	38	0	7	10
Japan (March 1994)	27	61	2	3	7
Canada (1992)	38	49	3	7	9
Australia	48	27	8	17	16

Foreign assets are included in the categories to the left.

Source: EFRP (1996).

Table 9.2: Returns on pension funds' portfolios 1967-90 (mean (standard deviation) of annual real total returns in local currency)

% - domestic currency	United Kingdom		Germany		Netherlands		Sweden		Denmark		Ireland		France		Italy		Belgium	
Estimated portfolio return ⁽¹⁾	5.8	(12.5)	5.1	(4.4)	4.0	(6.0)	0.2	(7.6)	3.6	(12.7)	5.0	(11.9)	n/a	n/a	n/a	n/a	n/a	n/a
Average earnings growth	2.6	(2.5)	4.0	(3.1)	2.4	(3.2)	1.5	(3.5)	2.8	(3.6)	2.0		4.0		3.1	(4.3)	n/a	
Portfolio return less average earnings	3.2		1.1		1.6		-1.3		0.8		3.0		n/a		n/a		n/a	
Inflation (CPI)	8.9	(5.3)	3.5	(2.1)	4.9	(3.1)	8.1	(2.7)	7.7	(3.2)	10.0	(6.0)	7.1	(4.1)	11.3	(5.9)	5.5	(3.2)
Returns on:																		
Loans	1.4	(5.0)	5.3	(1.9)	3.8	(3.6)	3.4	(3.1)	6.1	(3.6)	n/a	n/a	2.6	(3.2)	2.7	(3.7)	n/a	n/a
Mortgages	2.0	(5.2)	4.7	(1.4)	4.3	(2.6)	2.6	(3.0)	5.8	(3.7)	n/a	n/a	3.7	(2.6)	n/a	n/a	n/a	n/a
Equities	8.1	(20.3)	9.5	(20.3)	7.9	(28.2)	8.4	(23.3)	7.0	(27.5)	8.5	(25.9)	9.4	(26.9)	4.0	(35.9)	6.3	(16.7)
Bonds	-0.5	(13.0)	2.7	(14.9)	1.0	(13.1)	-0.9	(8.5)	3.4	(16.1)	-0.1	(15.3)	1.0	(13.1)	-0.2	(18.3)	1.3	(11.7)
Short-term assets	1.7	(4.9)	3.1	(2.1)	1.6	(4.0)	1.3	(3.5)	1.6	(1.8)	n/a	n/a	2.4	(3.4)	-2.2	(4.2)	n/a	n/a
Property	6.7	(11.4)	4.5	(2.9)	4.6	(15.0)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Foreign bonds	-0.1	(15.0)	3.0	(11.2)	-0.7	(11.2)	-0.2	(12.6)	-2.0	(11.6)	-1.4	(11.4)	-0.2	(12.8)	-1.5	(10.7)	0.2	(11.1)
Foreign equities	7.0	(16.2)	10.4	(13.5)	6.6	(14.4)	7.1	(14.0)	5.5	(14.3)	5.9	(14.2)	7.0	(13.5)	6.0	(12.5)	7.5	(13.7)
Memo: portfolio return ⁽²⁾	6.3	(10.7)	5.5	(3.0)	4.3	(5.5)	2.8	(2.9)	5.8	(3.0)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Notes: (1) Using holding period returns on bonds

(2) Using redemption yields on fixed rate instruments.

Source: Davis (1995), using National Flow of Funds Data (for portfolio distributions - see Table 9.1) and BIS macroeconomic database (for asset returns).

Table 9.3: Targeted replacement rates with indexed pensions

	Replacement ratio assuming indexation of pensions to prices	Percentage contribution rate for 40% replacement rate	Replacement ratio assuming indexation of pensions to wages
United Kingdom	60	6.7	50
Germany	39	10.3	27
Netherlands	44	9.1	37
Sweden	14	28.6	11
Denmark	36	11.1	27
Ireland	60	6.7	50

Source: Vittas (1992) and estimates of average earnings, inflation and real returns on pension funds shown in Table 9.2. There is assumed to a working life of 40 years followed by 20 years of retirement.

Table 9.4: Artificial diversified portfolios (mean (standard deviation) of real total return in local currency), 1967-90

% - domestic currency	Domestic¹		Domestic minus estimated portfolio return (Table 9.3)	Domestic & internatio nal²		Domestic and international minus estimated portfolio return (Table 9.3)	Domestic and international minus average earnings
United Kingdom	3.8	(14.8)	-2.0	3.7	(14.1)	-2.1	+1.1
Germany	6.1	(15.2)	+1.0	6.2	(13.4)	+1.1	+2.2
Netherlands	4.5	(17.0)	+0.5	4.2	(15.2)	+0.2	+1.6
Sweden	3.8	(13.5)	+3.6	3.7	(15.2)	+3.5	+2.2
Denmark	5.3	(18.9)	+1.7	4.6	(13.4)	+1.0	+1.8
France	5.2	(18.0)	-	4.9	(15.9)	-	+0.9
Italy	1.9	(22.1)	-	2.0	(18.7)	-	-1.1
Ireland	3.8	(13.3)	-1.2	3.8	(12.4)	-1.2	+1.8
Belgium	4.2	(18.4)	-	3.8	(16.7)	-	

Notes: (1) 50% domestic equity, 50% domestic bonds.

(2) 40% domestic equity, 40% domestic bonds,
10% foreign equity, 10% foreign bonds.

Source: Davis (1995).