



OFFICE OF FAIR TRADING

Report of the Director General's Inquiry into Pensions

Volume Two

Research undertaken by the OFT
for the Pensions Inquiry:

- ◆ Consumer Survey
- ◆ Structured Interview Process
- ◆ The Potential for Minimising Consumer Detriment in Pensions
 - ◆ International Comparisons

July 1997

APPENDIX D

International Comparisons

July 1997

Abstract

This appendix examines in detail eight pensions systems in Asia, Europe, North and South America (Australia, Canada, Chile, Denmark, the Netherlands, the Republic of Ireland, Singapore and the United States). By looking at such systems, the Office of Fair Trading (OFT) has sought to compare and contrast issues raised in the United Kingdom's pensions system internationally. From this research two common themes appear. First, to varying degrees, all countries are dealing with part or all of the issues raised in the OFT's report. Second, all countries researched have, or will have, to face up to the difficult realities of moulding a welfare system which sees its frontiers increasingly eroded by arguments for greater individual choice and the growing need to curtail public debt levels. Four countries (Denmark, the Republic of Ireland, the Netherlands and the United States) were visited and the rest researched by other means. The basis of selection focussed on their usefulness in highlighting similarities and comparisons with the United Kingdom's pension system, different methods for dealing with the ageing population crisis, approaches towards compulsion and the identification of issues of consumer detriment identified by the Pensions Inquiry.

Contents

D.1	Introduction	106
D.2	Australia	114
	D.2.1 Economic overview	114
	D.2.2 System design and characteristics	114
	D.2.3 Existence and extent of major research issues	119
D.3	Canada	123
	D.3.1 Economic overview	123
	D.3.2 System design and characteristics	123
	D.3.3 Existence and extent of major research issues	129
D.4	Chile	133
	D.4.1 Economic overview	133
	D.4.2 System design and characteristics	133
	D.4.3 Existence and extent of major research issues	137
D.5	Denmark	140
	D.5.1 Economic overview	140
	D.5.2 System design and characteristics	140
	D.5.3 Existence and extent of major research issues	144
D.6	Netherlands	147
	D.6.1 Economic overview	147
	D.6.2 System design and characteristics	147
	D.6.3 Existence and extent of major research issues	151
D.7	Republic of Ireland	154
	D.7.1 Economic overview	154
	D.7.2 System design and characteristics	154
	D.7.3 Existence and extent of major research issues	159
D.8	Singapore	162
	D.8.1 Economic overview	162
	D.8.2 System design and characteristics	162
	D.8.3 Existence and extent of major research issues	166
D.9	United States of America	169
	D.9.1 Economic overview	169

D.9.2 System design and characteristics	169
D.9.3 Existence and extent of major research issues	176
D.10 Overviews	179
Australia	179
Canada	180
Chile	181
Denmark	182
Netherlands	183
Republic of Ireland	184
Singapore	185
United States of America	186
References and notes for data	187
Bibliography	189

Tables

1	Analysis of Meetings	108
2	Denmark 10-12 November 1996	109
3	Netherlands 27-29 November 1996	110
4	Republic of Ireland 5-6 November 1996	111
5	United States of America 29 October-4 November 1996	112

D.1 Introduction

1 On 19 September 1996, the Office of Fair Trading (OFT) announced a far reaching Inquiry into consumer detriment and market structure associated with the United Kingdom's pensions industry. As part of this assessment, comparison of issues which relate to the OFT's Pensions Inquiry have been undertaken via extensive international research in the following countries:

- a Australia;
- b Canada;
- c Chile;
- d Denmark;
- e Netherlands;
- f Republic of Ireland;
- g Singapore; and
- h United States.

2 The International Research Unit of the Pensions Inquiry visited four of these countries during October to November 1996:

- a Denmark;
- b Netherlands;
- c Republic of Ireland; and
- d United States.

These visits were conducted to investigate how or whether these systems had dealt with the issues the inquiry was focussing on.

3 This appendix is a compilation of that qualitative analysis undertaken in the form of structured interview questionnaires in those countries visited and desk research. This material also provides a basis to understand the various features of each country's

pension system and how innovative solutions have been developed, in some cases, to deal with the associated consumer detriment experienced with the sale of pension products.

- 4 The appendix is laid out as follows. First, there is a brief analysis of the meetings conducted in the four countries visited and a list of commentators who participated in the structured interview process. Next, each country's pension system is analysed in detail, looking at the various characteristics and issues that are relevant to the inquiry. Finally, a one-page overview is given for each country, outlining the main structural features of each country's retirement framework.

International Research Unit
Consumer Affairs Division
Office of Fair Trading
July 1997

TABLE 1

ANALYSIS OF MEETINGS

	<i>Academic</i>	<i>Industry</i>	<i>Regulator</i>	<i>Government</i>	<i>Consumers</i>	<i>TOTAL</i>
<i>Denmark</i>	1	2	1	2	2	8
<i>Netherlands</i>	1	3	1	1	1	7
<i>Ireland</i>	1	4	1	1	1	8
<i>United States</i>	7	5	2	1	2	17
<i>TOTAL</i>	10	14	5	5	6	40

Table 2

Denmark

10- 12 November 1996

<i>Organisation</i>	<i>Type of Organisation</i>
1 Dr Jensen Copenhagen Business School	Academic
2 AMPR	Industry
3 PensionSelskaberne	Industry
4 Mr Grunbaum Finanstilsynet	Regulator
5 Dr Sorensen ATP Supplementary Pensions	Government
6 Mr Rostell Ministry of Business and Industry	Government
7 Dr Nedergaard The Consumer Council	Consumer Group
8 Mr Eckeroth Landsorganisationen I Danmark	Consumer Group

Table 3

Netherlands

27- 29 November 1996

<i>Organisation</i>	<i>Type of organisation</i>
1. Mr Alessie CentER, Tilburg University	Academic
2. ING Financial Services International	Industry
3. Ondernemingspensioenfondsen	Industry
4. Watson Wyatt	Industry
5. Mr Van Dam Verzekeringekamer	Regulator
6. Mr Strookman Ombudsman Pensioenen	Consumer group
7. Mr Higler Social Insurance Bank	Government

Table 4

Republic of Ireland

5- 6 November 1996

<i>Organisation</i>	<i>Type of Organisation</i>
1 Dr Hughes Economic & Social Research Institute	Academic
2 AIB Group Plc	Industry
3 Irish Insurance Federation	Industry
4 Mercer Ltd	Industry
5 Peter Bacon & Associates	Industry
6 Ms Maher The Pensions Board	Regulator
7 Mr Mangan Department of Social Affairs	Government
8 Mr Tierney Consumers' Association of Ireland	Consumer group

Table 5

United States of America
29 October- 4 November 1996

<i>Organisation</i>	<i>Type of Organisation</i>
1 Professor Kotlikoff Boston University	Academic
2 Mr Burtless The Brookings Institution	Academic
3 Mr Yakoboski Employee Benefit Research Institute	Academic
4 Professor Diamond MIT	Academic
5 Ms Reno National Academy of Social Insurance	Academic
6 Dr Mitchell The Wharton School, University of Pennsylvania	Academic
7 Ms James World Bank	Academic
8 American Council of Life Insurance	Industry
9 Jackson National Life	Industry
10 LeBoeuf Lamb Greene & MacRae	Industry
11 New England Mutual Life Ins. Co.	Industry
12 Dr Schieber Social Security Advisory Committee/Watson Wyatt	Industry
13 Mr Gustafson Pensions Benefit Guaranty Corporation	Regulator

14 Ms Nash Securities & Exchange Commission	Regulator
15 Mr Klevan Department of Labor	Government
16 Mr Hunt Consumers Federation of America	Consumer group
17 Mr Thau Third Millennium	Consumer group



D.2 Australia

D.2.1 Economic overview

5 The Australian economy has undergone labour market reform over the last decade that has seen the emergence of a compulsory pension system. In 1995, Australia's population was 18.34 million, which is projected to increase to 23.5 million by 2025. GDP was US\$391.3 billion in 1996, with growth being less buoyant since late 1995, being 3.1% in 1996. In 1995, public pension spending accounted for 2.6% of GDP, down from 3.8% in 1990. There has recently with a weakening of price pressures observed in the consumer price index, being 1.5% per year in 1996. The unemployment rate is currently 8.8%, with a workforce of 9.1 million.

D.2.2 System design and characteristics

6 For Australia, massive changes in the provision of retirement income or superannuation started to occur towards the mid- and late 1980s. Previously Australia had maintained a very simplistic retirement incomes framework. The Age Pension is universal (that is, non-contributory) and subject to means-testing (on both income and wealth). This means-testing has progressively tightened over the last decade in response to an increased push by the federal government for consumers to plan for their retirement. Two reasons spurred on the federal government to reform the increasingly cumbersome retirement incomes system. Australia as a nation was and still is ageing. The percentage of the population aged over 60 is expected to rise from 15.0% in 1990 to 27.7% by 2030. Also, the level of savings was considered by federal government to be low by world standards and thus the introduction of a system of compulsory savings was seen as a way of offsetting this feature.

- 7 In response to the ageing of Australia's population, the federal government implemented a comprehensive retirement strategy to urge or require individuals to take the initiative and plan for their futures. A safety net is provided in the form of the Age Pension but most younger Australians acknowledge that they are unlikely to receive this benefit in the future as the ratio of retirees to taxpayers narrows. On this basis, superannuation has become the main vehicle for the self-provision of retirement income. The government policy objectives are to ensure that:
- a all Australians have an adequate and secure level of income in retirement;
 - b the publicly funded contribution to retirement incomes remains within the capacity to pay; and
 - c retirement savings contribute to meeting the national savings goals.
- 8 To achieve these objectives, the government has adopted a three-tiered approach to the provision of retirement incomes with the following characteristics:
- a access to the safety net with a means-tested age pension for those who need it;
 - b compulsory employer superannuation contributions through awards and the Superannuation Guarantee;
 - c compulsory employee contributions through awards and enterprise agreements; and
 - d matching contributions by government for contributions made by employees and the self-employed, and other tax incentives.
- 9 The normal retirement age in Australia is 65 for men and 60 for women (to be increased to 65 by 2014). Before the introduction of compulsion into the system, Australia had relied on providing tax concessions to encourage participation in employment-related retirement income schemes. Through union initiatives, the newly elected Labor government embraced the concept of having a national employment-related retirement income scheme (NERRIS) to provide an overall framework to increase the coverage of superannuation.

- 10 The first steps to introduce NERRIS was through the centralised wage determination system. Both the union movement and government agreed in 1986 to introduce Productivity Award Superannuation (PAS). The crucial focus of this agreement was to provide employees with a compensation level of 6%, with half of this figure being made up of employer superannuation contribution, to be paid into an industry fund. This initiative saw Australia introduce the foundations of compulsion into its system and begin the process of forming significant industry-sponsored funds, principally operated by large unions. By September 1996, AUS\$261.2 billion was held in the assets of the superannuation system. Based on the last quarter of 1996, growth of superannuation assets was 16.5 % per year. Through this initiative the level of superannuation coverage has more than doubled by 1995, increasing from 31% in 1987 to 81% in 1995.

- 11 Australia's second tier centres on occupational schemes. With the introduction of compulsion, this tier grew rapidly, on the basis of the link with the award wages system. Union involvement and support for industry-sponsored funds saw the membership of these funds rapidly swell. Most of the new funds established since compulsion was introduced have been defined contribution (DC)¹. Over 70% of private funds, with over four members, are DC or 95% of private sector pension members are in a DC scheme.

- 12 In 1991, Australia further embraced the concept of compulsion by introducing the Superannuation Contribution Charge (SGC). This required employers to make contributions on behalf of their employees to complying superannuation funds. Compliance of these superannuation funds would be determined by the industry regulator, the Insurance and Superannuation Commission (ISC). Thus the Australian retirement incomes system within less than a decade had quickly moved from one of voluntary contributions, supported by tax concessions, to an extensive system of compulsion. Effectively the SGC arrangements apply to all employers and to almost all employees. Employers who do not comply become subject to the Superannuation

¹The determination of an individual's benefits by reference to contributions paid by that individual (and employer), usually increased by an amount based on the investment return on those contributions.

Guarantee Charge, which is redistributed to uncovered employees. The minimum level of superannuation support will be phased in over 10 years.

- 13 This commitment to funding superannuation began in 1 July 1992 and is expected to be completed, with employers providing 9% contributions for their employees, by 2002—2003. Additionally the government is committed to implementing a 3% round of employee contributions towards the end of the implementation phase. If the employer fails to meet their obligations under the SGC, a charge is imposed. This charge is equal to the shortfall in the minimum level of superannuation support plus an interest component and an administrative component. Such charges are not tax deductible and thus it means that it is cheaper to meet the mandated superannuation requirements.
- 14 Supporting the introduction of a system of compulsory retirement savings, a need was highlighted by the federal government to have improved and more detailed legislation ensuring that superannuation funds complied with acceptable prudential and solvency standards. The Superannuation Industry (Supervision) Act 1993 (SIS) came into effect on 1 July 1994. SIS imposes obligations on superannuation fund trustees, auditors and actuaries. The legislation clearly stresses the need to develop prudent behaviour in relation to the management of the fund. Also SIS places the responsibility for the viable and careful operation of superannuation funds solely on trustees. It empowers the ISC to take action against, trustees, actuaries and auditors who may pose a threat to funds.
- 15 Crucial to any compulsory system is the level of threshold from where contributions begin. Currently, an employer is not required to pay contributions for an employee earning less than AUS\$450 per month². Furthermore, proposals introduced by the coalition government pay superannuation as wages at the request of the employee if the employee earns between AUS\$450 and AUS\$900. These exemptions mean that 19% of workers are not covered by the system, being equivalent to 400,000 workers, the majority being women. Some welfare groups insist that the coalition government's proposals,

Other exemptions: employee is 65 or over, under 18 and working not more than 30 hours per week, paid for domestic or private work for no more than 30 hours per week, non-resident employee paid for work done outside Australia and resident employee paid for work.

where some workers have the contributions now rather than place it in superannuation, would be better since the superannuation would be eroded by fees and charges. It has been estimated that the opt out proposals mean that 170,000 men and 350,000 women would be eligible (those between AUS\$50 and AUS\$900 per month). The coalition government estimate that 80% would take this option.

- 16 The ISC regulatory powers allow it to actively check the operations of many funds through a national, strategically targeted review program. Any fund may come under scrutiny, particularly if it exhibits risk characteristics, including management weaknesses.
- 17 The third tier of the Australian retirement incomes framework sees fund managers and life insurance offices offering personal superannuation policies. These policies are principally targeted at the self-employed or individuals who wish to supplement their possible existing membership of occupational schemes. Further, life offices also provide superannuation policies on a group basis for the self-employed business with several staff and larger organisations. These funds are referred to as employer-sponsored funds and are usually managed by life offices. Additionally, as part of the third tier smaller excluded funds are established who have five or less members. Such funds, because of their size and mainly because they are used by smaller businesses, attract less regulation under the SIS legislation.
- 18 Funding for the regulatory responsibilities of the ISC is provided under the Superannuation Supervisory Levy Act 1991 which sees levies charged on superannuation entities.
- 19 Taxation of superannuation in Australia is quite high relative to other OECD countries. A rate of 15% is charged on contributions to the fund. Also the returns on the fund and the final payment to the beneficiary are also taxed. This taxing structure sharply contrasts with that of the United Kingdom where clearly more tax incentives are provided for the individual.

20 A recent policy initiative by the federal government is to allow Retirement Savings Accounts (RSAs) to be provided by banks. These accounts are essentially designed as a low-cost alternative for people who are infrequently employed. Some groups argue that this product will benefit minority groups (self-employed and itinerant workers) and women due to reducing charges and improved accessibility. This proposition is dispelled by other industry groups which insist that such products will not provide the necessary returns to generate sufficient income in retirement.

D.2.3 Existence and extent of major research issues

21 *Minority groups*

Although these groups normally are provided with greater access to superannuation funds, high charges and low wage levels result in their future benefits being lower than what is effectively needed in retirement. Broken working patterns amongst indigenous Aboriginal people means many existing superannuation policies are inappropriate for their needs.

22 *Impacts on women*

The issue of women and superannuation has been a major concern for the federal government, the ISC and the Office of the Status of Women (OSW). They have been active in targeting women in public education campaigns and producing literature on the need for women to plan for their future and the particular problems they face. Women's rights to superannuation benefits upon divorce have been recognised by the Family Law Court. A central concern is that women still represent the majority of low paid, unskilled workers who essentially find it difficult to provide sufficiently for their retirement. Recent policy initiatives contained in the 1996—1997 budget benefit women, in that working spouses will be able to claim a rebate of 18% for a contribution of up to AUS\$3,000 to the superannuation savings of a non-working or low income spouse.

23 *Shift from defined benefit (DB)³ to DC schemes*

The numbers of DB compared with DC schemes is significantly lower in Australia than in the United Kingdom. In the past the coverage of the workforce up to 1986 was largely confined to white-collar, middle class professions. When the rapid growth of superannuation did take place, many employers opted for DC schemes, because of cost and flexibility.

24 *Marketing material/selling methods/disclosure*

Australia has been very active in improving the standards of information and marketing material provided to the consumer. Section 52 of the Trade Practices Act 1974 allows for fines to be imposed on companies which produce marketing material or act in a manner which is seen to mislead or deceive the consumer. In recent years this section of the legislation has been interpreted very widely by the Federal Court of Australia. SIS contains disclosure requirements on the information that needs to be provided to the consumer on the sale and continued operation of a superannuation account. Public scandals in the misselling of superannuation policies (in particular the selling of superannuation policies to Aboriginal communities) have seen disclosure rules significantly strengthened and an industry code of conduct introduced for intermediaries involved in the sales process. Penalties and charges can be brought against the individual and manufacturer of the product under this legislation. Additionally all superannuation industry associations are keen to improve the perception of the industry and have taken steps in the form of industry codes of ethics, to eliminate the likelihood of inappropriate conduct being inflicted on the consumer.

25 *Costs of regulation*

Issues surrounding the costs of regulation have been closely examined by the Wallis Inquiry, established by the federal government to look at the overall financial services

A pension in which the rules specify the benefits to be paid, and the scheme is financed accordingly.

system of Australia. This inquiry has heard evidence that the current system is too costly and inefficient. Other parties have suggested that the regulatory model should move towards a more self-regulatory position. The Wallis Inquiry report, published in April 1997, recommends among other things a broad range of measures to encourage competition and contain the costs of regulation.

26 *Transfer values*

Generally, people do not transfer from one DB scheme to another, leaving deferred pension rights. However, when employees leave a firm an actuary can calculate the cash value of the accrued benefit and cash it out. This would generally then be put into a DC scheme (known as a rollover fund) until retirement. However, since defined benefit schemes have tended to disappear since compulsion was introduced, this has become less of an issue.

27 *Redress*

Two schemes run parallel in Australia for handling consumer complaints associated with pension products. The consumer has the option of either using the Life Insurance Complaints Service or the Superannuation Complaints Tribunal (SCT). Both services are free, with the SCT being a statutory authority, having been established by the Superannuation (Resolution of Complaints) Act 1993. The SCT aims to provide a cost free and *user friendly* forum to persons who have complaints about certain decisions or the conduct of trustees and/or insurers in relation to regulated superannuation funds, approved deposit funds, life policy funds and annuity policies. Some debate in Australia has centred on the need possibly to have a *one-stop-shop* for consumer complaints.

The issue of public education was addressed principally by an extensive campaign coordinated and funded by the ISC. This was estimated to have cost approximately AUS\$11million and saw leaflets delivered to every household in Australia. Such education principally served to outline the overall superannuation system and also to highlight the need for consumers to plan for their retirement. A continued public education role is provided by the federal government, through the ISC. Industry association groups such as ASFA (Association of Superannuation Funds of Australia) and LISA (Life Insurance Superannuation Association) also assist their members and the general public in this role.



D.3 Canada

D.3.1 Economic overview

29 The Canadian economy is characterised by the degree of openness to its neighbour, the United States. In 1995, the population was 28.54 million. In 1996, GDP was US\$577.8 billion, with economic growth slowing from 4.8% per year in 1994 to 2.3% in 1996. In 1995, public pension spending accounted for 5.2% of GDP, up from 4.3% in 1990. Compared to the rest of the OECD, unemployment is relatively high at 9.7% in 1997, but this is down from 10.4% in 1994. Consumer prices have fluctuated in the 1990s, being 0.2% per year in 1994 and 2.2% in 1997.

D.3.2 System design and characteristics

30 The federal and provincial governments provide a multi-tiered system for the regulation of the retirement mechanism. Canada is a confederation of 10 provinces, with a constitution which states that these provinces have exclusive legislative authority over property and civil rights. The provinces can legislate on labour relations, minimum wages, employment standards and employee benefits. This constitutional relationship is pivotal in the regulation and development of the tiered structure of Canada's retirement system.

31 Regulation of the retirement incomes industry (pension and life insurance) in Canada parallels the constitutional arrangements, in terms of the interaction between the provinces and the federal government. For example, life insurance companies are regulated by the Office of the Supervisor of Financial Institutions (OSFI) only in the area of financial solvency, and market conduct issues by the regulator in each province. Similarly, the first two tiers of the Canadian pensions framework, the Old Age Security

(OAS) program and the Canadian Pension Plan (CPP) are administered by federal authorities. It should be noted that the province of Quebec exercised its constitutional rights and established the Quebec Pension Plan (QPP) which essentially has the same terms and conditions of the CPP. In contrast the individual provinces have passed similar legislation, commonly referred as the Pension Benefits Act to regulate the third tier of Canada's pensions framework.

32 The first tier of the Canadian pension system is the OAS program which provides benefits in the form of the Old Age Security pension, the Guaranteed Income Supplement (GIS) and the Spouse's Allowance. It is financed from general taxation. All Canadians receive this entitlement based on 40 years' residency and upon reaching the age of 65. This is a flat-rate benefit adjusted in January, April, July and October of each year through movements in the Consumer Price Index.

33 Although this program's benefits are relatively small for the retiree the overall costs have been identified as rising and likely to continue in the future. The total cost of OAS benefit payments has risen steadily since the 1970s. From 1971 to 1994, payments for Old Age Security more than doubled to C\$15.4 billion from C\$6.8 billion (in 1994 dollars).

34 Although all Canadians are entitled to OAS payments, tax *clawbacks* effectively place a ceiling on the payment. The threshold to trigger the *clawback* provision is C\$53,215 compared with national average earnings of C\$31,133 (February 1997).

This provision requires that an individual earning in excess of that threshold is taxed at a flat rate of 15% of the excess net income up to the full amount of OAS. For an individual earning [C]\$84,000 or more, the full amount of OAS pension is taxed back (Canadian Health and Life Insurance, 1997, p.4).

Further modifications of the *clawback* provisions will take effect on 1 July 1997 which will see the system being based on the joint income of two spouses.

35 The CPP/QPP is a compulsory, contributory, earnings-related social insurance system. On 1 January 1966, CPP became effective along with the GIS for disadvantaged senior citizens. In developing the CPP, the government was identifying a need for Canadians to provide for their retirement through their own contributions. This initiative represented the last of the three pillars of Canada's retirement incomes framework with the OAS and the Registered Retirement Savings Plans (RRSPs) having been previously introduced. Generous benefits existed for the retirees who were first to utilise the system. A common rationale that existed towards those Canadians nearing retirement in the mid-1960s was that they

...had endured the Great Depression of the 1930s and the war years of the 1940s and many had saved little for their retirement. To help address the shortfall, full CPP retirement benefits were phased in rapidly over the 1966—1975 period. (Federal/Provincial Information Paper, 1996, p.10)

36 CPP retirement pensions are paid monthly to retirees who have been contributing to the scheme. The normal age of eligibility is 65, with late retirement up to the age of 70 being also permitted. The maximum monthly pension is 25% of average earnings. Disability benefits are payable to contributors under age 65 whose work pattern has been disrupted due to a severe and prolonged mental or physical condition and who have made sufficient contributions to the program. Survivor benefits are also available to the deceased contributor's estate, surviving spouse and dependent children. The system's contributions are based on co-contributions currently paid equally by the employer and employee. In 1996, the contribution rate was 5.6% on earnings between the basic exemption and the maximum pensionable earnings level.

37 In summary the CPP is essentially financed on a PAYG platform. Like any PAYG scheme, the security of the plan benefits is reliant on the continuing ability of each working generation to pay for the pensions of preceding generations. In Canada's case this presumption is being increasingly eroded by employment uncertainty but more prominently by the rapid ageing of the Canadian population. So concerned are

politicians from both federal and provincial jurisdictions that a review of the CPP has been carried out and the resulting changes from this review tabled in the federal parliament in February 1997. Most parties to the process agree that the rate of contributions will have to increase. Additionally the Chief Actuary's Fifteenth Actuarial Report (1995) on the CPP indicated that contribution rates will have to rise to 14.2% in the future in order to pay for benefits in 2030.

Baby boomers will have to pay more for less to save the Canada Pension Plan, the country's finance ministers agreed...Federal Finance Minister Paul Martin and the other ministers said they have little choice but to jack up premiums quickly if they are to maintain the pension plan (Toronto Star, 1996).

Projections from the OECD show CPP payouts could peak at 8.7% of gross domestic product around 2035 vs. 5.0% today. As a result, contributions will likely have to rise further than is currently scheduled. CPP rates are reviewed every five years by Ottawa and the provinces...In addition, OAS and GIS payments will likely increase at a similar pace (Investment Executive, November 1995, p.38).

- 38 The extent of the ageing effects on Canada's retirement incomes system can be seen in the associated statistics:

As the generation born during the 1952—1966 baby boom ages, Canada's population is being transformed. In 1966, there were 5.5 Canadians under the age of 20 for each Canadian over the age of 65. Today, there are 2.3. In 2030, there will be 1.1. ...The number of senior citizens will increase dramatically: from 19.8% of the working-age population in 1995 to 38.9% of the working-age population in 2030 (Canadian Institute of Actuaries, 1995, p.1).

- 39 In relation to part of the third tier, Pension Benefit Acts have been passed by provinces since 1965 and have recently been strengthened, as the issue of improving the supervision of such funds has grown. Ontario is seen in some quarters as the lead

province for regulation as it controls a majority of fund members, number of plans and overall fund assets. The Pension Commission of Ontario (PCO) regulates this tier of the pensions framework of Canada which makes it

...illegal for an employer (with a few exceptions in the public sector) to operate a pension plan covering employees in the province unless the plan is registered under the provincial Act and complies with its requirements (Canadian Health and Life Insurance Association, 1995, p.2).

Ontario is a province highly geared for industrial and commercial activity. Consequently the province has a high level of activity in regard to the establishment and maintenance of pension plans. By 31 May 1996, 7,213 active plans with a membership of 1.8 million existed in the province of Ontario. This figure represented 47% of Canadian plans in operation.

- 40 To address the concern of the federal and provincial authorities that significant differences may develop over this tier of the Canadian retirement framework, the Canadian Association of Pension Supervisory Authorities (CAPSA) was established to assist provinces to work together in developing comparatively uniform legislation. Recently this organisation has moved to overcome the problem of large organisations having operations in several provinces and thus having the pension scheme regulated by several provincial authorities.

....a new multilateral agreement to govern the regulation of pension plans where members are subject to the laws of more than one Canadian jurisdiction. The broad outline of the agreement is that plans would register only with the jurisdiction in which the largest number of members are employed and the laws of that jurisdiction would apply to all members regardless of where the members are employed. The draft agreement is currently under consideration by Ministers (Pension Commission on Ontario, 1995, p.5).

- 41 Registered Pension Plans (RPPs), regulated in part by the PCO, are registered also under federal legislation via the Income Tax Act. A pension plan will only gain favourable tax treatment if it meets the requirements in the income tax regulations; for example, an employer must be a contributor to the plan and the employee may or may not contribute. Such employee plan contributions are tax deductible which is further inducement for Canadians to plan for their future. These plans provide benefits through life annuities unless because of death or departure from employment lump sum settlements are allowed. Such plans must be funded as a going concern in accordance with an acceptable actuarial method.
- 42 Related to RPPs are the deferred profit sharing plans (DPSPs). These schemes are relatively small compared with the RPPs and RRSPs but remain an option for employers to provide remuneration for their employees. It sees profit sharing used as a method for contributing to an employee's retirement. Employers contribute from their profits with employees' contributions no longer allowed.
- 43 RRSPs have grown rapidly in numbers and asset value over the last five years as a result of taxation amendments. Essentially this retirement vehicle was designed to allow the self-employed to save for their retirement. Associated tax advantages enjoyed for ordinary employees were extended to this group. Today this product is widely used as a retirement savings vehicle by both the self-employed and employees, with no discrimination being shown to employees who are already members of RPPs. Essentially an RRSP is an individual contract between the taxpayer and the authorised issuer. Within certain limits the taxpayer makes contributions from income which accumulate with interest over the working life of the employee. When the product matures, the employer can opt for a life annuity, an annuity certain product or place it in a Registered Retirement Income Fund which allows for a more flexible basis to timing of withdrawals.
- 44 As discussed previously, limitations exist for contributions to RRSPs and RPPs. In the case of RRSPs, the limit is 18% of the individual's earned income in the previous year,

subject to a dollar current maximum of C\$13,500 which will increase by C\$1,000 each year to reach C\$15,500 in 1999. Indexation to consumer prices will take place after this period. RPP contributions will increase from the current level of C\$14,500, reaching a ceiling of C\$15,500 in 1998. Indexation to consumer prices will then take place from this point.

45 There is no doubt that the third tier of Canada's retirement incomes system is heavily linked with the taxation benefits derived by the individual. Under the new system, a tax shelter may only be obtained on pensions based on earnings up to about 2.5 times the average wage. Such taxation benefits derived by contributors to RRSPs have certainly been limited in recent years, via recent legislative amendments.

46 Recent reforms tabled in the Canadian parliament on 14 February 1997 plan to amend the current CPP structure. The government intends to move away from a PAYG system to a partially funded system, gradually increasing the fund to about C\$120 billion (5 to 6 years' worth of benefits) which will be invested in the capital market. Currently, there is a contingency reserve fund worth two years of benefits, which is lent to the provinces at the rates paid on long-term Government of Canada Bonds. It is intended that earnings on the fund will supplement contribution revenue, thus enabling a *steady state* contribution rate of 9.9% of contributory earnings for the foreseeable future. At the same time, retirement benefits will effectively be reduced and eligibility for disability benefits will be tightened.

D.3.3 Existence and extent of major research issues

47 Minority groups

These groups appear to be well served by the system. Comparisons with the United Kingdom suggest that the first and second tiers are relatively generous. In some cases these groups have more spasmodic work patterns and thus rely heavily on these two tiers rather than occupational pension schemes which are offered by the private sector.

48 ***Impacts on women***

Like the United Kingdom, Canada experiences a similar problem with women earning less, retiring earlier, living longer and having career breaks associated with childbirth and more fragile work patterns. More than half of all elderly women on their own currently have incomes below the poverty level- although that's down from more than 70% at the beginning of the 1980s. However, proposed changes to the CPP would have had a much bigger impact on women than on men. The second tier of the Canadian retirement incomes framework provides clear benefits for women.

Unlike most private pension plans, the CPP/QPP has a special provision to accommodate parents who may have had to leave the work force for a period of time to raise children. In general 15% exclusion available to all workers, periods when a worker had a child under the age of seven may also be excluded from the calculation of average earnings on which retirement benefit is based (Townson, 1995, p.32).

Like the United States, Canada has some laws in certain provinces which forbid industry schemes from discriminating on the basis of sex, with regard to the annuity rates they provide for men and women. This development in equality arose out of the large amount of debate which took place in 1981 on the future of Canadians' provisions for retirement.

49 ***Shift from DB to DC schemes***

Like the other countries researched, a major shift is taking place with more DC than DB schemes being created.

50 ***Market material/selling methods/disclosure***

All Canadians are covered in some form by the first two tiers of the Canadian retirement incomes system. In relation to the third tier, each province regulates the way RPPs are marketed and associated disclosure requirements correspond with their requirements. With regard to RRSP, no detailed disclosure requirements exist currently but these are planned to be developed by industry at a later date.

51 ***Costs of regulation***

Canada, like other countries researched, is concerned with the level of regulation. Some argument concerning regulation of pension schemes centres on the difference between the regulation on a federal and provincial level. This separation of regulation between the provinces and the federal government appears to concern some critics who argue that national laws and standards are difficult to achieve.

52 ***Role and competence of intermediaries***

Canada principally has the competency levels of intermediaries determined through intermediary and industry associations and also through consultation with provincial regulators. All intermediaries involved in the sale of pensions products are licensed through these provincial regulators for example, the Ontario Insurance Commission. Recently a financial planning standards council has been created by several key industry associations with one of the goals being to lift overall competency standards and standardise the advice provided to consumers. Canada's approach to competency standards appears to leave it principally to industry to define competency levels and then consult and have them endorsed by provincial regulators.

No ombudsman schemes comparable to those of the United Kingdom exist in Canada to deal with the sale of pension products by registered funds or life insurance companies. The system sees provincial pensions regulatory agencies such as the PCO hearing complaints from members of registered pension plans (essentially occupational schemes) concerning the conduct and performance of the fund and its trustees. In contrast the Registered Retirement Savings Plans see industry associations helping to reconcile the complaints of consumers relating to these products, along with the individual provincial insurance regulators.



D.4 Chile

D.4.1 Economic overview

54 The Chilean economy is characterised by its free-market orientation with the private sector's involvement in such areas as the provision of retirement income. Chile's population in 1994 exceeded 13 million with an annual average growth rate of 1.7%. GDP reached US\$50.1 billion (1994), with the economy growing at an average rate of 7% per year since 1984. In 1996, this slowed to 5.5%. In 1989, public pension spending accounted for 5.7% of GDP. The consumer price index has fallen from 27.3% in 1990 to 6.6% in 1996, although this has recently increased to 7.2%. Unemployment has fluctuated between 4.6% and 6.5% in recent years. The national savings rate has increased from 8.2% in 1981 to 27.6% in 1995.

D.4.2 System design and characteristics

55 The Chilean Pension Saving Account (PSA) system was established in 1980. This replaced the PAYG system that had become nearly bankrupt with a declining ratio of contributors to pensioners (12.2 in 1955 to 2.5 in 1980). The new system is privately and competitively managed by companies called *Administradoras de Fondas de Pensiones* (AFPs). Workers choose one of these AFPs to manage their PSA, with each AFP providing old-age, survivor and disability pensions. Members are entitled to their old-age pension starting at 60 for women and 65 for men, although there is flexibility with this depending on the amount of a member's accumulated fund.

56 The PSA system is mandatory for both private and public sector employees in the formal sector (excluding members of the police and armed forces) who started work after 1 January 1983. Those in the old state system had the choice of whether to remain or

transfer with a recognition bond (*Bonos de Reconocimiento*) to the new system. By 1992, about 90- 95% of all persons under the old system had transferred (Butler *et al.*, 1996, p.23). These bonds are adjusted in line with the consumer price index and earn an interest of 4% per year. The self-employed represent about one-quarter of the workforce and have the option of joining the system if their income is above the minimum wage. However, only about 10% of this group are affiliated to an AFP, with two out of five self-employed contributing.

57 According to the Office of the Superintendent of AFPs (SAFP, 1996), there are 5.3 million members of AFPs. However, only 56% of the members are employed contributors (equivalent to 3.0 million members). The difference is accounted for by the following factors: unemployment, withdrawal from the labour force, delays in paying contributions by employers, delays in recording information due to errors in recording information, or non-payment of contributions by the self-employed. Coverage of the labour force by both systems has increased from 42% in 1982 to 62% in 1995. From 1976 to 1980, coverage of the old system decreased from 54% of the workforce to 43%.

58 The Chilean PSA system has attracted attention from governments around the globe and strongly influenced the World Bank Report (1994) *Averting the Old-Age Crisis*. Other South and Central American countries including Argentina (1994), Bolivia (1997), Colombia (1994), Costa Rica (1996), Peru (1993) and Uruguay (1995) have adopted versions of this system, with some Central and Eastern European countries also considering implementation of similar systems. The PSA operates via a minimum net compulsory contribution from employees only of 10%⁴ up to a maximum of 20%. In 1996, this was subject to a salary ceiling of US\$22,000 per year, above which savings were not mandatory. This ceiling is indexed to the consumer price index.

59 Contributions from the employee are paid by the employer into an individual PSA. The employee chooses one of the AFPs on the market (currently 13) and is free to change once every four months. This has led to a high level of churning with members

When the system was introduced, all employers were required to increase all employees' wages by 18%.

switching between AFPs, although this will be reduced when switching is only allowed once a year. AFPs are able to make a charge on exit, when an affiliate moves funds, although in practice they do not. The AFPs operate the equivalent to mutual funds that invest in shares, bonds and government debt. If an individual AFP goes into bankruptcy, the mutual fund remains untouched and is taken over by the SAFP. The members are then given the choice of another AFP.

60 The AFP chosen by the employee for fund accumulation is also the source of disability and survivor insurance. Thus, on top of the 10% mandatory contribution, there will be commission and premiums paid to obtain this insurance. This pushes the contribution rate to about 13—14%. The member also has the option of contributing an additional 10%, which is deductible from taxable income as a form of voluntary savings, if they want to retire early or have a higher pension. The number of affiliates with voluntary savings was 18.1% in December 1995.

61 The role of the AFPs is to

...provide fund management services, do the record-keeping of individual accounts, purchase a group insurance policy for invalidity and death, perform collection and payment functions and answer questions and provide information about the workings of the system (Diamond and Prieto, 1993, p. 8).

The AFPs are regulated by the Pension Fund Law which only allows certain kinds of investments (see SAFP, 1996, Table IV.9, pp. 107—108) and this is carried out by the SAFP. The financial structure of the pension funds is about two-thirds fixed-income and one-third variable-income instruments, with total funds being US\$25 billion or 40% of GNP in 1995.

62 It has been noted in some literature that the PSA system is very expensive:

AFPs retain a minimum of 16.7% of workers' contributions for their old age pensions. By contrast, the cost of administering the old pay-as-you-go system in 1979 came to 5% of all contributions revenue (Ruiz-Tagle, 1995, p.1).

Furthermore, with affiliates switching between AFPs on a regular basis, much effort on the part of the AFPs is used trying to attract new affiliates. Thus, marketing costs are relatively high. Diamond and Prieto (1993) found that the total administrative costs (that is, 2.30%⁵) were close to those of very-expensive government managed systems (for example, Zambia (4.49%) compared to the first tier in the United States (0.05%)), although they were close to other privately run systems (for example, the second tier in the United States). However, administration costs by the AFPs have been reduced from on average 2% of total wages to 1% (Koselke, 1991, p.158)

63 The new system is underpinned in three ways. First, a minimum pension⁶ is guaranteed by the State and is provided for the elderly, disabled and survivors subject to certain requirements⁷. This is financed out of general revenue once the individual's accumulated fund has been depleted. Second, each AFP has to attain a minimum actual yield per annum. If it fails, it will be liquidated and the state will cover the difference. Third, if an AFP goes into bankruptcy or ceases payments, the state guarantees certain benefits.

64 The real return earned on the Pension Fund from 1981⁸ to 1995 was 12.8% per year, with this fluctuating between a high of 29.7% (1991) to a low of -2.5% (1995) over the same period. However, expectations are that this double-digit real return cannot be maintained; with share prices falling, the real average profit is expected to be below 5%

Per member administrative cost/income per capita (World Bank, 1994, p.370).

Being 85% of the government-mandated monthly minimum wage.

For those who have contributed to the funded system for 20 years or more.

July- December 1981.

(Ruiz-Tagle, 1995). Some critics have highlighted the government's role in the capital allocation process, with the *de facto* exclusion of foreign securities. The politicising of this process will inevitably lead to lower rates of return since risky alternatives, which could easily be diversified away, will be avoided, as will the benefits of international economic diversification.

65 Once an individual becomes eligible to receive pension benefits they can choose between three options: phased withdrawal, purchase of an annuity from an insurance company (restricted to indexed annuities), or a combination of the two. In the first option, the individual bears the longevity risk and investment risk. In the second, they bear the risk of the insurance company becoming insolvent, although these companies are regulated. Currently, there is no charge by the AFPs for phased withdrawal, although this also may change as the system matures. The annuity market is currently characterised by high commissions, a lack of transparency and informational problems. The current replacement rate is 38.7%, while for those awarded under the old system, it is 42.7% (Ruiz-Tagle, 1995).

D.4.3 Existence and extent of major research issues

66 Costs of regulation

The old system will eventually be replaced by the PSA version, with regulation being focussed on the AFPs and the insurance companies which provide annuities. It seems evident that these costs are currently being borne by the members of the new system via relatively high commission, administrative charges and a high level of churning. These may be reduced once the system reaches maturity.

67 ***Impacts on women***

It has been found that 27% of women who were classed as inactive in the national employment survey had in fact worked three and half months in that year. If they were affiliated to an AFP, they would have contributed, but if not they would not be saving for their retirement (Solowey, 1997, p.8).

68 ***Consumer attitudes to pension provision***

With the new system being compulsory, virtually all of the workforce has become affiliated to an AFP. However, not all are actively contributing and for various reasons the informal sector (estimated to be 1.5 million workers) is not covered. This may be addressed as the system matures in the future and more workers are drawn from the informal to the formal sector.

69 ***Market material/selling methods/disclosure***

Since workers have to choose between AFPs, information panels are set up at each AFP to provide information to the public on: commission charges; background information on the pension fund; and background information on the AFP. Each AFP must also provide an information brochure covering certain aspects of the system. Once a worker joins an AFP, the following information has to be provided: summarized four-monthly statement; information on individual capitalisation account yield; and pension balance booklet. In relation to selling methods some criticism has been levelled at the Chilean system for allowing churning to take place between providers. In some cases some consumers are changing providers based on the returns or yields being generated by the fund, with the perceived gain in return being offset by the associated charges incurred with the switch of policy provider.

70 ***Minority groups***

Those in the informal economy are excluded from the new system. The self-employed are also not well covered, but this may be addressed with new reforms intended in the short and longer term.

71 ***Tax treatment***

Contributions and returns on the PSA are exempt from tax, up to certain limits. Pension benefits are taxed according to the income tax bracket.

72 ***Transfer values***

Since the new system is DC, transfers between funds is relatively straightforward compared to that in the United Kingdom. In practice, members are free to move from one AFP to another without any penalties.

73 ***Consumer education***

As already outlined, AFPs provide a substantial amount of material to inform potential new members and once they are with that AFP. The high number of affiliates indicates that the message has got across to the workforce.



D.5 Denmark

D.5.1 Economic overview

74 The Danish economy is structured on a similar basis to the Scandinavian welfare model with the public sector's involvement in such areas as the provision for retirement income. Denmark's population in 1995 was 5.2 million. GDP reached US\$174.7 (1996), with economic growth peaking at 4.4% in 1994, and falling to 2.7% in 1996. In 1995, public pension spending accounted for 6.8% of GDP, down from 9.9% in 1990. The consumer price index increased from 1.2% in 1993 to 2.7% per year in 1997. Unemployment has fallen from 12.3% in 1993 to 8.3% in 1997. The national savings rate has fallen from 30.4% in 1992 to 26.8% in 1996.

D.5.2 System design and characteristics

75 The Danish pension system is based on four tiers. The first is an universal scheme open to Danish nationals who are resident in Denmark. The second (known as the *Arbejdsmarkedets Tillægspension or ATP*) covers all wage earners and is a fully funded DC scheme. The third tier is labour market pension schemes and covers all wage earners covered by a collective agreement. The fourth is individual private pensions and are provided by insurance companies.

76 The first tier is a public PAYG universal scheme financed out of general taxation and provides a flat rate benefit (known as the *folkepension or FP*) to pensioners over the age of 67. However, those with considerable supplementary income and those with considerable earned income will have this benefit means tested. Entitlement is based on 40 years' residence between the ages 15 and 67. In 1994, the FP was about 38% of

average wages. This benefit is currently indexed to the growth in nominal wages. A disability pension is also provided by the state.

77 The elderly dependency ratio will increase from 16.5% in 1990 to 37.7% in 2030. This is due to the expectation of increased life expectancy at birth. The Ministry of Finance (1995) and Jensen and Nielson (1995) note that in the short to medium term there will be a demographic breathing space, with the elderly burden not increasing until 2005 to 2010. Jensen and Nielson (1995) also note that in the longer term there be will *double ageing* of the elderly population that is, a greying of the grey population. If future projection prove correct (for example, OECD, 1996), the Danish government will face some hard choices regarding the first tier due to it being PAYG. Several options open to the Danish government include changing the indexation of the FP or increasing the retirement age. These have been considered by the Ministry of Finance (1995) and Jensen and Nielson (1995) in simulation models.

78 The second tier is a semi-autonomous supplementary pension scheme known as the ATP which was established in 1964. This has been fully funded since 1990 and is financed with flat-rate tax-exempt contributions (two-thirds employer, one-third employee) from employees who work more than 117 hours per month from the ages of 16 to 66, with those on low incomes having their contributions subsidised. Benefits are paid up to a maximum limit as an annuity, being related to the amount of contributions the individual has made and the return which the ATP obtains on invested funds. The real return after tax has averaged 6.9% per year from 1991 to 1995. When an ATP member dies, a lump sum is paid to the spouse and children under 18. It was indicated by the ATP during the research process that administration costs were less than 1% or about 300DKr per member per year.

79 Reforms of the ATP will take place covering four main areas. Firstly public sector employees will be given the opportunity to pay higher contributions, so that they will receive higher benefits. Secondly membership of the ATP will be extended to those on social cash benefits. Thirdly the ATP will extend its membership to include voluntary

contributors. Finally, for those groups that have been paying ATP contributions since 1993 during periods of absence from the labour market (that is, unemployment, sickness, maternity leave), double contributions will be payable in the future.

80 The third tier has been established as a result of wage negotiations between the main employers' federation (*Dansk Arbejdsgiverforening or DA*) and the confederation of trade unions (*Landsorganisationen i Danmark or LO*). The Danish labour market is characterised by a very high degree of unionisation (88%) and pension schemes are obligatory, which has led to a high degree of coverage of the workforce (80%). All these pension schemes are fully funded, with the reserves being sufficient to cover pension liabilities. These schemes are mainly industry-wide pension funds and cover groups of employees distinguished by their education or by being employed in a particular industry. There are also a declining number of company pension schemes covering employees of a specific single firm.

81 All 35 of the industry-wide pension funds, with one exception, are based on the *equivalence principle* that is, they are DC. In the older schemes, contributions are usually in the range of 8 to 10% of the wage from the employer and 4 to 5% from the employee. In the newer schemes, established after 1989, contributions have increased from 0.9% (one-third employee, two-thirds employer) in 1993 to 3.9% in 1996. This is expected to continue to 9 to 12% over the next few years.

82 Contributions paid can be split into three components: an administration premium (to cover the costs of the insurance scheme); a risk premium (for disability, spouse and child benefits); and a savings premium (for the old-age pension). The normal retirement age with these schemes is 67, with the possibility of early retirement at 60. Benefits are paid as an annuity, with a lump-sum also payable usually at 67 (being two times the annual pension for a married person and 2.4 for a single person).

83 It was indicated during the research process that the administration costs varied for the industry-wide schemes from 2% (for the largest) to 5% (for the smallest). This is at

currently an issue being debated in Denmark, with greater transparency being suggested to encourage competition to drive down these costs.

- 84 Out of approximately 106 company pension schemes, most are DC, with only DB schemes tending to be offered by multi-nationals. Contributions by the employee vary according to the quality and benefits offered by the scheme. For DB schemes, contributions from the employee vary from 2.5% to 7.5% of wages; for DC schemes, contributions from the employee are similar to those for industry-wide schemes. Again, benefits are usually payable at the age of 67 in the form of an annuity and lump sum.
- 85 Vesting regulations differ between private pension funds and group insurance arrangements. For private pension funds, which are covered by the Pensions and Savings Fund Act, employees have immediate vesting rights on their own contributions and on the employer's contribution after five years. For group insurance arrangements, which are covered by the Tax on Pension Schemes Act, there is a further requirement of full vesting after the age of 30. Employees are entitled to a transfer value once they move job which is free of tax. For group insurance arrangements, an employee cannot surrender their pension policy once they move job without permission from their former employer.
- 86 The final tier is personal pension plans offered by banks and life assurance companies which have been promoted by a favourable tax regime. The banks offer two kinds of products: a pension plan which provides a lump sum at some pre-determined age (after 60) or a pension plan which provides an income stream over a fixed period. Customers have the choice of whether to administer the funds and specify the category of assets themselves or leave this to the bank. The life assurance companies offer the two pension products offered by banks but with the possibility of survivor and disability benefits, plus a third product which provides an annuity at some pre-determined age until death.
- 87 All financial institutions, including pension schemes, are under the supervision of a single government body known as the Supervisory Authority of Financial Affairs (*Finanstilsynet*). This was formed at the beginning of 1988 and are financed by the

companies in the financial sector. The investments of the pension schemes is either regulated by the Act on Insurance Business (industry-wide pension funds and life assurance companies) or by the Law on Supervision (company pension schemes).

88 Coverage of the Danish pension system is high, compared to other OECD countries, at 80%. However, certain sectors of the workforce are not well covered such as the self-employed and part-time workers. Reforms to the ATP should improve coverage for these sectors, although the self-employed are still not well covered by the third and fourth tier.

89 The Danish Ombudsman was established in 1954 as a single point for the citizens of Denmark to complain to, including their pension complaints. Significantly, this reduces any confusion on the part of the consumer in terms of who they should complain to. In 1994, the scheme handled 3,166 cases (all complaints including pensions), an increase of about 40% since 1990.

D.5.3 Existence and extent of major research issues

90 Costs of regulation

It does not seem evident that the regulatory system imposes a high cost on the pension schemes in Denmark. All pension schemes are covered by two acts, with these covering the investments of the pension funds, vesting and transfer values and the management of the pension fund.

91 ***Impacts on women***

The ATP have introduced reforms to the supplementary pension scheme that covers more sectors of the Danish population that is, women on maternity leave. The system has also complied with the European Court of Justice (ECJ) ruling, which requires equal treatment of men and women in pension schemes.

92 ***Consumer attitudes to pension provision***

The strong degree of co-operation between the employers' federation and the confederation of trade unions has resulted in a high level of pension coverage and indicates a positive attitude to pension provision. However, since the majority of schemes are being DC, employees do face some uncertainty over the level of their pension benefits.

93 ***Market material/selling methods/disclosure***

With a majority of the Danish workforce being covered by industry-wide schemes, this removes the need for marketing material to be provided to the consumer. However, the fourth tier does rely on banks and life assurance companies selling pension products, although it was not evident from the research process that there were any problems with this.

94 ***Minority groups***

The self-employed are not well served by the system, although the fourth tier is available to this group of the workforce.

95 ***Tax treatment***

Contributions are tax deductible, although the real interest accruing on the pension fund is taxable within the fund. Pension benefits are fully taxed.

96 ***Transfer values***

As the majority of pension schemes are DC and industry-wide, transfer of an individual's fund is not an issue, unless an individual wishes to switch occupation and/or industry. For group insurance arrangements, an employee cannot surrender their pension policy without permission from their former employer. Vesting regulations do differ between private pension funds and group insurance arrangements.

97 ***Consumer education***

Consumer education on pensions is provided by the Ministry of Social Affairs, the ATP and the pension schemes to members. As the system is quasi-compulsory, which has led to a high level of coverage, education is focussed on what the various tiers can offer the individual.



D.6 Netherlands

D.6.1 Economic overview

98 The Dutch economy is characterised by the degree of openness to the international economy. The Dutch population in 1995 was 15.5 million, up by 1 million since 1985. GDP reached US\$ 393.7 billion in 1996, the economy showing a continuous decline for 1990—93, with recovery starting after this period and increasing by 2.8% per year in 1996. In 1995, public pension spending accounted for 6.0% of GDP, down from 11.8% in 1989. Consumer prices have fallen steadily from 3% per year in 1991 to 2.2% in 1997. Unemployment peaked in the recession, but has steadily fallen to 6.2% in 1997. The national savings rate was 15% in 1991.

D.6.2 System design and characteristics

99 The Dutch pension system is based on three tiers. The first tier is a universal scheme open to all residents in the Netherlands. The second is a supplementary tier characterised by compulsory industry-wide schemes, with some voluntary industry-wide schemes, single employer funds, and group personal contracts. This supplementary tier has been developed over a long period, often as a result of collective bargaining, to cover 83% of the workforce. The third tier is life insurance/annuity schemes run by life insurance companies.

100 The first tier is a public PAYG universal scheme (AOW) which provides a flat-rate benefit to pensioners over the age of 65. Entitlement to the AOW is based on 50 years' residence between the ages of 15 and 65. The full pension is reduced by 2% for each year of missing contributions. Contributions are paid at a rate of 15.4% up to a maximum limit. The full pension is 70% of net minimum wage for single persons and

90% for single parents. In 1994, the AOW was about 30% of average wages. The pension is adjusted annually in line with the minimum wage. A survivor's (ANW) and disability (AAW) pension are also provided by the state.

101 It is estimated that the percentage of the population over 60 years old will increase from 17.8% in 1990 to 33.4% in 2030. This is one of the highest ratios in the OECD, with only Germany, Italy and Switzerland being marginally higher. These changing demographics in the Netherlands will put an increasing strain on the PAYG first tier. The OECD (1996, p.30) state that, due to changing demographics, the costs of pensions will increase and the young will have to pay in the following ways:

- a paying higher taxes or contributions later, and suffering the economic consequences of increasing tax-to-GDP ratios;
- b bearing the costs of higher public debt and, possibly, a reduction in the rate of national saving;
- c facing lower income in retirement when gradual benefit reductions take effect;
- d reducing current consumption to save more for their later years;
- e or paying more now to improve the fiscal position when future obligations must be met.

If the projections prove correct, the Dutch government will face some hard choices regarding the first tier, because of the increasing elderly dependency ratio and the PAYG nature of this tier. Davis (1996) and Dekkers *et al.* (1995) conclude that reform should be immediate but gradual to improve the future outlook. Several proposals are being considered by the government such as the raising of the retirement age and the cutting of some benefits in the future, which would mean greater reliance on the second tier.

102 The second tier has a strong emphasis on social partners (that is, the employers and employees, and employers' organisations and trade unions). Employers are not required to set up pensions for their workers but, if they do, certain requirements must be met

(laid down in the Pensions and Savings Act (PSW)). However, certain industries are covered by the industry pension fund, where the employee is not free to opt out. An employer can opt out of the industry pension fund, if they offer their workers pensions rights at least as equivalent to the rights they would have had under the compulsory scheme. The Minister of Social Affairs can also grant exemption from compulsory participation.

- 103 There are 81 industry-wide funds, with 65 being compulsory, and about 1,000 company schemes. Benefits from these funds vary from a small monetary amount up to a full final pay plan. Employees are not penalised for moving jobs, as they will stay in the same industry-wide fund. Most of these occupational pension plans are DB with 85% being final salary, 10% career average plans and 5% DC. However, it was indicated during the research process that DC plans were gaining popularity due to their flexibility and a means for employers to contain employee costs.
- 104 Contributions by employees vary according to the quality of the pension scheme, the age structure of the employees and so on. This means that employees' contributions can vary from zero to 100% of total contributions. Typically, contributions by the employee will be in the range of 5 to 8%. However, many schemes have an actuarial surplus meaning that a number of funds have declared contribution holidays for their employees. Typically, defined benefit schemes provide an old-age pension of 70% of final average salary with 40 years' service, inclusive of the AOW. The normal retirement age with these schemes is 65, with the possibility of early retirement at 60 (known as VUT plans).
- 105 The Dutch system is distinctive in that *transfer circuits* operate within industries. This means that transferring of deferred vested benefits is straightforward. These clearing houses have certain requirements in that the fund has to be indexed, the pension has to be based on final salary and standardised actuarial assumptions⁹ are used. This means that labour mobility is not hindered, as there are no penalties involved for a job change.

These are set out in regulations.

106 The PSW states that pension funds are obliged to invest their funds in a proper way-without any further specification (apart from company schemes¹⁰). General guidelines suggest that investments should not be too high risk and spread between various kinds of investment. The single supervisory body for this is the Insurance Chamber (*Verzekeringskamer*). Recently, there has tended to be a shift into shares and a decrease in loans, although local fixed-interest investments tend to dominate.

107 Coverage of this supplementary tier is high compared to other OECD countries. However, as Lutjens (1993) notes, certain employees are not covered such as those with a company without a pension scheme, women and part-time workers. However, the latter two exclusions have been addressed after the ECJ ruling on the Equal Treatment of Men and Women in Pension Schemes under Article 119 of the EC Treaty. The self-employed are also not well served by this tier, since no compulsory pension scheme exists for them. However, certain professions are covered by compulsory schemes, which the self-employed may be allowed to join.

108 The Dutch Pensions Ombudsman was established in April 1995 with strong industry backing. No legislation is used in support of this, with decisions being enforced by the maintenance of goodwill and industry ethics. Funding for this is provided by the pension funds, with no cost to the consumer. As of April 1996, 900 complaints had been received, with the following breakdown of how these were dealt with:

a	plaintiff was happy	6%
b	not justified	23%
c	sent back procedure	9%
d	passed on	15%
e	not within the terms of the scheme	9%
f	information	38%

Shares and loans to the sponsoring employer are only permitted up to a maximum of 5% of the assets of the pension fund.

An Annual Report of the Dutch Pensions Ombudsman is prepared for the Ministry of Social Affairs and Employment.

D.6.3 Existence and extent of major research issues

109 *Costs of regulation*

It does not seem evident that the regulatory system imposes a high cost on the pension schemes in the Netherlands. Indeed, the system relies on a strong emphasis on social partners, which has led to a high coverage.

110 *Impacts on women*

Women tended not to be covered very well by the Dutch system prior to the ECJ ruling. However, this has been addressed, with equal treatment of men and women in pension schemes since then. There is a very high coverage of the second tier, so it is evident that women will tend to be in a pension scheme compared to women in similar occupations in the other researched countries.

111 *Consumer attitudes to pension provision*

Since a majority of the workforce are covered by compulsory and industry-wide schemes, the high level of coverage indicates a positive attitude to pension provision. Furthermore, with the majority of these schemes being DB, and transfer of pension rights not being affected by job mobility (once they are vested after one year), employees face certainty over the level of their retirement income.

112 *Market material/selling methods/disclosure*

The a majority of employees are within compulsory industry-wide schemes, which removes the need for any marketing material to be provided. Furthermore, a

comprehensive amount of information was already provided by the *Sociale Verzekeringsbank* and Ministry of Social Affairs and Employment on the benefits offered by the first tier, although this was largely missing for the second tier. It was indicated by the Dutch Pensions Ombudsman that a significant minority of complaints were seeking information about the scheme they were in. An increased reliance on the third tier would also mean that the selling methods of the insurance companies would have to be closely monitored, which was not evident currently.

113 ***Minority groups***

The self-employed tended not to be well served by the system. However, where certain professions are covered by compulsory schemes, the self-employed do have the option to join. It was not evident during the research process that ethnic minorities were disadvantaged by the current system. Information is provided by the *Sociale Verzekeringsbank* on the first tier of the system in French, English, Dutch, Turkish and Arabic (for example, Sociale Verzekeringsbank, 1996a).

114 ***Tax treatment***

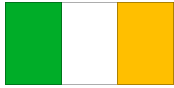
Contributions are tax-deductible subject to regulations and limits. This only applies to government-approved schemes. Returns on the pension fund are also tax deductible, with pension benefits being fully taxed when received either as a lump sum or as an annuity.

115 ***Transfer values***

Transfer circuits operate within industries, meaning that employees are not penalised for moving job. The requirement to be part of a clearing house is that the pension fund has to be indexed, the pension is based on final salary and standardised actuarial assumptions are used. Deferred benefits are generally indexed to inflation, although this is not mandatory, with the vesting period being one year (the lowest for those countries researched with DB schemes).

116 ***Consumer education***

As already indicated, it is evident that consumer education provided by the Ministry of Social Affairs and Employment and the pension schemes has led to the high level of coverage in the Netherlands (one of the highest of the countries researched). However, information about the schemes was identified by the Dutch Pensions Ombudsman as lacking for some employees, which could be addressed in the future.



D.7 Republic of Ireland

D.7.1 Economic overview

117 The Irish economy in the last three years has seen an upsurge in economic growth, spurred on by significant overseas investment. The Irish population in 1995 was 3.47 million. GDP has accelerated to US\$69.0 billion (1996), with economic growth increasing from 6.6% per year in 1994 to 10.7% in 1995. In 1995, public pension spending accounted for 3.6% of GDP, down from 6.4% in 1988. Unemployment has remained relatively high by European standards, but has decreased from 14.1% in 1994 to 12.4% in 1996. The consumer price index has fallen from 2.4% per year in 1994 to 1.9% in 1996 as price pressures become subdued.

D.7.2 System design and characteristics

118 Ireland, unlike some of the other countries studied, has no apparent ageing population problem in the immediate future. Its population, in comparison with Western European countries is relatively young. The ageing population crisis is expected well into the next century, because of the recent high level of birth rates experienced compared with other Western nations. The National Pensions Board had been established in the late 1980s to look into this issue of the ageing population crisis. Part of their conclusions are summarised as follows:

The Board notes that demographic patterns indicate a considerable increase in the proportion of elderly people in the population over the first half of the next century. This will have a significant impact on the future costs of social welfare pensions, which are set to increase by 90%. At the same time the ratio of persons in the economically active age group to those over age 65 is projected to fall from 5.4 to 1 currently to 3 to 1 by

the year 2035. This would result, in the absence of any change, in an increasing burden of the cost of pensions falling on future generations of Pay Related Social Insurance (PRSI) contributors and taxpayers (National Pensions Board, 1993, p.7).

- 119 Although the findings from this report indicated that Ireland would not have an ageing population until the next century, the Pensions Board identified, during the research process, that they were using this *breathing space* to implement necessary reforms to strengthen the pension industry's ability to meet the associated challenges of an ageing population. During the research process, it was indicated by most commentators that the demographic shift will be delayed by approximately 30 years in Ireland.
- 120 Broadly speaking, the Irish pensions framework displays similar characteristics to that of the United Kingdom, in terms of its overall structure. The first tier is composed of a universal non-contributory pension for all residents, which is means tested. Also as part of this first tier is pay-related social insurance (PRSI) which is designed to provide a pension for employees and the self-employed (non-means tested). The coverage of this scheme is quite extensive. With only a few exceptions, persons employed and aged 16 years and over must participate, regardless of their income. However, a major class of employment exempt from this scheme is that involving employment by relatives. The normal retirement age for both men and women in Ireland is currently 65 years.
- 121 Contributions are based on co-contribution made by the employee and employer based on the reckonable earnings (after exemptions) up to a prescribed ceiling. Reckonable earnings are defined as the employee's gross pay less any pension contributions which are allowable for income tax purposes. PRSI was extended to the self-employed in Ireland in April 1988. The major occupation which falls into this category is agriculture. Benefits that they received from this date include old-age, widow's and orphan's pensions, subject to the normal qualifying conditions which are applicable to all employees.

122 The second tier of the Irish pension system centres on occupational DB schemes. Like the United Kingdom, DB schemes have principally provided Irish pensioners with an additional source of retirement income, apart from the arrangements contained in the first tier. The full benefit provided under these arrangements equate to approximately two-thirds of final salary. As experienced in a majority of the countries researched, DC schemes have been set up in greater numbers in recent years, compared with DB. Such a shift from DB to DC was found to be more pronounced in Ireland, compared with the other international countries. Suggested reasons for this include employers being keen to cut costs associated with employment and the increased number of multi-national companies setting up operations in Ireland and wanting to have more employment flexibility with a DC scheme. Additionally, some industry sources suggest that the costs of operating a DC scheme were a lot less compared with a DB scheme. The Pensions Board indicated that in 1995, 5,302 of the 5,342 pension funds which had been established were operating on a DC basis. Both industry and the Board identified that a need existed to publicly educate consumers regarding the differences between these two types of pension funds.

123 The National Pensions Board recommended that:

The Pensions Board should carry out and publish a survey of the extent and level of pension coverage at regular intervals. Funding for this aspect of the Board's work should be provided directly by the exchequer (1993, p. 25).

In 1995, the Department of Social Welfare and the Pensions Board commissioned the Economic and Social Research Institute (that is, Hughes and Whelan, 1996) to carry out such a survey. They found that coverage of occupational pension schemes in 1995 was only 46% of all those employed. The actual coverage rate for employees in all types of pension schemes for the same period was 52%, a fall of 2% since 1985. A more alarming trend is to do with the self-employed whose coverage was low at 27%. An interesting dichotomy occurs between private and public sector employees. Coverage of 83% exists in public sector schemes compared with a relatively low level of 38% in

the private sector. Pension coverage also appears to vary widely between occupation, employment patterns and sex.

Coverage of the self-employed varies from 12% in the agricultural sector to 46% in the other production sectors and from 7% in clerical occupations to nearly 53% in professional occupations. ...The coverage rate for male employees is almost 58% but for female employees it is less than 43%. For temporary employees the coverage rate is 11%, for part-time employees it is about the same and for full-time permanent employees it is 63% (Hughes and Whelan, 1996, pp. 2—3).

- 124 The third and final tier are those retirement vehicles provided essentially by the life insurance sector. These vehicles may include retirement annuities and endowment policies. In discussions with the Irish Insurance Federation, representatives recognised that retirement/investment products were expected to strongly increase market penetration in Ireland, as more people became concerned with planning for their retirement needs. It was identified though that many Irish people felt that alternative retirement vehicles such as the purchase of personal and investment housing, were suitable also for their retirement. Unlike the United Kingdom, where the transfers out of SERPS and occupational schemes had stimulated the development of the private pensions market, Ireland still has a culture which sees the state playing an integral role in the individual's retirement planning needs.
- 125 The current regulatory framework of pensions in Ireland was initiated through the enactment of the Pensions Act 1990. Through this legislation, the current regulator, the Pensions Board, was also established. The main functions of the Board are:
- a to monitor and supervise the operation of the Pensions Act and pension developments generally;
 - b to issue guidelines on the duties and responsibilities of pension scheme trustees and codes of practice on specific aspects of their responsibilities;

- c to encourage the provision of appropriate training for trustees and to advise the Minister for Social Welfare on standards for trustees; and
- d to advise the Minister for Social Welfare on pension matters generally.

126 In discussions with the Board, it was clear that compliance with the Act is achieved through close liaison with trustees, monitoring of scheme performance and conduct and as a final step, taking action, where necessary, through the courts. Court action is considered as a last resort which is felt would have a negative impact on the whole of the pensions industry. As the pensions industry in Ireland is small by comparison with that of the United Kingdom, compliance with the Act is ensured through both formal and informal channels. In the Board's 1995 annual report, they indicate that their activities are principally concerned with the monitoring and supervision of the operation of the Act.

127 Further, the Board conducts pro-compliance activities to enhance the protection of members. As indicated previously, the Board also accepts the need to not impose undue compliance costs on schemes being well run for the benefit of employees. An encouraging sign of the progressive nature of this regulatory organisation is the acceptance of its role as a public education provider and an information disseminator. Within the mission statement of the Board, reference is made to its information and educational responsibilities. This stance by the Board on their public education and information responsibilities is both encouraging and essentially parallels some of the countries researched.

128 A feature that seems to give members further safeguards against their pension funds encountering problems is the legislation and regulation relating to whistleblowing by a relevant person. Such regulations and legislation ensures that if auditors, actuaries or trustees, for example, while carrying out their functions, detect material misappropriation or fraudulent conversion is occurring or has occurred with a fund or may occur in the future, they must report it to the Board. Failure to carry out this function will attract associated penalties under section 83 of the Pensions Act 1990.

Such an approach to regulation by the Board sees a regulatory and compliance responsibility identified or associated with industry participants, through this section of the Act.

D.7.3 Existence and extent of major research issues

129 *Minority groups*

Similar problems appeared to exist in Ireland in relation to minority groups and their provisions for retirement. Same sex and *de facto* relationships suffer from inadvertent discrimination contained in the trust deeds of many occupational funds. Concerns are also associated with the self-employed who have a low coverage rate, especially in one of the larger self-employed areas, that being agriculture.

130 *Impacts on women*

Similar problems are experienced in Ireland with regard to the percentage coverage of women. As previously indicated, data from Hughes and Whelan (1996) highlights the differences in membership of occupational and personal pension schemes, based on sex. Further concern was also raised by a number of industry and government commentators that women's employment patterns were concentrated in areas of part-time or contractual arrangements. In most cases, these types of employment patterns were not covered by pension arrangements. Like most countries researched, women on average are more lowly paid than men and are generally engaged more commonly on a part-time or contract value basis. Similarly, as in the United Kingdom, Ireland is addressing the issue of the splitting of retirement savings upon divorce. A new Family Law Divorce Act recently passed in the Irish *Dail* (parliament) will deal with the issue surrounding the splitting of pension benefits in the event of judicial separation.

131 *Shift from DB to DC schemes*

Ireland was no exception to the rule that DC schemes are being created at a significantly faster rate than DB schemes. Reasons for this are the costs of maintaining a DB scheme, employer concerns over a potentially unfunded liability and the growth in multi-national industries demanding labour flexibility, through the use of DC schemes. In response to this trend, the Consumers' Association of Ireland expressed concerns over whether consumers really understood the implications for their future, with the shift from DB to DC schemes.

132 *Marketing material/selling methods/disclosure*

Associated disclosure rules existed in the Pensions Act 1990 and through associated industry codes of ethics and conduct. In discussions with the Irish Insurance Federation, it was clearly stated that the Irish industry was keen to avoid the excesses and errors associated with the personal pensions misselling scandals in the United Kingdom during the late 1980s and early 1990s. Improved standards of competency and associated codes of practice were felt to be mechanisms for providing consumers with suitable disclosure levels and selling methods. Further, the Pensions Board was eager to ensure that inappropriate practices, which may harm the perception by consumers of retirement provisioning, be quickly addressed and in some cases penalties imposed.

133 *Costs of regulation*

Some industry associations expressed the view that the costs of regulation were too high in Ireland. In discussions with individual fund managers and the Pensions Board, it was clear that regulation was considered to be at realistic levels. Moreover, the Board firmly identified that their function was to protect members' interests but at the same time ensure that a responsible approach is taken towards the need for further regulation.

134 ***Transfer values***

The issues surrounding transfer values and the associated consumer detriment were in no way as pronounced in Ireland. The government has no policy to move consumers from the first and/or second tier to the third tier of the pensions framework, based on demographic concerns and other realities. However, treatment of early leavers does vary considerably. The vesting period is up to five years. The 1990 Pensions Act ensures that deferred benefits are increased in line with consumer prices up to a limit of 4%.

135 ***Redress***

Unlike the United Kingdom, no formal disputes handling mechanism or ombudsman schemes exist for consumer redress. This function is principally carried out by the Pensions Board and the Department of Social Affairs. The labour force is 1.40 million, such an approach to redress seems appropriate, based on the level of complaints received by the above organisations.



D.8 Singapore

D.8.1 Economic overview

136 Singapore's economy is one of the most robust of the Asian Tigers, which maintains a compulsory pension system known as the Central Provident Fund (CPF). As at mid-1995, its population was 2.87 million. Singapore has achieved a GDP per capita of US\$22,600, although the economy has slowed down after two years of double digit growth in 1993 and 1994, to 5.8% per year in 1996. In 1989, public pension spending accounted for 2.2% of GDP, being the lowest of the countries researched. The labour market is tight, with unemployment being relatively low by world standards. However, this has increased gradually from about 1.5% in 1990 to 2.7% in 1995. Inflationary pressures have eased in 1995, with the consumer price index falling from 3.1% per year in 1994 to 1.9% in 1997. The national savings rate has increased from 44% in 1990 to 51% in 1995, being the highest in the world.

D.8.2 System design and characteristics

137 The CPF was established in 1955 to provide a mechanism for the population to save for their future retirement needs. Since then, the CPF has evolved into a comprehensive social security savings scheme, which not only takes care of a member's retirement, home ownership and health-care needs, but also provides financial protection to members and their families through its insurance scheme and an associated mechanism for funding the cost of education. Legislation identifies that all of Singapore's citizens under a contract or agreement of service entered into in Singapore must participate in the CPF. However, coverage of the CPF has decreased from 74% in the early 1980s to 67% in 1994 (Butler *et al.*, 1996, Table 2, p.15).

- 138 The ageing population issue is not such a priority in the immediate future for Singapore but there is no doubt that it is being considered by the authorities and government more generally. Expected birthrates and fertility rates are quite alarming for planners of the CPF and the government. The total fertility rate has been below the replacement rate since 1992. As a result, the proportion of the population above 60 is expected to increase from 8.5% in 1990 to 29.4% in 2030.
- 139 Singapore's CPF system is often used to contrast other overseas models, which have embraced greater interaction of the state in the provisioning of a retirement incomes framework. The CPF operates via the net compulsory contribution of 40%, half being met by the employer and half by the employee. The current retirement age in Singapore is 55, but members can continue contributions above this age. Since 1 July 1988, contributions payable to the CPF depend on the age group of the member, with smaller percentage contributions for older members above 55. Maximum contributions are subject to a maximum of S\$1,200 each for the employer and employee, based on a salary ceiling of S\$6,000 a month, beyond which no contributions are payable.
- 140 Contributions are channelled into three separate accounts, for those members who are under the age of 55 years. These are the Ordinary, Medisave and Special Accounts. Ordinary accounts can be used for all schemes/insurance premium payments, including purchase of housing through the Housing Board. The Medisave Account is used for the Medisave Scheme and can also be used to pay premiums for the Medishield Scheme. Special Accounts along with Ordinary Accounts can be used for the purchase of shares or assets through the Enhanced Investment Scheme and for more basic assets for example, gold, through the Basic Investment Scheme.
- 141 The coverage extends to all Singapore citizens and permanent residents. A distinction is made for the self-employed who are required to contribute to Medisave only. To accommodate such diverse goals as supporting home ownership along with a method to meet medical expenses, current contribution levels are expected to be maintained in the short term. Although the threshold levels are relatively low in Singapore, compared

with other compulsory systems, it is more than likely that casual and part-time workers (usually women) will not be covered- 33% of the workforce was not covered in 1994¹¹. Furthermore, the number of contributors to members was only 45% in 1994 (Butler *et al.*, 1996, Table 2, p.15). The difference can be attributed to unemployment, withdrawal from the labour force and delays in paying contributions.

142 In recent years, falling returns and escalating property values have meant that many of Singapore's citizens have been retiring asset rich and cash poor. For the new retiree they are then confronted by an uncomfortable dilemma, - either having to recover some of the equity in their house through its sale and purchase of more modest dwellings or to rely on family members for assistance. This latter aspect of traditional Singaporean society is declining rapidly as a result of an increasing acceptance of Western values. On 1 July 1987, the CPF introduced the Minimum Sum Scheme which is aimed at providing a certain level of minimum income in retirement through a basic capital amount, based on the year of their retirement.

143 The threshold amount is adjusted annually for inflation and for members attaining 55, being S\$11,600 in 1993. Once an individual has reached 55, they are entitled to withdraw from their account all money above a minimum sum of S\$40,000, which is required to be left in the account. About two-thirds of members with accounts exceeding this amount withdraw all but the minimum sum (Butler, 1996, p.17). The minimum sum may be converted to one of the following three options:

- a *A fixed-term annuity from the CPF board.* This is a fixed monthly amount paid to members from the age of 60 until the account is exhausted.
- b An annuity from a private insurance company. CPF - approved companies can sell fixed-term or annuity until death to members.
- c Funds placed in banks as fixed deposits. The member receives fixed amounts on a regular basis.

Foreign workers, who represent 18% of the workforce, tend not be covered (Butler *et al.*, 1996, p.15).

Most members tend to opt for the second two due to a low rate of investment return offered by the CPF (Butler *et al.*, 1996, p.17).

- 144 The difficulties being experienced by the CPF have been that the dividend or return for members is comparatively low compared with other investments. It has been indicated that

...some actuarial projections are that the CPF will yield a little more than one third of final salary in retirement for a 35 year old currently earning [S]\$6,300 a month and who uses their CPF money in the usual ways of property investment, health and education (Beckerling, 1996, p.19).

The real return earned on CPF funds from 1984 to 1994 was 2.3% per year, with this fluctuating between a high of 7.1% (1986) to a low of -0.6% (1994) over the same period (Beckerling, 1996, p.22).

- 145 Some critics of the CPF highlight concerns over the inadequate disclosure regarding their investments with the Monetary Authority of Singapore (MAS). CPF funds are exchanged for government bonds and advanced deposits, and invested by the Singapore Government Investment Corporation (GIC). At this point, disclosure of returns on the investment portfolio of the CPF seems to breakdown. The investment portfolio and performance of the GIC, in turn, is not made available to the public. On this basis, increasing pressure is being placed on the CPF for further reforms to be introduced to allow the private sector to manage greater levels of retirement funds and thus generate what is hoped to be a greater real return for the average citizen of Singapore.

D.8.3 Existence and extent of major research issues

146 *Costs of regulation*

By having a CPF, much of the regulatory costs are removed. Yet some of this cost would obviously be shifted onto the CPF member in the form of having to pay administrative charges. In 1986, total administrative costs were 0.16%¹² compared to 0.05% (1989) for the first tier in the United States. However, these administrative costs are relatively low for a DC system (compared to Chile's 2.30%), due to economies of scale being captured.

147 *Impacts on women*

With a third of the workforce not being covered by the CPF, and with women tending to earn less and having more fragile working patterns, this tends to mean they are the ones not covered by the system. However, the CPF makes no explicit distinctions based on sex.

148 *Consumer attitudes to pension provision*

A radically different approach has been pursued by Singapore compared with the United Kingdom in terms of consumers actively associating their pension contributions with the development of public infrastructure and housing. As the system is compulsory, coverage is relatively high (67% in 1994). However, the number of contributors to members was only 45% in 1994. This may be due to factors such as unemployment (this is relatively low by world standards) and withdrawal from the labour force, but may also reflect an indifferent attitude to the compulsory system.

Per member administrative cost/income per capita (World Bank, 1994, p.370).

149 ***Marketing material/selling methods/disclosure***

As a pension product is not actively sold, marketing and selling costs are not a consideration in this system. A substantial amount of educational material is provided to members to outline the characteristics of the CPF. The cost to provide this is ultimately borne by the member.

150 ***Minority groups***

No apparent distinction is made either directly or indirectly although it is likely that certain ethnic groups are low paid, thus causing them to be not covered by the CPF due to the thresholds that are in place.

151 ***Tax treatment***

All contributions, income earned and benefits derived from the schemes are deemed tax-free. This tax treatment is distinctive from the other countries researched and completely opposite to that found in Australia.

152 ***Transfer values***

The current arrangements in Singapore do not allow people to opt out of the CPF. This has meant that much of the calculation and associated guidance notes needed by pension funds in the United Kingdom is not required in Singapore. More fundamental is the structure of retirement planning which centres on only having one *central pot* rather than many industry or occupational pension funds.

153 ***Consumer education***

It is apparent in examining the material from the CPF (for example, CPF, 1995c) that public education or the need to inform the members of their rights is foremost in the

mind of the Board. Publications outlining the services offered by the CPF and facilities for obtaining balances of members accounts are considered fundamental to eliminating ignorance about the CPF's purpose.



D.9 United States of America

D.9.1 Economic overview

154 The United States is characterised by its free-market orientation with a significant domestic market. However, the government is actively involved in the provision of retirement income. The population in 1995 was 263.1 million. In 1996, GDP reached US\$7,263.2 billion, with recent economic growth being relatively buoyant. GDP growth was 3.4% per year in 1996. In 1995, public pension spending accounted for 4.1% of GDP, down from 6.5% in 1989. Unemployment, by OECD standards, is relatively low and fell from 6.1% in 1994 to 5.3% in 1997. Inflationary pressures have increased slightly as unemployment has fallen, with consumer prices increasing from 2.5% per year in 1995 to 3.0% in 1997. The national savings rate is abnormally low by world standards, being 2.7% per year in the first five years of the 1990s, down from 9.1% in the 1950s and 1960s.

D.9.2 System design and characteristics

155 At the cornerstone of the retirement incomes framework of the United States is the Old-Age Survivors and Disability Insurance (OASDI) program. Additionally, means-tested minimum allowances are granted. Pension benefits are determined through career earnings and the maximum replacement rate equates to 43% of average earnings. The normal retirement age is currently 65, although this will increase to 67 by 2022. The OASDI program has funded elements and holds assets currently worth some 25% of GDP. In 1995, social security wealth¹³ was about US\$11 trillion or more than 1.5 times

Also known as social security liability.

GDP (Feldstein, 1996, p. 1), with the funded elements representing less than 5% of social security wealth (US\$69 billion).

- 156 The pressure for reforming the current structure of OASDI and the retirement incomes industry of the United States is growing in the wake of more attention being paid to an ageing population and the increasing realisation that reforms are needed to correct fiscal imbalances. The United States, like many OECD nations faces the combined problems of earlier retirement and an ageing population.

This worsening dependency ratio will put added financial pressure on retirement income and health programs such as Social Security and Medicare, because they are financed primarily through taxes on current workers' wages. Such pay-as-you-go financing becomes dangerously unstable when growth in the retiree population rapidly outstrips growth in the workforce (Schieber and McDervitt, 1996, p.3).

- 157 Current contribution rates towards OASDI are based on a payroll deduction of 12.4% (6.2% from both employee and employer) with a maximum wage base ceiling of \$65,400 (1997). This compares to the average wages earned by all workers of \$24,706 (1995) With the hospital insurance tax rate (1.45% from both employee and employer), these deductions are referred to as FICA (Federal Insurance Contributions Act). Much debate in recent years has centred on whether the current social security arrangements can be sustained in the future, because of the increasing ageing of the population. Recently the Social Security Advisory Council, a committee appointed by the President, could not agree on the approach which the United States should adopt in funding the system in the future. The crisis associated with the fiscal imbalance impacting on the OASDI can be summarised by the following Employee Benefit Research Institute (EBRI) report:

The OASDI trust fund is considered to be insolvent when the funds are exhausted. ...According to the 1994 board of trustees report, under the intermediate set of assumptions the projected date of insolvency for the OASDI trust fund is 2020; seven

years earlier than the year projected in the two prior annual reports, and just as the oldest of the baby boom generation begins reaching retirement age (EBRI, 1994, pp.38—39).

- 158 For the United States, the central issues of retirement provisioning are not likely to move out of the public policy agenda for some time. Increasingly, the baby boom generation is approaching the zenith of its economic and political power. It is agreed by most commentators that reform is required to the first tier of the retirement incomes framework. The vexing question is how this can be done and to what extent it will be welcomed by the current and future retirees.
- 159 Currently, three proposals are on the table concerning social security reform. Simply put, they are divided into three schools of thought and are named after the participants who have championed them at meetings of the Social Security Advisory Council. All three appear to encompass the political spectrum of the debate surrounding retirement incomes benefits.
- 160 The Ball plan would maintain the current system which was established by the Roosevelt administration in 1930s. It also foreshadows the need to reduce the long-range deficit through several small steps largely agreed to by a majority of the Council, such as taxing social security benefits to the extent they exceed what the worker has contributed. The Ball plan also considers the need to implement a program to eliminate the remaining deficit by passively investing part of the current surplus in private equities indexed to the broad market. Additionally, the plan also recommends that the current surplus by the OASDI be invested through government initiatives, to generate higher levels of return for the fund.
- 161 In contrast, the Gramlich plan essentially argues that the current system should be maintained but individual accounts should be developed through a financing arrangement which would require an additional mandatory contribution of 1.6% of

payroll while at the same time reducing the increase of Social Security benefits, particularly for middle- and high-income earners.

- 162 The most radical of these proposals was by Dr Schieber, a leading commentator in the area of pension policy in the United States. His recommendations for reform of the Social security system involved the establishment of Personal Security Accounts which would see the current system converted to a flat benefit program and substitute compulsory individual accounts for part of social security benefits. Dr Schieber's model, although radical, mirrors some of the important characteristics of the Australian, Chilean and Singaporean systems. More importantly, the model essentially acknowledges two growing themes in retirement incomes frameworks of countries throughout the world. These include giving the individual more freedom of choice over their future retirement needs and how the frontier of state social security systems is increasingly diminishing or being pushed back in response to public demands for smaller government. Older workers would continue to

...receive benefits from Social Security while younger workers would receive benefits from a combination of Social Security and their Personal Security Accounts. Social Security benefits would be converted to a flat benefit for full career workers, 5 percentage points of the Social Security payroll tax would be re-directed to the individual accounts and the transition to the new system would be financed by tax equal to 1.5 percent of payroll or its equivalent (Social Security Advisory Council, 1997, p.2).

The findings and recommendations of the Advisory Council are being passed on to the Secretary Shalala and to the Commissioner of Social Security, Ms Chater. Subsequently the report will then be sent to Congress where hearings will be conducted on the Council's recommendations.

- 163 The second tier of the United States retirement incomes model is based on the following retirement vehicles and occupational pension products provided by employers.

- a Individual retirement accounts (IRAs);
- b 401(k) plans; and
- c Keogh plans.

164 IRAs were established in 1974 for workers without pensions and featured tax-deductible contributions up to an annual limit, tax-free accrual of interest, and penalties for early withdrawal of funds. In 1981 eligibility was extended to all workers and the limits were raised to their current levels. IRA contributions may be financed with loans, the interest on which is deductible as investment interest. Keogh plans and simplified employee pensions (SEPs) are similar to tax deductible IRAs, with Keogh plans applying to the self-employed and typically both having higher contribution limits. However, SEPs have been replaced by savings incentive match plan for employees (known as SIMPLE- see paragraph 174 for further details). In 1996, 22 million workers had an IRA, with 7.6 million contributing to their IRA.

165 Established in 1978 and named after the section of the Internal Revenue Code, 401(k) plans are employment-based saving incentives. Important clarifying regulations were issued in 1981. Like IRAs, 401(k) plans feature tax-deductible contributions, tax-free accrual of interest, annual contribution limits, and restrictions on withdrawals. In 1996, 140,000 401(k) plans covered over 22 million workers and held US\$522 billion in assets. They differ from IRAs on three counts:

- a they are available only to employees of firms or other organisations that choose to sponsor the plans;
- b 401(k) contributions are made through regular payroll deductions, while IRA contributions can be made on an irregular basis; and
- c employers may make tax-deductible contributions into the plan.

In 1996, contributions by workers into their 401(k) plans averaged about 7% of salary; with 80% receiving a contribution from their employer of on average 5% of salary.

166 Almost half of all workers are covered by one of the above pension plans, with 75% of pension participants having a primary or supplemental DC plan. A report by the United States General Accounting Office (GAO) found that:

One in four workers who have pension coverage participates in a 401(k) pension plan. Male, white, highly educated, and high-income workers are more likely to have pension coverage than other workers. Moreover, most union members are covered by a pension plan as are most people working for large employing organisations... In contrast, over half of the workers who never graduated from high school and are nearing retirement age have no pension coverage (GAO, 1996a, p.2).

Further, only 39% of women are covered by a pension plan with two-thirds of working women employed in sectors that have relatively low pension coverages, such as services and retail. This is reflected in the benefits received by women retirees over the age of 55, being one-half the average pension benefit received by men (GAO, 1996b)

167 Since 1974, the Employee Retirement Income Security Act (ERISA) gave greater protection to members of occupational pension funds. This legislation had been developed in part as a response to major corporate collapses which saw occupational pension funds become insolvent. A notable example was that of Studebaker, a well-established car manufacturer in Notre Dame, Indiana. ERISA addressed the issues of sound investment strategies by pension funds. Further it standardised vesting requirements and forbade divesting once vesting had been granted. Thus, ERISA provided an important legislative mechanism to nurture public confidence in the United States by eliminating *sharp* practices by employers whose businesses were failing or had failed. It also saw the establishment of the Pensions Benefits Guaranty Corporation (PBGC) whose function is to insure DB occupational schemes from insolvency and thus financial loss to the members.

168 However, most DB schemes are still non-contributory. This means that in most instances workers leaving jobs lose all their pension benefits if the issue of vesting has not taken

place. Currently, there are two forms of vesting. *Cliff vesting* is where vesting takes effect after five years and *graded vesting* is where a proportion of the pension rights are vested after three, with full vesting after seven years. Deferred benefits tend not to be indexed.

169 For the overall policy direction of pensions policy, the Department of Labor provides important advice and regulatory guidance concerning all pensions issues, with the Treasury Department examining the structure to see if plans conform with tax regulations. The Securities and Exchange Commission (SEC) is the market regulator for mutual funds, indirectly involving it in the regulation of some pension funds.

170 For the United States retirement incomes framework, the life insurance industry provides the third tier for consumers to provide for their retirement. Regular and single premium products are marketed in the United States as alternatives and supplements to the first and second tier products. Although this industry remains a central pillar of the retirement incomes framework, increasing litigation, the threat of regulation and strong competition from other sectors have caused many companies to examine the systems and methods they employ to conduct business.

Prudential Insurance Company of America is expected to announce this week a sweeping change in the way it sells policies to individuals, [as] part of a continuing effort to put allegations of deceptive sales practices behind it. A task force of more than two dozen state insurance regulators has probed Prudential's sales methods for more than a year and is expected to shortly announce a plan for a restitution program that Prudential has internally estimated will cost between [US]\$280 million and [US]\$1 billion. The company also faces lawsuits in state and federal courts filed by unhappy policyholders and former employees who say they were fired for whistle-blowing (Scism, 1996, p.A4).

171 Regulation of the third tier of the retirement incomes framework is essentially controlled by state insurance commissioners. Under the United States Constitution all powers not

expressly ceded to the federal government are reserved to the states. Thus, although insurance is clearly interstate business in almost all its characteristics and probably always has been, the practice of regulating it on a state level continues unabated.

172 In response to a ruling of the United States Supreme Court, the United States Congress quickly passed a law delegating the federal government's authority to the states, subject to federal oversight. Thus a curious framework was established of having a federal regulator for securities, the SEC and insurance commissioners in the 50 states, the District of Columbia and four territories that the United States has responsibility over.

173 To address the issue of developing common approaches to the regulation of life insurance the National Association Insurance Commission (NAIC) helps to co-ordinate the functions and duties of the various state insurance regulators. Funding for the body comes from the state insurance regulatory authorities. Their functions tend to be limited through being only able to develop model laws for state jurisdiction and thus the power to influence regulatory direction tends to be hampered.

D.9.3 Existence and extent of major research issues

174 Costs of regulation

The costs of regulation of 401(k) and IRA plans have recently been addressed with the introduction of SIMPLE by the Small Business Job Protection Act of 1996. These are simplified retirement plans for small employers who have fewer than 101 employees, with earnings thresholds for eligibility (currently US\$5,000) and a contribution limit of 15% of salary. The IRA arrangement of the SIMPLE is not too different in design from a SEP, with most of the characteristics dealing with the reporting and ERISA requirements. Industry representatives indicated that this was a good step to minimise the complexity and costs that were increasingly being associated with pension products.

175 Competency levels of intermediaries

Primarily, all state regulators require some form of entrance exam to be completed before a license is issued to the prospective intermediary. Further, competency assessments are usually required in the major states and, additionally, minimum requirements for ongoing professional development in the form of completed qualifications or attendance at seminars. These levels vary greatly between the state regulatory domains. Increasingly state regulators are also examining the competency levels of intermediaries when conducting audits and investigations of companies and how companies actually train their agents. Recent legal cases have focussed on this functional relationship between the producer and agent.

176 ***Marketing material/selling methods/disclosure***

In relation to the second tier, products offered by producers have to meet the requirements contained in the ERISA legislation and regulations prescribed by the Department of Labor. Varying regulations on this issue apply in different states. Common regulatory models and selling practices have been developed by the NAIC but are being introduced in piecemeal fashion throughout the United States.

177 ***Consumer redress***

No formal structures exist in the United States like those which have developed in the United Kingdom. The only forms of disputes resolution mechanisms are through the actions of the PBGC and the individual state regulatory bodies.

178 ***Shift from DB to DC schemes***

The United States is displaying clear signs that the number of new DC schemes being established is far outstripping the number of DB schemes. In 1996, for the private sector, there were 10.6 million workers in a DB only scheme, 18.9 million in a DC only scheme and 14.5 million in both DB and DC.

179 ***Transfer values***

The United States does not allow transfers between DB schemes, unless a reciprocity agreement is in place. Indexation of deferred benefits is uncommon, with the vesting period usually being five years, although some schemes have *graded vesting*, where a proportion of deferred benefits are protected after three years, with full vesting after seven years.

180 ***Public education***

The Department of Labor identified that public education was the responsibility of the government and industry. A common practice seemed to be government agencies using industry participants as a basis for the distribution of public education material.

181 ***Women***

Women are not well covered by the system, with only 39% having a pension plan. In common with other researched countries, women tend to be employed in those sectors of the economy that have the lowest pension coverage rates. Recent initiatives by the Department of Labor and industry groups (for example, Department of Labor, 1996e) have seen public education material being targeted at women, although it has yet to be seen if this has been successful.

D.10 Overviews

Australia

Main economic indicators

Gross domestic product =	3.1%	Unemployment rate =	8.8%
Consumer prices =	1.5%	Wages/earnings =	2.9%
GDP in billions of US\$ =	391.3	GDP per capita in US\$ =	17,130
(current prices and current exchange rates)		(current prices and current PPPs)	

Pensions

Implicit replacement rate =	30%	Population in millions =	18.34
Population over 60 in 1990 =	15.0%	Population over 60 in 2030 =	27.7%
Public pension spending =	2.6% of GDP		
Net present value of public pension scheme =	-97% of GDP		

Major structural features

First tier:	Means-tested flat-rate scheme Normal retirement age- 65m/60f (increasing to 65 for women by 2014) Contribution years required for full pension- 0 Indexation variable- prices Financing- PAYG Relative value of benefits- 25% of average weekly earnings
Second tier:	Compulsory- National Employment-Related Retirement Income Scheme (NERRIS) Normal retirement age- 65m/60f (increasing to 65 for women by 2014) Superannuation Contribution Charge- employer required to make contributions on employee's behalf Contributions- 9% employer, 3% employee by 2002—2003 Industry-sponsored funds principally union schemes Coverage- 81%
Third tier:	Personal superannuation policies provided by fund managers and life insurance offices

Canada

Main economic indicators

Gross domestic product =	2.3%	Unemployment rate =	9.7%
Consumer prices =	2.2%	Wages/earnings =	3.4%
GDP in billions of US\$ =	577.8	GDP per capita in US\$ =	21,520
(current prices and current exchange rates)		(current prices and current PPPs)	

Pensions

Implicit replacement rate =	33%	Population in millions =	28.54
Population over 60 in 1990 =	15.6%	Population over 60 in 2030 =	30.2%
Public pension spending =	5.2% of GDP		
Net present value of public pension scheme =	-101% of GDP		

Major structural features

First tier:	Old Age Security (OAS) Program, Guaranteed Income Supplement (GIS), Spouse's Allowance Program (SPA) Normal retirement age- 65 Contribution years required for full pension- 40 years residence between the ages of 18 and 65 Indexation variable- prices Financing- PAYG Relative value of benefits- flat rate
Second tier:	Canadian Pension Plan (CPP) and Quebec Pension Plan (QPP) Disability, survivor's benefits Normal retirement age- 65 Compulsory, contributory (both employee and employer), earnings-related Indexation variable- prices Financing- PAYG Relative value of benefits- 25% of average earnings
Third tier:	Registered Pension Plans, Registered Retirement Savings Plans, Deferred Profit Sharing Plans

Chile

Main economic indicators

Gross domestic product =	5.5%	Unemployment rate =	6.4%
Consumer prices =	7.2%	Wages/earnings =	12.7%
GDP in billions of US\$ = (current prices)	50.1	GDP per capita in US\$ = (current prices)	4,500

Pensions

Implicit replacement rate =	38.7%	Population in millions =	14.24
Population over 60 in 1990 =	8.7%	Population over 60 in 2030 =	20.8%
Public pension spending =	5.7% of GDP		
Net present value of public pension scheme =	N/A		

Major structural features

First tier:	Compulsory- Pension Saving Account system Normal retirement age- 65m/60f Net compulsory contribution rate- minimum of 10% of salary, up to a maximum of 20% (employee only) Additional contributions required for disability and survivor's insurance Minimum pension guaranteed by the state Managed by private companies- the AFPs (13) Coverage- 62.2%
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Denmark

Main economic indicators

Gross domestic product =	2.7%	Unemployment rate =	8.3%
Consumer prices =	2.7%	Wages/earnings =	4.0%
GDP in billions of US\$ =	174.7	GDP per capita in US\$ =	22,271
(current prices and current exchange rates)		(current prices and current PPPs)	

Pensions

Implicit replacement rate =	40%	Population in millions =	5.19
Population over 60 in 1990 =	20.2%	Population over 60 in 2030 =	32.1%
Public pension spending =	6.8% of GDP		
Net present value of public pension scheme =	-235% of GDP		

Major structural features

First tier:	Social security benefit (FP) with disability pension Normal retirement age- 67 Contribution years required for full pension- 40 years of residence Indexation variable- nominal wages Financing— PAYG Relative value of benefits— flat rate
Second tier:	Compulsory- Labour Market Supplementary Plan (ATP) Semi-autonomous supplementary pension scheme Financing- fully-funded
Third tier:	Voluntary (although in practice compulsory, since covered by collective agreement) Company defined contribution/defined benefit schemes, although majority are industry-wide defined contribution schemes covering specific occupations and economic sectors Coverage- 80%
Fourth tier:	Individual pension products provided by banks and life assurance companies

Netherlands

Main economic indicators

Gross domestic product =	2.8%	Unemployment rate =	6.2%
Consumer prices =	2.2%	Wages/earnings =	1.6%
GDP in billions of US\$ =	393.7	GDP per capita in US\$ =	20,621
(current prices and current exchange rates)		(current prices and current PPPs)	

Pensions

Implicit replacement rate =	39%	Population in millions =	15.50
Population over 60 in 1990 =	17.8%	Population over 60 in 2030 =	33.4%
Public pension spending =	6.0% of GDP		
Net present value of public pension scheme =	-53% of GDP		

Major structural features

First tier:	Old-age, survivors and disability pensions (AOW, Anw, AAW) Normal retirement age- 65 Contribution years required for full pension- 50 years of residence Indexation variable- minimum wage Financing- PAYG Relative value of benefits- mostly flat rate Coverage- 93.6%
Second tier:	Compulsory— industry-wide defined benefit funds (65 obligatory) Voluntary- industry-wide defined benefit funds (16), company pension schemes (1000) Coverage- 83%
Third tier:	Pension products provided by life insurance/annuity schemes run by insurance companies

Republic of Ireland

Main economic indicators

Gross domestic product =	10.7%	Unemployment rate =	12.4%
Consumer prices =	1.9%	Wages/earnings =	4.2%
GDP in billions of US\$ =	69.0	GDP per capita in US\$ =	18,745
(current prices and current exchange rates)		(current prices and current PPPs)	

Pensions

Implicit replacement rate =	25%	Population in millions =	3.47
Population over 60 in 1990 =	15.2%	Population over 60 in 2030 =	22.9%
Public pension spending =	3.6% of GDP		
Net present value of public pension scheme =	-18% of GDP		

Major structural features

First tier:	Contributory old age pension, means tested retirement Pension, contributory survivors pension, disability and invalidity benefit Normal retirement age- 66 Contribution years required for full pension- 15 years of residence Indexation variable- prices Financing- PAYG Relative value of benefits- flat rate benefits
Second tier:	Voluntary- self-administered defined benefit and defined contribution pension funds, group insurance contracts Coverage- 46%
Third tier:	Pension-type products provided by life insurance companies.

Singapore

Main economic indicators

Gross Domestic Product =	5.8%	Unemployment rate =	2.7%
Consumer Prices =	1.9%	Wages/earnings =	6.7%
GDP in billions of US\$ = (current prices)	118.6	GDP per capita in US\$ = (current prices and current PPPs)	22,600

Pensions

Implicit replacement rate =	N/A	Population in millions =	2.87
Population over 60 in 1990 =	8.5%	Population over 60 in 2030 =	29.4%
Public pension spending =	2.2% of GDP		
Net present value of public pension scheme =	N/A		

Major structural features

First tier:	Compulsory- Central Provident Fund Normal retirement age- 55 Net compulsory contribution rate- 20% of salary from employee with 20% from employer (that is, 40% total) Channelled into three separate accounts- Ordinary, Medisave, Special Coverage- 67.3%
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United States of America

Main economic indicators

Gross domestic product =	3.4%	Unemployment rate =	5.3%
Consumer prices =	3.0%	Wages/Earnings =	3.8%
GDP in billions of US\$ =	7263.2	GDP per capita in US\$ =	27,358
(current prices and current exchange rates)		(current prices and current PPPs)	

Pensions

Implicit replacement rate =	30%	Population in millions =	263.14
Population over 60 in 1990 =	16.6%	Population over 60 in 2030 =	28.2%
Public pension spending =	4.1% of GDP		
Net present value of public pension scheme =	-23% of GDP		

Major structural features

First tier:	Old-Age, Survivors and Disability Insurance (OASDI) Program Normal retirement age- 65 (rising to 67 by 2022) Contribution years required for full pension- 10 Indexation variable- prices Financing- partly funded ¹⁴ Relative value of benefits- 43% of final salary Coverage- 96.7%
Second tier:	401(k) plans, Keogh plans (self-employed), individual retirement accounts, savings incentive match plan for employees (replaced simplified employee pensions) Coverage— 50%
Third tier:	Regular and single premium products provided by life insurance companies

Funded component is in the form of a contingency fund.

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Assumptions:

- (a) Net present value of employee and employer contributions less pensions paid until 2070, plus existing assets.
- (b) Productivity growth assumed to be 1.5% per year, discount rate 5%¹⁵.
- (c) All economies assumed to have returned to their medium term growth path and there is no cyclical unemployment.
- (d) Participation rates are assumed to remain constant.
- (e) All legislative reforms taken into account¹⁶.

The figures for Denmark are relatively high, since the Danish social security system is mostly tax-financed, so the whole liability is registered. The US appears low, due to social security benefits being relatively modest and the contribution rate being close to that required to meet the liabilities.

The figures are more sensitive to changes in the discount assumption than the productivity growth assumption.

The scenario for the Netherlands does not take into account recent changes to the widows' and orphans' scheme.

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