The retirement income market: country analysis

Comparative international research

Prepared for
Financial Conduct Authority

September 2014

www.oxera.com

Contents

1 Australia

Glossary of terms

APRA	Australian Prudential Regulation Authority
ASFA	Association of Superannuation Funds of Australia
ASIC	Australian Securities and Investments Commission
FSI	Financial System Inquiry
SMSF	Self-Managed Superannuation Fund

Box 1.1 Key findings

Australia provides an example of a system where consumers are free to choose retirement income products, but do not typically choose to buy lifetime annuities. The key areas of interest are as follows.

- The market for post-retirement products in its present form dates from 1992 when the Superannuation Guarantee system was introduced, with a mandatory pension contribution for employers. The average pot size is therefore smaller than other, more developed, DC pension systems (the employer contribution rate began at 3% and has risen steadily to 9.5%).
- Consumers do not face any tax constraints in their choice of retirement products. The taxation system is TTE: contributions and investment earnings are taxed at lower than the standard rate, and withdrawals are tax-free;
- Upon retirement, consumers typically face four options:
  - leave the funds in their superannuation fund and withdraw these at will;
  - convert the funds into an income drawdown product called an 'account-based pension';
  - purchase an annuity;
  - take the funds as a lump sum.
- Around half of retirees take the money as a lump sum. Most people use the lump sum to pay back their mortgage, improve their home, or invest the funds in alternative products. Only a small percentage uses the funds for consumption goods such as holidays.
- Annuities are highly unpopular. The annuitisation rate is below 1%.
- Advice on retirement products typically comes from the consumer's superannuation fund. Financial intermediaries play a limited role in the decision-making process mainly due to the high cost of bespoke advice and the poor confidence in financial advisers.
- State pension is means-tested. While financial assets are deemed to generate income, real estate assets are not considered as income-generating. As such, if a pensioner takes the entire fund as a lump sum and pays back the mortgage on their house, they are entitled to a higher state pension.
- The FSI has raised concerns about annuitisation rates being low. One of the proposals from the inquiry is the introduction of a 'default option' for retirement products (one from which the consumer would have to opt out), which would provide longevity insurance (e.g. a deferred lifetime annuity).

Source: Oxera.

1.1 Accumulation phase

1.1.1 Structure of defined-contribution schemes

Approximately 90% of Australia's managed pension funds are held in DC schemes, with the remaining 10% held in DB schemes.[1] The relative popularity of these schemes has also been changing, with DB schemes seeing a decline in popularity over the decade prior to 2005.[2] The proportion of pension fund assets in DB schemes has remained at approximately 10% since then.[3] Where DB schemes do exist, they are usually found in the public sector.[4] Since 1992, Australia has had a system of mandatory pension savings known as the Superannuation Guarantee system,[5] which requires employers to contribute to a superannuation fund.[6,7] There are some tax incentives for saving into a superannuation fund (see 'Taxation structure' section below).

Before 1992, DB schemes were more prevalent, but had gradually been giving way to DC schemes.[8] Employment habits were changing, with employees tending not to stay with one company for their whole working life. Moreover, the credit risk associated with DB plans was significant, as employees were vulnerable to liquidations and mismanagement, for example. Employers were increasingly unwilling to hold the liability of a DB scheme on their balance sheet.[9]

On DC schemes specifically, the FSI highlights concerns about low pension contributions, particularly in the context of an ageing population: the number of people aged 75 or older is expected to rise by 4m between 2012 and 2060.[10]

In addition to concerns about contribution levels, there is some suggestion of the existence of a 'lump-sum culture', something that the Australian government is keen to change in order to reduce pressure on its Age Pension (Pillar I)—a universal, means-tested and publicly funded pension.[11]

A variety of superannuation fund types are available: retail funds; industry funds; public sector funds; corporate funds; and self-managed superannuation funds (SMSFs).[12, 13] Assets in SMSFs have increased considerably compared with the

[1] OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2013-en), p. 191.
[2] Association of Superannuation Funds of Australia (2014), 'Financial System Inquiry Submission', March (http://www.superannuation.asn.au/ArticleDocuments/1228/ASFA_FSI-submission-March2014.pdf.aspx), p. 9.
[3] Ibid.
[4] Information provided by the Association of Superannuation Funds of Australia.
[5] OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2013-en), p. 211.
[6] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 2–97.
[7] As of 1 July 2014, an employer must contribute 9.50% of an employee's ordinary-time earnings up to a maximum contribution base of A$49,430 (£28,000) per quarter for the income year 2014–15. This rate has steadily increased from 3% in 1992, and is expected to rise to 12% by 2022. Source: Australian Taxation Office 'Maximum super contribution base' (https://www.ato.gov.au/rates/key-superannuation-rates-and-thresholds/?page=24&fb_locale=pl_PL#Maximum_super_contribution_base).
[8] Association of Superannuation Funds of Australia (2014), 'Financial System Inquiry Submission', March (http://www.superannuation.asn.au/ArticleDocuments/1228/ASFA_FSI-submission-March2014.pdf.aspx), p. 8.
[9] Ibid.
[10] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 4-4.
[11] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 2-97.
[12] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July, p. 1-16.
[13] The APRA regulates 299 large regulated funds and upwards of 530,000 small funds, which are mainly SMSFs—see Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July, p. 2-101. This represents a significant change in the superannuation market in recent years. Large APRA-regulated funds have fallen from more than 4,700 to 299 since 1997, and SMSFs now constitute the largest segment of

rest of the superannuation system, and are more than 15 times their 1997 level, with more than 1m members.[14] Indeed, SMSFs account for approximately one-third of total superannuation assets[15].

1.1.2 Size of retirement savings

Table 1.1 Average fund sizes

Age group	Mean fund size: AU$ (£)
15–19	409 (230)
20–24	4,437 (2,500)
25–29	13,290 (7,400)
30–34	24,701 (14,000)
35–39	34,761 (19,000)
40–44	48,789 (27,000)
45–49	67,345 (38,000)
50–54	88,508 (49,000)
55–59	127,955 (71,000)
60–64	155,216 (87,000)
65+	72,247 (40,000)
All ages	55,873 (31,000)

Source: Challenger (2012), 'Retirement Income Research', April (http://www.challenger.com.au/funds/TechnicalUpdates/CRIR_How_much_super_do_Aussies_have_Apr12.pdf), p. 8.

Table 1.1 presents individuals' average *aggregate* personal funds–which aggregate all account-level data (as individuals may have more than one account). It emerges that pension fund balances are often small, owing to the relative immaturity of the Superannuation Guarantee system. This is amplified by the fact that contribution percentages started at 3%when the scheme was introduced.[16] However, balances are expected to rise as the system matures.[17,18]

Typically, individuals with a smaller fund will take a lump sum (approximately 50% of accounts, equating to 20% of funds), whereas individuals with larger funds will opt for an income stream product.[19] It is also possible to withdraw from a superannuation fund early under special circumstances, such as compassionate grounds or severe financial hardship, and this may contribute to the further shrinking of the average pension fund.[20]

the industry—see Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July, p. 1-16.

[14] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July, p. 2-98.

[15] AU$559bn (£315bn) of AU$1.8tn (£1.0tn)—see Financial System Inquiry (2014), 'The financial system inquiry interim report', p. 2-99.

[16] 4% if the individual has crossed the AU$1m (£558,000) threshold. Source: Australian Government ComLaw, 'Superannuation Guarantee (Administration) Act 1992' (http://www.comlaw.gov.au/Details/C2004C07278).

[17] Information provided by the APRA.

[18] Rainmaker provides greater estimates of the average super balances for individuals: for those aged 60–65, it estimates balances of AU$285,422 (£159,000) and for individuals aged 65+ AU$478,160 (£267,000). Source: ING Direct (2013), 'Australians pay an average $2,000 in super fees each year', press release, 20 February (https://newsroom.ingdirect.com.au/releases/australians-pay-an-average-2-000-in-super-fees-each-year?mode=print).

[19] Information provided by the ASFA.

[20] Australian Taxation Office, 'Withdrawing your super and paying tax' (https://www.ato.gov.au/Individuals/Super/In-detail/Receiving-benefits/Withdrawing-your-super-and-paying-tax/#When_you_can_access_your_super).

1.2 Decumulation phase—the retirement income market

1.2.1 Overview of the decumulation phase

In general, individuals must reach preservation age[21] before they can access their superannuation fund. They are then faced with three broad options:

- leave the money in the superannuation fund to continue to accumulate;
- convert the fund into an income stream;
- take the fund as a cash lump sum.

Those who opt for an income stream product have the choice of two options:

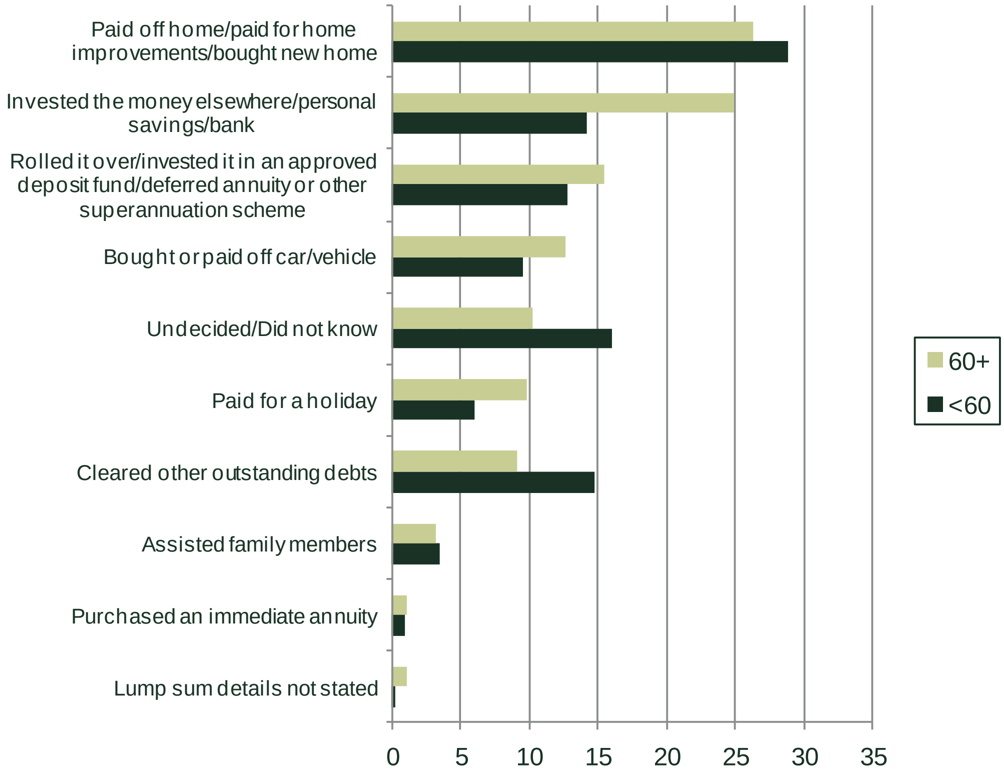
- an account-based pension[22]—income drawdown products that allow individuals to choose how much to draw down, subject to minimums. Most draw only the minimum amount;[23]
- an annuity—these tend to be sold by life insurance companies. It is also possible to purchase indexed annuities to protect from the effects of inflation.[24] The annuity market is very small,[25] at 0.3% of GDP.[26]

Individuals tend not to leave the money in the superannuation fund in the decumulation phase; indeed, some funds require individuals to transfer the money when they reach 65. Moreover, investment earnings are taxed.[27]

Lump sums are untaxed for individuals who take a lump sum after 60,[28] as long as the contributions were taxed—as would typically be the case for employed individuals. A significant number of individuals (around 50%[29]) choose to take a lump sum. A key driver of the 'lump-sum culture' is the fact that many pots are small—evidence indicates that individuals do not 'splurge' their money on luxury purchases, such as cruises.[30] Figure 1.1 shows the popularity of different ways of spending a lump sum.

[21] For anyone born after 1 July 1964, the preservation age is 60. Source: Australian Taxation Office, 'Preservation Age' (https://www.ato.gov.au/Rates/Key-superannuation-rates-and-thresholds/?amp=&page=12#Preservation_age).
[22] Account-based pensions account for around 94% of pension assets. Source: Bateman, H. (2009), 'Retirement incomes in Australia in the wake of the global financial crisis', November, Centre for Pensions and Superannuation, the University of New South Wales Discussion Paper 03/10 (http://www.asb.unsw.edu.au/research/cps/Documents/H.%20Bateman%20-%20Retirement%20incomes%20in%20Australia%20in%20the%20wake%20of%20the%20global%20financial%20crisis%20.pdf).
[23] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 4-6.
[24] Ibid., p. 4-7.
[25] Information provided by the ASIC and APRA.
[26] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 4-7.
[27] Australian Securities and Investments Commission (2014), 'Financial decisions at retirement', April (https://www.moneysmart.gov.au/media/332959/financial-decisions-at-retirement.pdf).
[28] Australian Taxation Office, 'Super lump sum tax table' (https://www.ato.gov.au/Rates/Key-superannuation-rates-and-thresholds/?pa=&page=13#Super_lump_sum_tax_table).
[29] Information provided by ASIC and APRA.
[30] Information provided by the ASFA.

Figure 1.1 How individuals spend their lump sum (% of total)[31]



Source: Australian Bureau of Statistics (2013), 'Retirement and retirement intentions', 9 December (http://www.abs.gov.au/ausstats/subscriber.nsf/log?openagent&62380_july%202012%20to%20june%202013.pdf&6238.0&Publication&A46D2A8001FB64B7CA257C39000B6B09&&July%202012%20to%20June%202013&09.12.2013&Latest), p. 43.

Investment earnings are untaxed for income drawdown products, making them an attractive post-retirement option.[32] These products also permit greater flexibility and access to capital. Individuals aged 60 or older who opt for an income drawdown product do not pay tax on the withdrawals,[33] although the government is becoming increasingly aware of the opportunity cost of these tax-free streams—that is, it is becoming increasingly aware of the revenue it is forgoing.[34]

Minimum account withdrawals are imposed on account-based pensions, which increase as a percentage of the balance as the individual ages. Table 1.2 displays the minimum withdrawal amounts for each age group.

[31] Australian Bureau of Statistics (2013), 'Retirement and retirement intentions', 09 December (http://www.abs.gov.au/ausstats/subscriber.nsf/log?openagent&62380_july%202012%20to%20june%202013.pdf&6238.0&Publication&A46D2A8001FB64B7CA257C39000B6B09&&July%202012%20to%20June%202013&09.12.2013&Latest), p. 43.
[32] Information provided by the Association of Superannuation Funds of Australia.
[33] Australian Taxation Office, 'Super income stream tax tables' (https://www.ato.gov.au/Rates/Key-superannuation-rates-and-thresholds/?amp=&page=14#Super_income_stream_tax_tables).
[34] Information provided by APRA.

Table 1.2 Minimum withdrawal from account-based pension

Age	Annual payment as a % of account balance
55-64	4
65-74	5
75-79	6
80-84	7
85-89	9
90-94	11
95+	14

Source: Australian Securities and Investments Commission, 'Account-based pensions' (https://www.moneysmart.gov.au/superannuation-and-retirement/income-sources-in-retirement/income-from-super/account-based-pensions).

1.2.2 Products

The range of decumulation products available in the Australian market is rather limited. It has been claimed that a major shortcoming of the Australian superannuation system is that it does not provide sufficient post-retirement products to meet the longevity risks of retirees.[35] Additions to the paucity of existing products have recently been proposed: the FSI contends that more widespread access to deferred life annuities, where annuity payments are delayed for a certain amount of time, or group self-annuitisation, where individuals contribute to a common pool invested in financial assets, would be particularly useful product developments for retirees.[36]

In the annuities market, in particular, both demand- and supply-side forces are constraining its size.

On the demand side, there is a perception that annuities are poor value for money[37] (despite the money's-worth ratio of annuities suggesting that they are not necessarily bad value[38]) and, historically, annuities have tended to be offered at low interest rates.

On the supply side, some concern has been noted that adverse selection may present a problem for annuities: it has been estimated by one report that for a 65-year-old male buying an annuity in the current market, adverse selection lowers indexed annuity payments by around 7%.[39] It should be noted, however, that an impact on annuity payments of this magnitude appears to be inconsistent with the estimates of the money's-worth ratio of 98.6–101.0.[40]

In addition, firms offering annuities must comply with demanding capital adequacy requirements,[41] which may further limit supply.

[35] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 4-26.
[36] Ibid., p. 4-26.
[37] Ibid., p. 4-7.
[38] Information provided by the APRA.
[39] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 4-17.
[40] Cannon, E. and Tonks, I. (2011), 'Annuity markets: Welfare, Money's worth and Policy implication', Netspar Panel Paper 24 (http://www.bath.ac.uk/management/research/pdf/tonks-cannon-annuity-markets.pdf).
[41] Information provided by the Association of Superannuation Funds of Australia.

1.2.3 Providers

Decumulation products are mainly provided by the superannuation fund providers themselves.[42,43] SMSFs are an important driver of competition since they are reported to have typically lower fees and offer better tax outcomes.[44] The popularity of SMSFs appears to be challenging APRA-regulated funds to be more competitive. In response, some industry and retail funds have expanded their product offering.[45]

Concerns have been raised about the level of superannuation fund fees.[46] Research has shown that Australians are paying an average of 1.26% a year in fees—AU$2,000 (£1,100) a year. Table 1.3 presents estimates of the average annual fee levied on each fund type. Oxera's review of a small selection of websites suggests that the typical MySuper annual management charge is around 0.9% of assets, somewhat lower than the 2013 estimates in Table 1.3.

Table 1.3 Average annual super fees by fund type

Fund type	Average annual fee
Personal funds	2.01%
Retirement funds (e.g. pension funds)	1.84%
Workplace funds (e.g. corporate- and employer-sponsored funds)	1.38%
SMSFs	0.87%
Not-for-profit funds (e.g. industry funds)	0.97%

Source: ING Direct (2013), 'Australians pay an average $2,000 in super fees each year', press release, 20 February (https://newsroom.ingdirect.com.au/releases/australians-pay-an-average-2-000-in-super-fees-each-year?mode=print).

There appear to be few barriers to expansion for new superannuation funds wishing to enter the market (which then offer decumulation services),[47] and APRA has not rejected any MySuper fund applications.[48]

1.2.4 Intermediaries

Financial advice, and in particular the role of financial intermediaries, has been a 'hot topic' in Australia.[49] In April 2010, the government announced its Future of Financial Advice reforms,[50] which sought to improve the quality of, and access to, advice for consumers. The reforms banned financial advisers from receiving commission payments from providers, and followed various high-profile mis-selling cases, such as Storm Financial and Timbercorp.[51]

[42] Association of Superannuation Funds of Australia (2014), 'Financial System Inquiry Submission', March (http://www.superannuation.asn.au/ArticleDocuments/1228/ASFA_FSI-submission-March2014.pdf.aspx), p. 39.
[43] As at June 2013, the percentage of accounts staying with their pension fund provider was approximately 20% for industry funds and as high as 95% for SMSFs. Source: Ibid.
[44] FSI 201 The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 2-123.
[45] Ibid., p. 2-123.
[46] ING Direct (2013), 'Australians pay an average $2,000 in super fees each year', press release, 20 February (https://newsroom.ingdirect.com.au/releases/australians-pay-an-average-2-000-in-super-fees-each-year?mode=print).
[47] Information provided by APRA.
[48] Although firms may still be deterred from entering the market due to the complexity of the regulations. Source: Ibid.
[49] Ibid.
[50] Australian Government Treasury (2010), 'Overhaul of financial advice', 26 April (http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=pressreleases/2010/036.htm&pageID=&min=ceba&Year=&DocType=0).
[51] Information provided by APRA.

Industry funds provide basic financial advice and, if they have their own financial planning arm, can offer specific advice to individuals.[52] Retail funds offer general advice but provide individual advice only at extra cost. SMSFs are more likely to provide advice from financial planners.[53] Obtaining advice is typical for annuity purchases, with one estimate suggesting that the cost of annuity advice is typically around 2.5–3% of the assets.[54] However, at a more general level, individuals do not tend to receive bespoke financial advice, as it is often expensive—direct provider-to-consumer sales are quite common.[55]

A number of factors seem to contribute to the low take-up of financial advice. There is evidence of poor confidence in financial advisers. A survey in 2011 found that 42% of respondents would not trust financial planners or their recommendations.[56] Many retail and institutional investors also reportedly do not believe that advice providers act in the best interests of their client.[57] The provision of poor financial advice is seen as partially responsible for Storm-Financial mis-selling cases.

1.2.5 Taxation structure

The Australian Pillar II pension system can be described as a TTE system, as contributions and investment earnings are taxed (TT), while withdrawals are tax-exempt (E).

The tax rates on contributions and investment earnings are significantly lower than the standard tax rates. This means that significant tax incentives exist for saving in the MySuper scheme rather than another savings vehicle.[58] Accumulation earnings (e.g. dividend and interest payments received) are taxed at the same rate as contributions, and, more generally, dividend tax rates are the same as the marginal income tax rates for the individual.

There is no tax for the withdrawal phase for benefits taken as a lump sum or as an income stream.[59] On already taxed contributions, there is no differential tax treatment for annuities or other income drawdown products. Inheritance tax is not payable on the taxed element of the remaining super fund.[60]

[52] Ibid.
[53] Ibid.
[54] Potts, D. (2012), 'Why retirees overlook lifetime annuities', *Financial Review*, 30 May (http://www.afr.com/p/personal_finance/portfolio/why_retirees_overlook_lifetime_annuities_TgYqw2d4DtIaQq6vQfUIOI).
[55] Information provided by APRA.
[56] Australian Securities and Investments Commission (2012), 'Future of financial advice: best interests duty and related obligations', December, Regulation Impact Statement (https://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/RIS%20-%20FOFA%20-%20Best%20Interests%20Duty%20and%20Related%20Obligations.pdf/$file/RIS%20-%20FOFA%20-%20Best%20Interests%20Duty%20and%20Related%20Obligations.pdf).
[57] Ibid.
[58] As of 2007, contributions (currently 9.5% of gross salary) are taxed at 15%, which compares with a marginal income tax rate of 32.5% for most workers, rising to 45% for higher earners. Source: The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 2-119.
[59] Ibid., p. 2-119.
[60] Australian Taxation Office, 'Superannuation death benefits' (https://www.ato.gov.au/Individuals/Deceased-estates/Superannuation-implications/).

1.3 Decumulation phase—consumer journey

1.3.1 Sources of retirement income

Aside from occupational pensions, the Age Pension is a means-tested state pension provision that provides a safety net against longevity risk.[61] It is currently available to those aged 65 and above, with the age rising gradually to 67 over the next decade. There is some consensus that the Age Pension is moderately generous, providing sufficient insurance against longevity risk, such that it lessens the importance of accumulated Pillar II/Three savings.[62,63] As noted, the government is concerned about reliance on the Age Pension,[64] with the number of individuals accessing the state pension not expected to fall, and approximately 70% of retirees currently receiving it. Moreover, a generous Age Pension may create incentives for individuals to spend down their private pension savings to boost their entitlement to Age Pension benefits.[65]

However, the rules on income are also important. In particular:

- financial assets (including superannuation funds, other investment funds and bank balances) are deemed to earn income, using a set formula (not the actual earnings). The first AU$48,000(79,600) are deemed to earn 2% a year, with amounts above earning 3.5% a year;

  and

- interest income from the superannuation fund (from income drawdown or annuity products) is included as income, but not income from the fund which represents the capital drawdown.

Consequently, if a person takes the entire super fund as a lump sum, this sum will count towards income for the purposes of assessing the Age Pension if it is in a bank account or investment fund, but will not count once it has been spent (e.g. to clear a mortgage for the individual's primary residence or to fund a holiday).

In practice, there can therefore be an incentive for those with smaller pension pots to take the money as a lump sum, spend it on non-income-generating assets or consumption, and then receive a higher Age Pension (i.e. higher than if they had purchased an income drawdown or annuity product). Moreover, the principal home is not counted as an asset for the purposes of means-testing,[66]

[61] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 2-97.
[62] For 2014/15, the maximum rate of the Age Pension is AU$843 (£470) per fortnight for a single person or AU$1,271 (£700) per fortnight for a couple. The pension is reduced by 50c per AU$1 (£0.56) (a marginal rate of 50%) for those with incomes from other sources above AU$160/284 (£89/160) (single/couple) per fortnight, which is a relatively low amount. This means that those with incomes above AU$1,846/2,825 (£1,000/1,600) will receive no Age Pension. In practice, this means that most people with additional pension income will face a marginal 'tax' rate of 50%. Source: Australian Government Department of Human Services, 'Income test for pensions' (http://www.humanservices.gov.au/customer/enablers/income-test-pensions).
[63] The Age Pension is approximately 27% of male average weekly earnings, and is the main source of government pension payments. Source: Information provided by APRA.
[64] Ibid.
[65] The Pensions Policy Institute (2014), 'Freedom and choice in pensions: comparing international retirement systems and the role of annuitisation', May, Briefing Note No. 66 (http://www.pensionspolicyinstitute.org.uk/uploaded/documents/Briefing%20Notes/201405%20BN66%20Freedom%20and%20Chioce%20in%20Pensions.pdf), p. 6.
[66] Australian Government Department of Human Services, 'Real estate assets' (http://www.humanservices.gov.au/customer/enablers/assets/real-estate-assets).

further incentivising individuals to take a lump sum to pay off any remaining mortgage on their principal home, for instance.

Total replacement rates are 52.3% for the average earner and 91.1% for the low earner, relative to OECD averages of 54.4% and 71.0% respectively.[67] Individuals' savings and the selling of assets account for approximately 8% of retirement income.[68]

1.3.2 Decision-making process

Shortly before retirement age, individuals typically receive advice on their options from their superannuation fund. Individuals enter a transition phase where the most common route is to convert their superannuation fund into some form of income stream or to take the fund out as cash. Income-stream products are often offered by the superannuation funds themselves, but are also offered by life insurance companies. The onus is on the individual to do something with their superannuation fund—there is no 'default' option at retirement.[69]

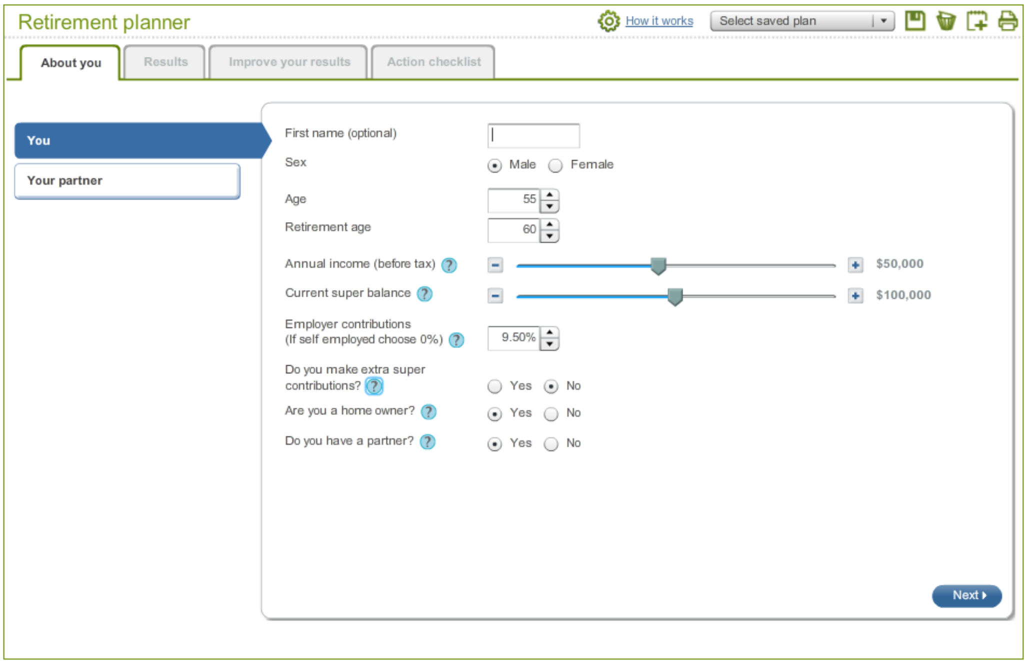
Tailored financial advice is available, but is often expensive relative to the size of the superannuation fund.[70] In addition, the quality of financial advice tends to be poor. Following a 'shadow-shopping' exercise, ASIC found that more than one-third of the financial advice received was of a poor quality.[71]

For certain groups there is a lack of financial literacy and awareness.[72] There have been efforts to improve this, but studies are inconclusive about whether such financial literacy strategies have been successful.[73] An ASIC report on financial literacy argues that while Australians tend to be confident with basic financial matters, an increased availability of complex financial products is increasing the need for sound financial advice.[74] ASIC is taking steps to improve financial literacy and has proposed measures to improve education, such as integrating financial literacy into the Australian curriculum.[75]

It is worth noting the guidance provided by ASIC through its online tools. It offers an interactive 'Retirement Planner' that enables people to gauge their income from Pillars One and Two, as well as the impact of investment options on superannuation fund size (see Figure 1.2).

[67] OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2013-en).
[68] Australian Bureau of Statistics (2013), 'Retirement and retirement intentions', 9 December (http://www.abs.gov.au/ausstats/subscriber.nsf/log?openagent&62380_july%202012%20to%20june%202013.pdf&6238.0&Publication&A46D2A8001FB64B7CA257C39000B6B09&&July%202012%20to%20June%202013&09.12.2013&Latest), p. 37.
[69] Information provided by the ASFA.
[70] Ibid.
[71] Australian Securities and Investments Commission (2012), 'ASIC releases full report on retirement advice shadow shopping research', 27 March (http://www.asic.gov.au/asic/asic.nsf/byheadline/12-55MR+ASIC+releases+full+report+on+retirement+advice+shadow+shopping+research?openDocument).
[72] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 3-60.
[73] Ibid., p. 3-60.
[74] Australian Securities and Investments Commission (2011), 'National financial literacy strategy', March, Report 229 (https://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/rep229-national-financial-literacy-strategy.pdf/$file/rep229-national-financial-literacy-strategy.pdf).
[75] Ibid.

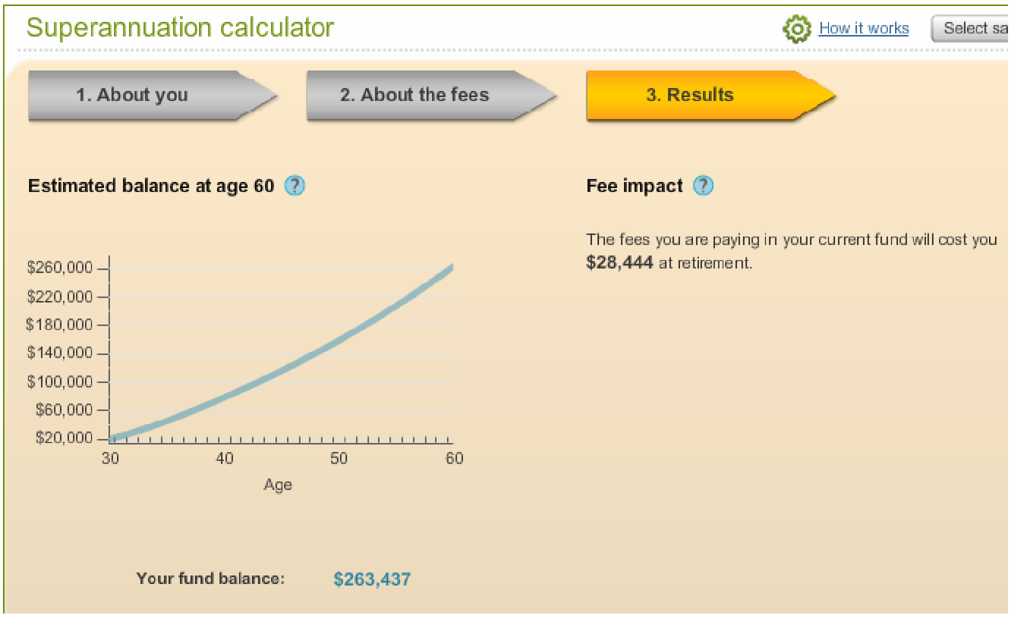
Figure 1.2 ASIC online superannuation tool



Source: Australian Securities and Investments Commission, 'Retirement planner' (https://www.moneysmart.gov.au/tools-and-resources/calculators-and-tools/retirement-planner).

ASIC also offers a 'Superannuation calculator', which indicates the likely size of an individual's pension pot once the individual has input details on certain parameters. Of particular interest is the attention that the tool pays to the impact of administrative costs, reflecting an awareness of fund charges (see Table 1.3 above and Figure 1.3).

Figure 1.3 The superannuation calculator and fund charges



Source: Australian Securities and Investments Commission 'Superannuation calculator' (https://www.moneysmart.gov.au/tools-and-resources/calculators-and-tools/superannuation-calculator).

Reforms to the superannuation system in 2011 aimed to improve the comparability of the default accumulation fund for employees, legislating that, from 1 January 2014, employers' pension contributions must be made into an authorised 'MySuper' default option rather than a preferred fund. Websites such as CANSTAR provide tools to compare products in both the accumulation and decumulation phases.[76]

Despite the existence of such online tools and the MySuper reforms, the FSI has concluded that the disclosure tends to be complex and lengthy, and often does not facilitate greater consumer understanding.[77]

1.3.3 Consumer behaviour

From the UK perspective, Australia provides an interesting example of a system where consumers are free to choose retirement income products, but do not typically choose to buy lifetime annuities. There is a perception that annuities offer poor value for money compared with alternative post-retirement products, which tend to be more popular. A change to the asset test exemption legislation on 20 September 2004, such that annuities were no longer fully tax-exempt, caused a sharp drop in demand for annuity products.[78]

While to the extent that a 'lump-sum' culture is in evidence and consumers may not appear particularly risk-averse, there is some suggestion that poor returns for superannuation funds (owing in part to high fees) is making consumers more risk-averse:[79] in 2012, Australia was one of only two countries to record a negative rate of return on its pension funds.[80] Furthermore, contrary to the suggestion that a 'lump-sum culture' indicates low risk aversion, it has been contended that taking a lump sum is seen as the least risky option. When individuals do not understand the array of financial products presented to them at retirement, taking a cash lump sum seems like the safest option.[81]

However, the FSI concluded that the retirement phase of superannuation is underdeveloped and does not meet the risk management needs of many retirees. Individuals are concerned about outliving their savings, and the FSI concluded that a lack of effective longevity risk management is a real weakness of the Australian superannuation system.[82]

1.4 Regulatory developments

Regulatory developments have occurred on a number of fronts. As of 1 July 2013, a new set of prudential standards has been implemented such that APRA regulates MySuper products—APRA's regulatory requirements are substantively detailed. APRA does not regulate SMSFs; this is the domain of the Australian Tax Office. Other bodies involved in regulation include the ASIC and the Superannuation Complaints Tribunal.

As part of the Stronger Super reforms announced in 2011, the MySuper product was intended to be a new default low-cost product to replace the defaults offered by funds.[83] Improved fee transparency with MySuper products was expected to

[76] Canstar, 'Compare Superannuation funds' (http://www.canstar.com.au/superannuation/).
[77] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 3-56.
[78] Information provided by the ASFA.
[79] Pandey, S. (2014), 'Not so super: Australian retirees struggle as twilight beckons', Reuters, 22 May (http://www.reuters.com/article/2014/05/22/australia-retirement-idUSL3N0N90B020140522).
[80] Ibid.
[81] Ibid.
[82] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. 4-9.
[83] Ibid., p. 2-104.

lead to reduced charges through an increase in competition,[84] although it is too early to assess whether this objective has been achieved.[85]

In a recent regulatory development related to financial advice, in April 2010 the Future of Financial Advice reform package was announced, imposing obligations such as requiring advisers to act in the best interests of their client, a ban on conflicted remuneration, and a requirement that retail clients be provided with an annual fee disclosure statement where there is an ongoing fee arrangement.[86] The Corporations Act (encompassing the Future of Financial Advice reforms) imposes high-level and principle-based obligations on advice providers, but does not provide detail on the processes that advice providers should adopt to comply with their obligations.

1.4.1 Financial System Inquiry

The FSI included a significant discussion of options for the Australian retirement income market.[87] This discussion was motivated by concern about the lack of annuitisation in the Australian market, with most funds remaining in account-based income drawdown-type products. The Interim Report considered a range of policy options (see Figure 1.4), with the status quo being considered the most flexible one available.

[84] Center for Retirement Research (2013), 'Australia's retirement system: strengths, weaknesses and reforms', April (http://crr.bc.edu/wp-content/uploads/2013/04/IB_13-5-508.pdf), p. 3.
[85] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p. xxiii.
[86] Australian Securities and Investments Commission (2012), 'Future of financial advice: best interests duty and related obligations', December, Regulation Impact Statement (https://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/RIS%20-%20FOFA%20-%20Best%20Interests%20Duty%20and%20Related%20Obligations.pdf/$file/RIS%20-%20FOFA%20-%20Best%20Interests%20Duty%20and%20Related%20Obligations.pdf).
[87] The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), chapter 8.

Figure 1.4 Policy options considered in the Financial System Inquiry

MORE FLEXIBILITY AND FREEDOM ←

→ MORE RISK MANAGEMENT

	STATUS QUO	POLICY INCENTIVES	DEFAULTS	COMPULSION
Key features	Significant freedom for individuals Tax incentives for income streams	Create incentives for retirees to take benefits as longevity-protected income streams	Part of retirees' benefits to be taken in a longevity-protected product by default	A portion of benefits must be used to purchase a longevity-protected product
Pros	Individuals free to use their assets to fund retirement as they see fit	Can be effective while still allowing members freedom	Guides decision making Defaults are powerful drivers of behaviour Members retain the right to opt out	Ensures superannuation is used to provide income in retirement Addresses adverse selection issues
Cons	Limited access to effective risk management in retirement Significant risk to the Government of people falling back on the Age Pension	May require significant tax and social security concessions/ penalties to be effective Potential Government fiscal implications	Limited ability for the member to opt out after the member is in a product Members have ability to opt out, take lump sums and fall back on the Age Pension	Denies individuals the ability to use their assets as they see fit Sub-optimal outcomes for some individuals, given heterogeneous circumstances Could disadvantage groups with lower life expectancies

Source: The Financial System Inquiry (2014), 'The financial system inquiry interim report', 15 July (http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf), p 4-20.

The FSI provides support for introducing a default option for part of retirees' benefits to be taken in a longevity-protected product, potentially starting quite late in life (e.g. at age 85). This is referred to in Australia as a longevity pension.

The report also calls for new products to be developed for the retirement income market, including:

- deferred lifetime annuities, to complement account-based drawdown; and
- group self-annuitisation, which pools longevity risk between a group of individuals to improve 'income efficiency', with assets potentially held in risky assets (with hopefully higher returns).

The report highlights the concern in Australia that retirees have too much flexibility and are failing to insure their lifetime incomes (instead relying on the state pension if pension savings run out).

2 Canada

Glossary of terms

CLHIA	Canadian Life and Health Insurance Association
CPP	Canada Pension Plan
FSCO	Financial Services Commission of Ontario
LIF	lifetime income fund
NLIF	new lifetime income fund
OAS	old age security
OSFI	Office of the Superintendent of Financial Institutions
PRPP	pooled registered pension plan
QPP	Québec Pension Plan
RRIF	registered retirement income fund
RRSP	registered retirement savings plan
TFSA	tax-free savings account

Source: Oxera.

Box 2.1 Key findings

The Canadian pension system is dominated by DB schemes (approximately 96% of assets), although there is a movement toward DC schemes. While it is difficult to draw firm conclusions due to the infancy of DC schemes and the small size of pension pots, the following patterns are observed.

- The most popular product for retirees is the income drawdown option, even though it carries no tax advantages over annuities and annuities appear to offer relatively good value for money (money's-worth ratio of 98.1).
- One potential explanation for the low demand for annuities may be the small size of pension pots (approximately C$75,000 (£41,000)). Many individuals with DC pension pots are likely to also have DB pension entitlements (e.g. from other jobs), which may mean that the (relatively small) DC pension pots have a relatively low level of importance in terms of providing retirement income.
- Other potential explanations are related to consumer behaviour:
  - income drawdown products are considered to be the natural continuation to the accumulation products provided by pension providers. Consumers exhibit a degree of inertia, using the same financial institution to manage both their pension accumulation and decumulation;
  - the cultural norm is one of self-reliance and individualism, and annuities are seen as an unwarranted interference in one's freedom at retirement.

Source: Oxera.

2.1 Accumulation phase

2.1.1 Structure of defined-contribution schemes

Canada's pension landscape is dominated by DB schemes,[88,89] with DB pension fund assets accounting for all but around 5% of pension fund assets in 2012. However, as elsewhere, Canada is seeing a move towards DC pension schemes,[90] with DB plan membership falling and many plans being closed to new employees[91]—this has been mostly driven by declining DB membership in the private sector,[92] as membership numbers in the public sector have remained broadly constant.[93,94]

Pension savings in Pillar III are sizeable in Canada, as shown in Figure 2.1, the main vehicle for private pensions saving is the registered retirement savings plan (RRSP). Consumers typically contribute to these accounts through income deductions (subject to certain deduction limits[95]) and investment earnings are also tax-deferred—tax is only payable when individuals withdraw funds.[96] As effectively private savings, individuals can withdraw from RRSPs before they are used to pay a retirement income.

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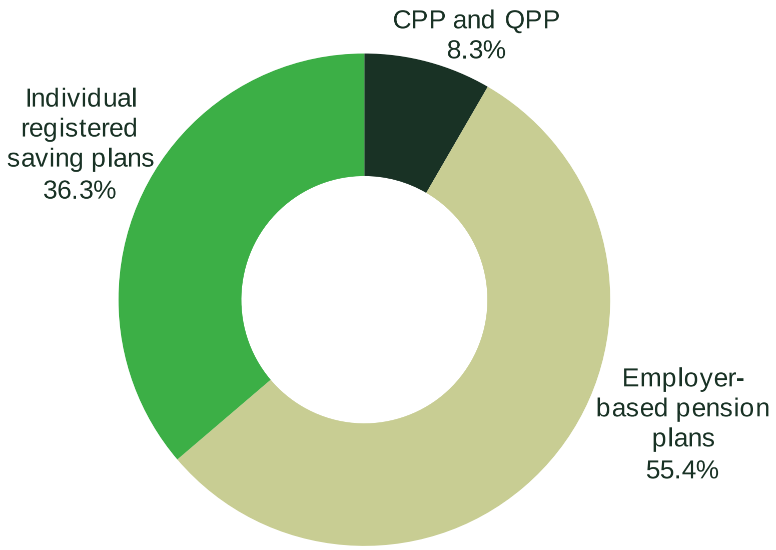
[88] Information provided by the Canadian Association of Pension Supervisory Authorities.
[89] Total pension assets were C$2.56tn (£1.41tn) in 2012, of which most (C$1.42tn (£0.78tn)) was in the form of employer-based pension plans. See Statistics Canada, *Table 378-0117 – Pension satellite account* (http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=3780117&pattern=3780117&searchTypeByValue=1&p2=35).
[90] For employer-based pension plans, the number of DC pension plan members increased from 935,236 in 2008 to 1,003,310 in 2012. See Statistics Canada, *Table 280-0018* (http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2800018&tabMode=dataTable&srchLan=-1&p1=-1&p2=9).
[91] Canadian Institutional Investment Network (2012), 'Canada's pension landscape report' (http://www.institutionalinvestmentnetwork.ca/researchDocument.jsf?id=2).
[92] From 2001 to 2011 the proportion of active employer pension plan members in a DB plan fell from 83% to 73%. Private sector membership has fallen from 74% DB to 51% over the same period. See Office of the Superintendent of Financial Institutions, 'Registered pension plan and retirement savings coverage' (http://www.osfi-bsif.gc.ca/Eng/oca-bac/fs-fr/Pages/FS_RPP_2013.aspx).
[93] Approximately 94% of public sector employer plan members are covered by a DB plan. Source: Ibid.
[94] Private sector pension schemes account for approximately 93% of employer-based plans, with the remaining 7% in the public sector. Source: Statistics Canada, *Table 280-0014 (*http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil118a-eng.htm).
[95] Canada Revenue Agency, 'How much can I contribute and deduct?' (http://www.cra-arc.gc.ca/tx/ndvdls/tpcs/rrsp-reer/cntrbtng/lmts-eng.html).
[96] Canada Revenue Agency, 'Making withdrawals' (http://www.cra-arc.gc.ca/tx/ndvdls/tpcs/rrsp-reer/wthdrwls/menu-eng.html).

Figure 2.1 Canada Pension Plan asset values, 2012



Source: Statistics Canada, Table 378-0117 – Pension satellite account (http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=3780117&pattern=3780117&searchTypeByValue=1&p2=35).

Parallel to the decline in membership of DB employer pension plans, the proportion of the labour force contributing to RRSPs has declined from 39% in 2001 to 32% in 2011.[97] The likely drivers of this decline include:

- the popularity of tax-free savings accounts (TFSAs), introduced in 2009, which permit individuals to earn tax-free investment income and make tax-free withdrawals, subject to a maximum contribution cap of C$5,500 (£3,000) a year. [98] These are attractive alternative savings vehicles for consumers;[99]
- the introduction of pooled registered pension plans—a form of employer pension scheme. By pooling assets, the administration costs of pension schemes are lowered and hence participation costs fall—an appealing alternative offering to a regular DC pension scheme[100] for employers.

The main providers of DC pension schemes are life insurance companies accounting for approximately 60% of workplace pension plans (mainly for plans among smaller employers).[101] These companies also typically provide individual saving plan products. Indeed, taking these two types of service together, life insurance companies support more than 80% of plans.[102]

[97] Office of the Superintendent of Financial Institutions, 'Registered pension plan and retirement savings coverage' (http://www.osfi-bsif.gc.ca/Eng/oca-bac/fs-fr/Pages/FS_RPP_2013.aspx).
[98] At the close of 2011, 8.2m Canadians had opened a TFSA, compared with 6.7m at the close of 2010. Source: Ibid.
[99] Information provided by the CLHIA.
[100] Information provided by the Financial Services Commission of Ontario.
[101] Information provided by the CLHIA.
[102] Ibid.

2.1.2 Size of retirement savings

Data on the average pot size at retirement is not readily available; as an approximate guide, an extrapolation from data on payout annuities suggests a ballpark average pot at retirement of C$75,000 (£41,000).[103]

Consumers have certain allowances to withdraw from their fund during the accumulation period, depending on the product. There are two types of pension savings: unlocked and 'locked in', with the former offering more allowances to withdraw funds from.

If an individual has 'unlocked' (essentially private) savings, this unlocked fund can enter an unlocked decumulation fund, often a registered retirement income fund (RRIF). If an individual transfers their pension fund from an employer-based plan, their funds are considered 'locked in'[104] and are transferred to a locked-in accumulation product and subsequently an LIF (the decumulation product for locked-in funds).[105]

Provinces often make particular legislative stipulations,[106] but typically, provided that they are younger than 55, an individual is free to transfer their employer pension fund to another employer plan, a locked-in accumulation product such as a 'locked-in' RRSP, an LIF,[107] or to buy a deferred annuity.[108,109]

There has also been some concern about pension coverage in Canada, particularly with regard to employer-based schemes.[110] Contribution levels appear to have fallen for both employers and employees in DC schemes: from 2007 to 2013, levels fell from 7.3% to 5.1% for employees and from 6.2% to 4.8% for employers.[111] This concern is particularly acute for individuals who rely primarily on RRSP products in retirement.[112] As in other countries, improved life expectancy is putting pressure on the Canadian pension system.

At the provincial level

What an individual has to consider at age 55 varies for individuals entitled to employer pension benefits:

- British Columbia and Québec—DC plans are 'portable' (eligible for transfer to a locked-in vehicle) at any age. However, for DB plan members, transfer is possible only before age 55. Transfer out of DB plans may also be required by a plan's rules;

[103] Based on the 376,245 individual payout annuities purchased in 2012, with a combined purchase price of C$28.23bn (£16bn), the average pot at retirement for individuals who purchase an annuity is C$75,021 (£41,000). This figure should be regarded as an overestimate, however, as it represents not only retirement plans but also reflects, for instance, non-registered savings or corporate purchases that aim to offload certain liabilities. Source: Information provided by the CLHIA.

[104] Individuals who transfer their funds from an employer-based plan to a locked-in private savings plan cannot access their money except in exceptional circumstances such as financial hardship. See Office of the Superintendent of Financial Institutions, 'Unlocking' (http://www.osfi-bsif.gc.ca/eng/pp-rr/faq/pages/ulk-dbc.aspx).

[105] Information provided by the Office of the Superintendent of Financial Institutions.

[106] Standard Life (2014), 'Summary of pension legislation', 1 January (https://www.standardlife.ca/pdf/ge10129.pdf).

[107] Information provided by the Financial Institutions Commission, British Columbia.

[108] The ability to transfer employer pension funds is known as portability.

[109] It is sometimes stipulated at the provincial level that, for portability to be permissible, the value of benefits must be less than 20% of that year's maximum pensionable earnings.

[110] Australian Centre for Financial Studies (2012), 'Melbourne Mercer global pension index', October (http://globalpensionindex.com/pdf/melbourne-mercer-global-pension-index-2012-report.pdf).

[111] Benefits Canada (2013), '2013 CAP member survey: retirement readiness', 1 November (http://www.benefitscanada.com/pensions/cap/2013-cap-member-survey-retirement-readiness-45720), p. 8.

[112] Information provided by the Office of the Superintendent of Financial Institutions.

- Ontario—both DC and DB plans are portable until age 55.[113]

A further provincial development is being implemented by the Ontario government, in a bid to increase the coverage and adequacy of retirement savings. The Ontario Retirement Pension Plan is the first mandatory employer pension contribution scheme.[114] If employers do not offer a workplace pension then, under this scheme, employer contributions will be mandatory.

2.2 Decumulation phase—the retirement income market

2.2.1 Overview of the decumulation phase

Normal retirement age in Canada is currently 65, and individuals must stop contributing to their pension fund after age 71.[115] The main products available to a DC retiree in the post-retirement market are:

- an income drawdown product;
  - an RRIF (for unlocked funds);
  - an LIF (for locked-in funds);
- an annuity;
- a lump sum.

Data on the annuitisation rate in Canada is difficult to obtain. On one estimate, it is approximately 33% (although this figure should be treated with caution).[116] In addition to any demand for annuities from individual consumers, there is demand for annuities from DB pension funds who wish to offload pension liabilities to life insurance companies.[117]

Where consumers have the choice, they are more likely to opt for income drawdown products, which impose varying restrictions. The RRIF and the LIF are similar income-drawdown products, but impose varying restrictions: for RRIF products there is a minimum withdrawal imposed by the Canada Revenue Agency,[118] but no maximum withdrawal; for LIF products there is both a minimum and a maximum withdrawal, set at the provincial level.

There is no differential tax treatment between annuity products and income drawdown products since both are taxed as income. There is little incentive for individuals to take their fund as a lump sum because it would be taxed as income at the individual's marginal tax rate.[119]

[113] Standard Life (2014), 'Summary of pension legislation', 1 January (https://www.standardlife.ca/pdf/ge10129.pdf).
[114] Ontario Ministry of Finance (2014), '2014 Ontario budget chapter IV' (http://www.fin.gov.on.ca/en/budget/ontariobudgets/2014/ch4.html).
[115] Régie des rentes Québec, 'Types of plan pensions' (http://www.rrq.gouv.qc.ca/en/retraite/rcr/rpd/prendre_retraite/Pages/Type_de_rente.aspx).
[116] Using CLHIA data on the annuity markets in Canada for 2012, for a total of 1,144,632 members of payout products, there were 376,245 individual payout annuities. This figure reflects only the life insurance industry (other providers such as banks offer annuities) and should therefore be considered only a gauge of magnitude rather than a precise estimate.
[117] Information provided by the CLHIA.
[118] Canada Revenue Agency, 'Withholding tax on payments from a registered retirement income fund' (http://www.cra-arc.gc.ca/tx/rgstrd/rrsprrif-reerferr/wthhldng-eng.html).
[119] Information provided by the CLHIA.

2.2.2 Products

Income drawdown tends to be the most common option for holders of individual retirement savings and is typically regarded as a natural continuation.[120] As elsewhere, there is a tendency for individuals to exhibit a degree of inertia, using the same financial institution to manage their banking and pension accumulation and decumulation, for example.[121]

Income drawdown products such as RRIFs can offer good value for money, as no taxes are payable on transfer of funds from individual retirement savings[122] and growth within an RRIF is tax-deferred. In addition, although RRIF funds are taxed on withdrawal, as retirees' incomes are often lower, individuals tend to face a lower rate of marginal tax than they otherwise would.[123]

Despite the relative unpopularity of annuities, they appear to be relatively good value for money: the estimated money's-worth ratio for a 65-year-old male is 98.1.[124]

At the provincial level

Québec's implementation of a voluntary retirement savings plan—a version of the federal pooled plans—aims to improve coverage by lowering member fees, and is likely to be rolled out in other provinces.[125]

The Ontario Retirement Pension Plan (see 'Size of retirement savings' section above) is a similar provincial development, but makes employer contributions mandatory.

2.2.3 Providers

The major providers of pension products are: the large Canadian banks—Royal Bank of Canada, Toronto-Dominion Bank, Bank of Nova Scotia, Bank of Montreal, Canadian Imperial Bank of Commerce; and the life insurance companies—SunLife and the Manufacturers Life Insurance Company.[126] These companies typically offer pension fund services in both the accumulation and decumulation phases.[127]

Relative to other OECD countries, the private pension market in Canada is quite competitive. Looking at the efficiency of Canadian private pensions systems by assessing the total operating costs in relation to the assets managed, the operating costs for pension funds are on average 0.3% of total assets, compared with an average of 0.5 for the other countries studied.[128]

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[120] While the RRSP to RRIF transfer is not necessarily automatic, some institutions will actually roll an RRSP over to an RRIF on 1 January of the year in which an individual turns 72.
[121] Information provided by the Financial Services Commission of Ontario.
[122] RRSPs.
[123] Invesco (2014), 'Registered retirement income funds' (https://www.invesco.ca/publicPortal/ShowDoc?nodePath=/BEA%20Repository/common/library/PDF/tax_planning/TERRIF//eBinary).
[124] Cannon, E. and Tonks, I. (2011), 'Annuity markets: Welfare, Money's worth and Policy implication', Netspar Panel Paper 24 (http://www.bath.ac.uk/management/research/pdf/tonks-cannon-annuity-markets.pdf).
[125] Information provided by the Office of the Superintendent of Financial Institutions.
[126] Information provided by the Financial Institutions Commission, British Columbia.
[127] Information provided by the Canadian Association of Pension Supervisory Authorities.
[128] OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2013-en), p. 201.

2.2.4 Intermediaries

Advisers play an important role in the Canadian post-retirement market,[129] and financial advisers are the most likely source (54%) of advice on financial matters, according to one estimate.[130] Financial advice is often expensive, however, and financial advisers are commission-based, potentially creating conflicts of interest. Pension providers also play a role and tend to be an important source of information on retirement options.

Employers can be unwilling to provide financial advice for fear of being held liable for poor advice,[131] and an individual's main source of advice can be from in-house advisers at banks[132]—direct sales from provider to consumer are therefore quite common. For DC schemes in Canada, the plan administrator is responsible for providing investment information and bearing the fiduciary responsibility.[133] Employers are responsible for making deductions and other administrative tasks, but, as explained below, they can be wary of incurring the significant fiduciary responsibility of the plan administrator. This unwillingness of firms to provide pension-based advice has been a driver of demand for pooled pension plans,[134] which allow the employer to substantially offload fiduciary responsibility by passing it to a separate plan administrator. Indeed, the introduction of these pooled schemes is partly an attempt to increase pension coverage by making it easier for employers to offer pension schemes without incurring fiduciary responsibility.

The provision of online comparison tools for pension products, in either the accumulation or decumulation phase, is limited. For the accumulation phase, individuals are able to compare the interest rates offered by different RRSP funds (see Figure 2.2), but such tables are not interactive.

Figure 2.2 RRSP interest rate comparison

Registered Retirement Savings Plan - Annual

These tables show interest rates paid by banks and other lenders for Registered Retirement Savings Plans (RRSPs). The columns in this table can be sorted by clicking on the bold headings.

Institution	Update	Amount	1 yr	2 yr	3 yr	4 yr	5 yr
ATB Financial	15 AUG	500	1.630	1.800	1.750	2.000	2.200
AcceleRate Financial	15 AUG	500	2.250	2.400	2.500	2.750	2.750
Achieva Financial	15 AUG	1000	2.150	2.250	2.350	2.450	2.600
Airline Financial C.U.	15 AUG	1000	2.210	1.700	2.000	2.150	2.600
Alterna Svgs/Alterna Bk	15 AUG	500	1.400	2.100	1.850	1.900	2.300
Bank of Montreal	15 AUG	1000	1.000	1.150	1.350	1.600	1.950
Bank of Nova Scotia	15 AUG	1000	0.900	1.100	1.250	1.400	1.750
CFF Bank	15 AUG	5000	1.750	1.800	1.950	2.100	2.350
CFF Bank	15 AUG	25000	1.800	1.850	2.000	2.150	2.400
CIBC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Source: Financial post, 'Loans and savings rates tables – registered retirement savings plan' (http://www.financialpost.com/personal-finance/rates/rrsp.html).

[129] Information provided by the CLHIA.
[130] Task force on financial literacy (2010), 'Canadians and their money', December (http://www.financialliteracyincanada.com/pdf/canadians-and-their-money-1-report-eng.pdf), p. 12.
[131] Information provided by the Office of the Superintendent of Financial Institutions.
[132] Information provided by the CLHIA.
[133] Canadian Association of Pension Supervisory Authorities (2014), 'Defined contribution pension plans guideline', 28 March (http://capsa-acor.org/en/init/defined_contributions_plans/DC_Plans_Guideline.pdf).
[134] Pond, R. (2012), 'The precarious balance of fiduciary duty', *Benefits Canada*, 27 April (http://www.benefitscanada.com/pensions/governance-law/the-precarious-balance-of-fiduciary-duty-28137).

CANNEX, a private third-party company,[135] provides financial institutions and brokers with data on financial products such as annuities and RRIFs,[136] but the tool is not aimed at the individual consumer or average retiree.

2.2.5 Taxation structure

The Canadian Pillar II pension system can be described as EET, as contributions and investment earnings are tax-exempt (EE), while withdrawals are taxed (T). In the withdrawal phase, annuities, income drawdown products and lump sums are all taxed as income at the marginal rate. In addition, RRIF payments are subject to a requirement of a minimum withdrawal each year, set on 1 January of that year.[137]

Two other sources of tax assistance are: a) the TFSA, which, as detailed above, enables individuals to earn tax-free investment income and make tax-free withdrawals; and b) the Pension Income Tax Credit, which grants many individuals aged over 65 a C$2,000 (£1,100) tax credit.

There is no inheritance tax in Canada; rather, the estate of the deceased is viewed as a sale. Accordingly, RRSPs and RRIFs are taxable on the death of an individual as if they were income on the individual's terminal tax return,[138] unless the estate is to be inherited by the deceased's spouse or common-law partner.

2.3 Decumulation phase—consumer journey

2.3.1 Sources of retirement income

Besides occupational pensions, the main sources of income are provided by Pillars I and III. The gross replacement rate for an average earner in Canada in 2012 was 45.4%, below the OECD average of 54.4%.[139,140]

With respect to Pillar I, public transfers currently account for a relatively low proportion of income—39% compared with the OECD average of 59%.[141] This comprises old age security (OAS), received by most Canadians over the age of 65,[142] which provides for a maximum monthly payment of C$558.71 (£310).[143,144] Accordingly, Pillar I offers reasonable mitigation of longevity risk.[145] With respect to Pillar III, private pension plans are a crucial element in Canada's pensions system, with a total of C$928bn (£510bn) in assets in 2012.[146]

[135] Pond, R. (2012), 'The precarious balance of fiduciary duty', *Benefits Canada*, 27 April (http://www.benefitscanada.com/pensions/governance-law/the-precarious-balance-of-fiduciary-duty-28137).
[136] CANNEX (https://www.cannex.com/).
[137] Canada Revenue Agency, 'Withholding tax on payments from a registered retirement income fund' (http://www.cra-arc.gc.ca/tx/rgstrd/rrsprrif-reerferr/wthhldng-eng.html).
[138] Canada Revenue Agency, 'Death of a RRIF annuitant', 2 January (http://www.cra-arc.gc.ca/tx/ndvdls/tpcs/rrif-ferr/dth-eng.html).
[139] OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2013-en).
[140] For a low-income individual, replacement rates are higher—80.1%, relative to the OECD average of 71.0%. Source: OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2013-en).
[141] OECD Pensions at a Glance Country highlights Canada.
[142] Subject to meeting certain residency and legal status requirements.
[143] Service Canada, 'Old age security payment amounts' (http://www.servicecanada.gc.ca/eng/services/pensions/oas/payments/index.shtml).
[144] The OAS can be topped up by a guaranteed income supplement of up to C$757.58 (£420) for a single pensioner. Source: Service Canada, 'Old age security payment amounts' (http://www.servicecanada.gc.ca/eng/services/pensions/oas/payments/index.shtml).
[145] Information provided by the Financial Services Commission of Ontario.
[146] Statistics Canada, *Table 378-0117 – Pension satellite account* (http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=3780117&pattern=3780117&searchTypeByValue=1&p2=35).

Private pension plans are also an important source of retirement savings in Canada. Approximately 7 in 10 Canadian family units have private pension plans, with a median pot size of C$116,700 (£64,000).[147] This is reflected by data which shows that private pension assets accounted for 30.1% of assets held by Canadians in 2012.[148]

2.3.2 Decision-making process

In Canada, many individuals on employer pension schemes make decisions about their post-retirement products years before they actually retire. This is because individuals with employer pension plans can typically terminate their membership in the plan and are entitled to transfer their fund to a locked-in RRSP, provided that they are younger than 55.[149]

Yet to the extent that this may suggest that individuals have cause to engage with their pension arrangements further from retirement than in other countries, studies into levels of financial literacy in Canada have revealed areas for potential improvement. One survey revealed that only 51% of Canadians budgeted their personal expenditure, and that while 70% of Canadians were confident that their retirement income would provide for the level of comfort in retirement that they hoped for, only 40% had a good idea of how much money they needed to save to achieve this.[150] Accordingly, Canada is in the process of developing a National Strategy for Financial Literacy that will set out goals for promoting Canadians' financial literacy.[151] Initiatives include Financial Literacy Month as well as a National Conference on Financial Literacy.[152]

2.3.3 Consumer behaviour

On the whole, consumers appear quite risk-averse. In the accumulation phase it is typical for a retiree to remain with the default, low-risk option for their fund, despite funds frequently offering an additional three to eight higher-risk options.[153] One driver of this risk aversion in financial matters is a lack of financial education on the part of the consumer: individuals often feel overwhelmed by the investment decision and do not have a good sense of their own risk tolerance.[154] Employer pension plan members are typically not well educated in investment and savings choices.[155]

A further driver for the choice of low-risk products is the lack of 'safe harbour' (essentially protective) legislation for employers.[156] For DC schemes, to mitigate the risk of being held liable for investment losses, employers will usually opt for low-risk plans to protect themselves from fiduciary responsibility.[157] Furthermore, if an employer contracts out annuity obligations to a life insurance company, the

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[147] Statistics Canada (2012), *Survey of Financial Security* (http://www.statcan.gc.ca/daily-quotidien/140225/dq140225b-eng.htm).
[148] C$2.8tn. Source: Statistics Canada (2012), *Survey of Financial Security* (http://www.statcan.gc.ca/daily-quotidien/140225/dq140225b-eng.htm).
[149] Information provided by the Financial Institutions Commission, British Columbia.
[150] Task Force on Financial Literacy (2010), 'Canadians and their money', December (http://www.financialliteracyincanada.com/pdf/canadians-and-their-money-1-report-eng.pdf), p.12.
[151] Financial Consumer Agency of Canada, 'Toward a national strategy for financial literacy' (http://www.fcac-acfc.gc.ca/Eng/financialLiteracy/financialLiteracyCanada/Pages/home-accueil.aspx).
[152] Financial Consumer Agency of Canada, 'Toward a national strategy for financial literacy' (http://www.fcac-acfc.gc.ca/Eng/financialLiteracy/financialLiteracyCanada/Pages/home-accueil.aspx).
[153] Information provided by the Financial Institutions Commission, British Columbia.
[154] Ibid.
[155] Benefits Canada (2013), '2013 CAP member survey: retirement readiness', 1 November (http://www.benefitscanada.com/pensions/cap/2013-cap-member-survey-retirement-readiness-45720), p. 6.
[156] Information provided by the Financial Institutions Commission, British Columbia.
[157] Ibid.

employer is still liable if the life insurance company is unable to honour the agreement.[158] This puts downward pressure on annuity demand from firms.

There is also a DIY culture in Canada, and perhaps an antipathy towards insurance companies[159]—a sense of self-reliance and individualism is an important cultural norm.[160] Financial products such as an annuity are therefore often seen as unwarranted interference in individuals' freedom at retirement.[161] Annuities are viewed as expensive products and individuals hesitate to lose control of the principal.[162]

While such a DIY culture exists in Canada, it is possible to conflate the effects of this culture with the impact of a lack of financial education and literacy. There is a suggestion that many employees do not understand their employee retirement plans properly.[163] In a recent survey, 51% of plan participants said that they did not seek out specific information before joining their employer's retirement scheme. In one survey, only 28% reported a high-level understanding of longevity risk and 27% a high-level understanding of inflationary risk.[164]

It is possible that a lack of financial literacy explains why pension coverage by employer-based plans is low—the DIY culture may be a manifestation of poor financial literacy. There has been suggestion that auto-enrolment of employees would be beneficial, although this would involve taking responsibilities back from employees, a move that would potentially create tension with the DIY culture to the extent that it exists.[165]

2.4 Regulatory developments

Coverage—in particular ensuring that individuals are covered by pension plans aside from Pillar I—is currently a central issue in the regulatory debate.[166] The proportion of employees covered by an employer plan decreased from 40% in 2001 to 38% in 2011.[167] This decline in coverage has mostly occurred in the private sector—from 28% coverage in 2001 to 24% in 2011.[168] Public sector coverage has remained fairly stable, declining only slightly from 87% in 2001 to 86% in 2011.[169] The introduction of pooled pension plans, as detailed in the 'Products' section, is intended to address some of the coverage issues.

At the provincial level

While the federal government is primarily responsible for the tax regime (the Canada Revenue Agency), the regulation of pensions falls under provincial jurisdiction because pensions are considered property.[170] The supervisory authorities are:

- British Columbia: British Columbia Financial Institutions Commission;

[158] Ibid.
[159] Ibid.
[160] Ibid.
[161] Ibid.
[162] Information provided by the Financial Services Commission of Ontario.
[163] Benefits Canada (2013), '2013 CAP member survey: retirement readiness', 1 November (http://www.benefitscanada.com/pensions/cap/2013-cap-member-survey-retirement-readiness-45720).
[164] Ibid.
[165] Ibid.
[166] Information provided by the Office of the Superintendent of Financial Institutions.
[167] Office of the Superintendent of Financial Institutions, 'Registered pension plan and retirement savings coverage' (http://www.osfi-bsif.gc.ca/Eng/oca-bac/fs-fr/Pages/FS_RPP_2013.aspx).
[168] Ibid.
[169] Ibid.
[170] Information provided by the Financial Institutions Commission, British Columbia.

- Ontario: Financial Services Commission of Ontario;
- Québec: Régie des rentes du Québec.

There have also been some regulatory developments with regard to the locking-in of funds, as detailed above. Some provinces permit a one-time unlocking of LIF funds—under new regulation legislation, Ontario permits the holder of a new lifetime income fund (NLIF) to unlock up to 50% of the total market value of assets that were transferred into the NLIF.[171] The NLIF rules also relax the regulatory requirement for an LIF holder to purchase an annuity at the age of 80.[172]

There is a view that regulatory burdens imposed by the government on employer plans are encouraging employers who would otherwise provide DC schemes to their employees to opt instead for group RRSPs—essentially a collection of individual RRSPs,[173] which involve less regulatory burden.

[171] Financial services commission of Ontario (2012), 'Locked-in accounts', February (http://www.fsco.gov.on.ca/en/pensions/policies/active/Documents/L200-303.pdf).
[172] Financial Services Commission of Ontario (2008), 'Locked-in accounts', May (http://www.fsco.gov.on.ca/fr/pensions/documents/l200-302.pdf).
[173] Information provided by the Financial Services Commission of Ontario.

3 Chile

Glossary of terms

AFP	*Administradores de Fondos de Pensiones*, pension fund administrators
APVC	*Ahorro Previsional Voluntario Colectivo*, collective voluntary pension savings
PAYGO	pay-as-you-go pension system
SCOMP	*Sistema de Consultas y Ofertas de Monto de Pension*, government electronic quotations system
SP	*Superintendencia de Pensiones*, superintendent of pensions
SVS	*Superintendencia de Valores y Seguros*, superintendent of values and insurances
UF	*Unidades de fomento*, annually readjusted unit of measurement

Box 3.1 Key findings

Since introducing a fully funded occupational pension scheme in 1980, Chile has introduced a series of reforms, most recently in 2008. Some of the key findings of the system in Chile are as follows.

- Individuals can switch among six approved pension fund providers during the accumulation period.
- At retirement, consumers can choose among four products:
  - planned withdrawal;
  - lifetime annuity;
  - deferred annuity with a temporary income drawdown;
  - combination of lifetime annuity and planned withdrawal;
- Approximately 57% of retirees are covered by an annuity.
- The regulator provides financial guidance at the accumulation and decumulation phase. During the former, the regulator provides information on each pension provider’s performance and commission charges.
- At the decumulation phase, the regulator has an electronic quotation system that provides the individual with complete and comparable information about all products. This system has encouraged competition in the market for retirement products and has led to a significant fall in the spread of money’s-worth ratios for annuities.
- Financial intermediaries play a limited role in the decision-making process due to the existence of the electronic quotation system. The regulator caps the fees charged by advisers, with the cap on planned withdrawal being lower than that of annuities. The rationale is that an annuity is a one-off purchase, as opposed to a planned withdrawal where the consumer maintains control over the funds.

Source: Oxera.

3.1 Accumulation phase

3.1.1 Structure of defined-contribution schemes

In 1980, Chile switched from a pay-as-you-go (PAYGO) system to a fully funded pensions system run by private pension fund administrators. The previous PAYGO system had been introduced in the 1920s. However, a deteriorating ratio of active contributors to pensioners generated a financing problem by the late 1970s, exacerbated by many individuals evading social security contributions, with those who did contribute largely paying the minimum statutory amount. This is in general attributed to the lack of relationship between an individual's contributions during their working life and the benefits they received on retirement.[174]

The main component of the pension system in Chile is the compulsory occupational pension scheme. This mandates that each worker contributes 10% of their salary, with a maximum cap of UF60 per month (*unidades de fomento*, a unit of measurement that is adjusted annually; UF60 is currently valued at around £1,500).[175] In addition, there are individual voluntary savings and employer-matching contribution schemes.

The pension funds that are part of the compulsory contribution system are managed entirely by the *Administradoras de Fondos de Pensiones* (AFPs, pension fund administrators), which are private financial institutions whose sole function is to manage these types of fund.

In addition, workers may make voluntary contributions to savings products, including voluntary savings accounts managed by, among others, AFPs, mutual fund administrators, investment fund administrators, life insurance companies, and banks.[176] AFPs are regulated by the *Superintendencia de Pensiones* ('SP', Superintendent of Pensions).Companies providing annuities are regulated by the Superintendencia de Valores y Seguros (SVS, Superintendent of Values and Insurances). Jointly, these two institutions regulate the pensions market.

The types of product that AFPs can offer are tightly regulated by the government. Until 2000, AFPs could offer only a single fund: the Type C fund. In 2000 a second fund was created, and since 2002 firms have been allowed to offer five funds, A–E, with differing rates of risk: Fund A being the riskiest and E the least risky.[177] While the fifth, most risky, fund is optional, in practice, all the AFPs offer it alongside the other four, mandatory, options.

The category of people who can be affiliated to an AFP has also been extended over the years to include the self-employed; by 2015, affiliation with an AFP will be obligatory for self-employed individuals.

There are currently six pension fund providers in the market: Capital, Cuprum, Habitat, Modelo, Planvital and Provida. Provida has the highest market share (35% in 2013), followed by Habitat (23%) and Capital (20%). The remaining 22% of the market is divided between the other AFPs.[178] Several (Capital, Cuprum,

[174] Vial Ruiz-Tagle, J. and Castro, F. (1998), 'The Chilean Pension System', OECD Ageing Working Papers, p. 5.
[175] Superintendencia de Pensiones (2010), 'The Chilean Pension System', February, p. 12 (http://www.spensiones.cl/portal/informes/581/articles-8557_recurso_1.pdf). For UF exchange rate, see http://coinmill.com/CLF_USD.html
[176] Ibid.
[177] Superintendencia de Pensiones (2010), 'The Chilean Pension System', February, p.143 (http://www.spensiones.cl/portal/informes/581/articles-8557_recurso_1.pdf).
[178] AFP Modelo and AFP Provida annual accounts, available at https://www.afpmodelo.cl/afp/memoria-anual/ and http://www.provida.cl/empresa/reportes/memoria-anual/index.html.

Modelo and Planvital) are members of large multinational firms such as Metlife or the Generali Group.

When an individual starts working, an affiliation with an AFP is automatically generated. Workers can change their affiliated AFP a maximum of once per month. Transferring one's funds from one AFP to another is equivalent to changing affiliation. Workers can only be affiliated with a single AFP for the obligatory contribution fund, but can have an additional voluntary contribution fund with any AFP.

In 2008, concerns about the low density of contributions[179] led to a series of reforms to improve the coverage of the poverty prevention pillar, increase density of contributions in Pillar II and III, and improve gender equality in the pensions system, among other aspects.

The 2008 reforms made contributions mandatory for a broad group of self-employed workers, and created incentives for contributions in the form of subsidies for the formal hiring of young workers. This is of particular importance because, due to the nature of DC systems, contributions made at an early age have a large impact on the final size of the pension pot (due to the interest accrued in the interim). For this reason, the 2008 reforms introduced a subsidy to part-finance the cost of the contributions to the system for employers hiring individuals aged between 18 and 35. The reforms also established stronger tools for supervising and collecting contributions.[180]

To keep pension fund management commissions down, the 2008 reforms also established *licitación de cartera*, a tender for new affiliates to the system, which awards all new affiliates to the AFP that offers the lowest commissions for a period of two years. This tender has taken place twice so far, in 2009 and 2011. New affiliates must stay with the AFP that won the tender for two years, and are then free to move to another AFP.

The reforms also had a significant impact on Pillar III. Originally, tax benefits for voluntary savings were available only for a limited segment of the population; the 2008 reforms introduced *Ahorro Previsional Voluntario Colectivo* (APVC, collective voluntary pension savings). This established a scheme providing tax incentives to companies that offered savings plans for employees and provided employer matching.

3.1.2 Size of retirement savings

According to the SP's Statistical Bulletin, in May 2014 (the latest month for which figures are available), the average contribution to AFP pension funds was CLP63,837.60 (about £66).[181]

Early retirement is available to those whose pension pots can finance an annuity of 70% of their average earnings over the previous ten years. Early retirement is

[179] Before the 2008 reforms, only about 62% of the labour force, and about 68% of those employed, actively contributed. See Shelton, A.M. (2012), 'Chile's Pension System: Background in Brief', CRS Report for Congress.
[180] Superintendencia de Pensiones (2010), 'The Chilean Pension System', February, pp. 10–14 (http://www.spensiones.cl/portal/informes/581/articles-8557_recurso_1.pdf).
[181] Calculations based on SP data on average taxable income of affiliates by AFP, and the 10% mandatory contribution.

common—as of 2002, approximately 60% of pensioners had chosen early retirement.[182]

Importantly, the 2008 reforms strengthened the safety net for individuals who are or were unable to contribute or whose pension funds were too small to afford a minimum monthly income (equal to approximately £80 per month). The 2008 reforms replaced the former system (in which risk of poverty was assumed by two basic programmes, the minimum state-guaranteed basic pension and social assistance pensions) with a single, nationwide scheme guaranteeing access to a basic solidarity pension for all individuals from the least affluent 60% of the population,[183] provided that they had lived in Chile for a minimum of 20 years, and for four of the last five years. This new system increased coverage, raising the income provided by the pension and reducing the complexity of the system for pensioners. As of December 2010, 56% of beneficiaries of the new system had not been covered in the former system. This might be because they were not affiliated with it, or were affiliated with it but the amount of the pension was low compared with the parameters determined by the pensions reform.[184]

3.2 Decumulation phase—the retirement income market

3.2.1 Overview of the decumulation phase

Four types of retirement pension plan are available to retirees.[185]

- ***Retiro Programado* (planned withdrawal)**: the pension paid by the AFP, with the pension amount calculated and actualised every year based on the balance of the individual's fund, the fund's profitability, life expectancy, the number of beneficiaries, and the current rate of calculation for the planned withdrawal. Unlike an annuity, the monthly income is not constant, and in fact decreases over time. Although the AFP takes steps to reduce longevity risk via its calculations, this risk is not entirely eliminated.

- ***Renta Vitalicia Inmediata* (immediate annuities)**: this is carried out by a life insurance company, which pays a monthly income for the rest of the life of the individual. The AFP transfers the retirement fund of the individual to the company (meaning that the individual no longer has ownership). For this reason, once the Renta Vitalicia Inmediata is chosen, it is no longer possible to change pension type. This plan can only be chosen if the pension fund is greater or equal to the minimum pension provided by the state.

- ***Renta Temporal con RV Diferida* (temporary income with deferred annuities)**: between the date when this plan is chosen and when the deferred annuities start, the retiree receives a monthly sum financed by the funds that are retained for this purpose in the AFP account. The affiliate retains ownership over (and assumes the risk associated with) only the part that remains with the AFP, but does not assume longevity risk nor financial risk for the period covered by the annuity.

[182] James, E., Martinez, G. and Iglesias, A. (2006), 'The Payout Stage in Chile: Who Annuitizes and Why?', *Journal of Pension Economics and Finance*, **5**:2, pp. 121–54.
[183] At the moment of introduction of the reform, the scheme covered only the least affluent 40%; this number has increased gradually, reaching the target of 60% as of July 2011. See Superintendencia de Pensiones (2010), 'The Chilean Pension System', February.
[184] Quintanilla, X. (2012), 'Integral elements of the pension system/Elementos Solidarios del Sistema de Pensiones (original)', *Serie Documentos de Trabajo* (http://www.safp.cl/portal/informes/581/articles-8617_pdf.pdf).
[185] See http://www.safp.cl/portal/orientacion/580/w3-article-3581.html.

- ***RV Inmediata con Retiro Programado* (immediate annuities with planned withdrawal)**: the funds in the AFP account are divided and simultaneously finance an annuity and a planned withdrawal scheme.

The retiree will choose which scheme to opt for at the time of retirement. While it is always possible to switch from planned withdrawal to an annuity, the decision to purchase an annuity, once made, is irrevocable.

3.2.2 Products

As at June 2009, approximately 57% of all retirees were covered by an annuity, with 40% in planned withdrawal (the remaining 3% mostly comprised those who were covered by the previous pension system).

Annuities are by necessity inflation-linked, avoiding inflation risk, but possibly causing worse value for money.[186]

3.2.3 Providers

The main providers of annuities are *Companias de Seguros de Vida* (life insurance companies), which provide immediate and deferred annuities. There are currently 29 registered life insurance companies, of which 15 provide annuities, with these annuities being automatically and necessarily inflation-linked.[187] All companies that provide annuities must be registered with the SVS, the regulator in charge of financial institutions, and all must be legally registered in Chile. Foreign insurance companies cannot offer products in Chile, either directly or through intermediaries. All insurance companies must be *Sociedad Anónima* (roughly equivalent to a public limited company) with a minimum capital requirement of UF90,000 (£1.6m). There is also a gearing ratio limit.[188]

If the individual does not choose to purchase an annuity, the AFP itself provides a planned withdrawal, and calculates the monthly amounts that can be withdrawn (including an annual inflation adjustment). For those individuals who choose temporary planned withdrawal with a deferred annuity, the monthly income from the planned withdrawal cannot exceed 200%, or be less than 100%, of the amount of the deferred annuity.[189]

The cost of fund administration is limited to 1.25% of assets a year (annual management charge, AMC) for programmed withdrawal. The cost of buying an annuity is limited to 2.5% of assets (a one-off payment), although additional costs of administering the annuity will be included within the annuity rate.[190]

3.2.4 Intermediaries

The regulator provides financial advice to members during the accumulation period, with information on AFPs' performance available on the regulator's website. About five years before retirement age, individuals also start to receive information on the return they can expect from AFPs and insurance companies.

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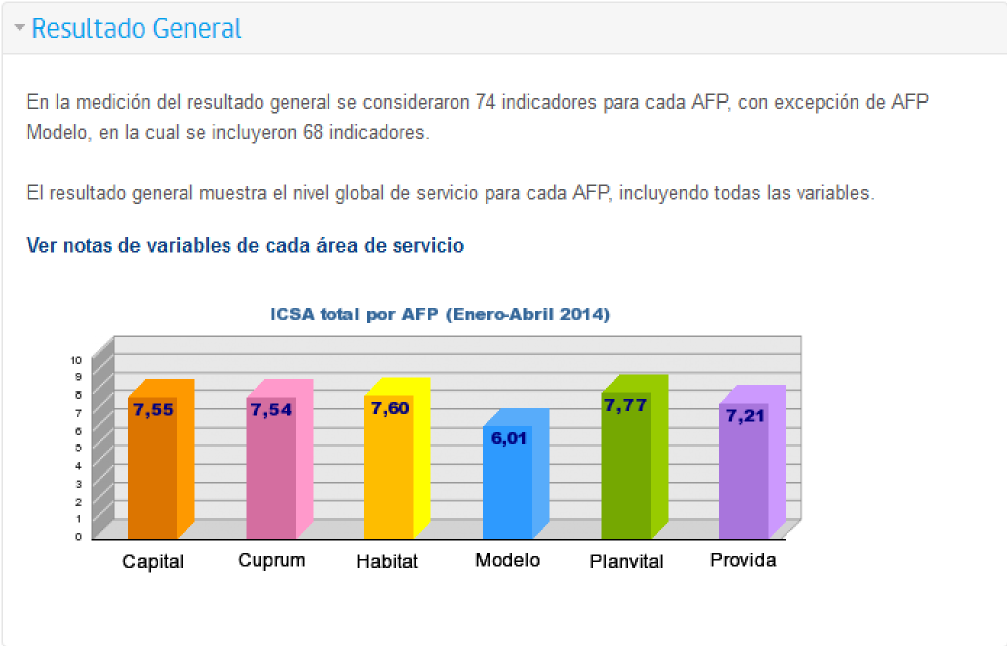
[186] Rusconi, R. (2008), 'National Annuity Markets Features and Implications', OECD Working Papers on Insurance and Private Pensions.
[187] See http://www.svs.cl/portal/principal/605/w3-channel.html.
[188] Summary of legal rules governing insurance companies, available at http://www.svs.cl/portal/principal/605/articles-793_doc_pdf.pdf; Superintendencia valores y seguros, 'Decree Law No. Force 251 DE 1931 / Decreto con fuerza de ley No. 251 DE 1931 (original)' (http://www.svs.cl/portal/principal/605/articles-792_doc_pdf.pdf).
[189] See http://www.cuprum.cl/webpublico/Retiro_Programado/RentaTemporal.aspx.
[190] Asociacion AFP (2008), 'Research Series', No. 65 (http://aafp.cl/wp-content/uploads/2012/09/Modalidades08.pdf).

Therefore, there is relatively little scope for financial intermediaries during the accumulation period.

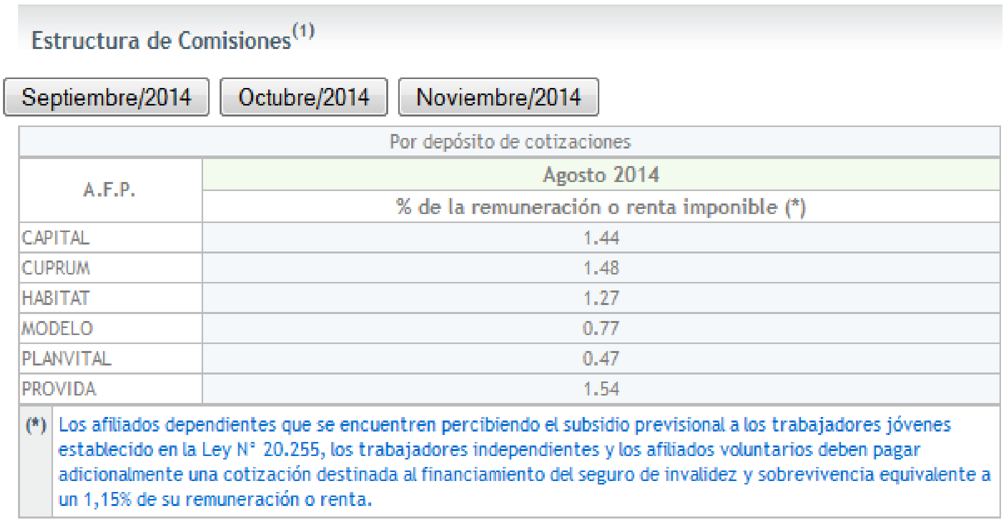
The Superintendencia de Pensiones' website provides extensive information to consumers to compare AFPs and this information is continuously updated. There are comparisons of service quality assessments, the financial performance of individual providers and commission charges. Moreover, there is guidance as to which AFPs operate in the different regions and where they have agencies. The figures below illustrate how this information is presented.

Figure 3.1 Comparison of service quality of providers



Source: Superintendencia de Pensiones, 'Compare AFP' (http://www.safp.cl/portal/institucional/578/w3-propertyvalue-6324.html).

Figure 3.2 Comparison of commission charges



Estructura de Comisiones(1)

Septiembre/2014 | Octubre/2014 | Noviembre/2014

A.F.P.	Por depósito de cotizaciones — Agosto 2014 — % de la remuneración o renta imponible (*)
CAPITAL	1.44
CUPRUM	1.48
HABITAT	1.27
MODELO	0.77
PLANVITAL	0.47
PROVIDA	1.54

(*) Los afiliados dependientes que se encuentren percibiendo el subsidio previsional a los trabajadores jóvenes establecido en la Ley N° 20.255, los trabajadores independientes y los afiliados voluntarios deben pagar adicionalmente una cotización destinada al financiamiento del seguro de invalidez y sobrevivencia equivalente a un 1,15% de su remuneración o renta.

Source: Superintendencia de Pensiones, 'Fee structure / Esstructura de Comisiones (original)' (http://www.safp.cl/safpstats/stats/apps/estcom/estcom.php).

Figure 3.3 Comparison of performance of fund administrators

RENTABILIDAD REAL DEL FONDO TIPO A DEFLACTADA POR LA UF (1)
Julio de 2014 - En porcentaje

A.F.P.	Del Período		Anual	
	Jul 2014	Acumulado Ene 2014-Jul 2014	Últimos 12 meses Ago 2013-Jul 2014	Promedio Anual Período 27 Sep 2002 - Jul 2014
CAPITAL	3,46%	9,19%	13,06%	7,18%
CUPRUM	3,48%	9,55%	13,67%	7,20%
HABITAT	3,39%	9,22%	12,98%	7,27%
MODELO	3,33%	9,04%	13,56%	
PLANVITAL	3,30%	9,19%	12,99%	6,91%
PROVIDA	3,40%	9,37%	13,03%	7,20%
SISTEMA	3,43%	9,33%	13,20%	7,21%

Source: Superintendencia de Pensiones, 'Real return fund pension / Rentabilidad real del fondo tipo a deflactada por la uf (original)' (http://www.safp.cl/safpstats/stats/rentabilidad/getRentab.php?tiprent=FP).

In 2004, the government introduced a system of electronic quotations designed to facilitate comparison of pension products. Called SCOMP, the system aims to provide the individual with complete and comparable information about annuity and planned withdrawal offers, via a platform that connects AFPs and life insurance companies. Individuals with a sufficiently large pension fund, whether they want to purchase an annuity or opt for planned withdrawal, have to go through SCOMP and must select one of the best three quotes offered.[191]

The system shows each company's risk classification and the size of the annuity or monthly pension they can offer the individual, which is net of any fees charged by the company, ensuring ease of comparison. Insurance companies are only able to view basic individual characteristics, a feature intended to discourage discrimination between individuals.[192]

In its 2013 report on SCOMP, the SP revealed that 36.9% of new pensioners passed through the SCOMP system; the remaining 63.1% did not qualify for an annuity and obtained their pension directly via planned withdrawal from their AFP.[193]

The significant spread of money's-worth ratios for annuities in Chile has contracted over time. This may partly reflect a change in the behaviour of market participants in response to legislation,[194] but is mostly due to the SCOMP system reducing inappropriate behaviour by financial intermediaries such as overcharging)[195] and improving competition between insurance companies and AFPs.[196] This is because the system considerably reduces the role and therefore influence of individual brokers in the consumer's decision. Also, after becoming effective in 2004, the average number of quotations increased and there was stronger price competition because the consumer's final selection was closely

[191]See http://www.scomp.cl/que-es.
[192] Information provided by the Superintendencia de Pensiones (Chilean pensions supervisor).
[193] Superintendencia de Pensiones (2013), 'Informe Sistema de Consultas y Ofertas de Montos de Pensión (SCOMP) (original) / Query and report system offers pension amounts', December (http://www.safp.cl/portal/informes/581/articles-10502_recurso_1.pdf).
[194] As suggested in Rusconi, R. (2008), 'National Annuity Markets Features and Implications', OECD Working Papers on Insurance and Private Pensions.
[195] Rusconi, R. (2008), 'National Annuity Markets Features and Implications', OECD Working Papers on Insurance and Private Pensions, p. 27. See also Rocha, R. and Thorburn, C. (2006), 'Developing annuities markets: the experience of Chile', Directions in Development, Finance, The World Bank.
[196] Ibid., p. 27.

correlated to the ranking of the quotes. Moreover, average commissions fell to 2.2%.

Financial intermediaries (*asesoras previsionales*) offer advice on which retirement products to purchase. The role of financial advisers is significantly diminished due to the existence of the SCOMP system. The regulator caps the fees charged, with the cap on planned withdrawal being lower than that of annuities. This is because financial advisers receive a fee only once when the consumer purchases an annuity, whereas, with an income drawdown, the customer may return years later for a subsequent purchase of an annuity. The discrepancy in fees is likely to have created incentives to recommend annuities, although this hypothesis has not been tested.[197] Regulation limits the fees of 'pension consultants' (advisers) to no more than 2% of assets of UF60 (approximately £1,800).

3.2.5 Taxation structure

The mandatory contribution comes from pre-tax income and is tax-exempt until withdrawal, at which point the contribution and the accrued interest are both subject to taxation. For voluntary contributions, the individual can choose whether to contribute from pre-tax income (in which case, it is subject to tax upon withdrawal) or post-tax income (in which case, it is tax-exempt upon withdrawal).

Annuities and income drawdown are not treated differently. Benefits in the form of income are part of the base *Imponible del impuesto* (i.e. the income is taxable). Benefits in the form of capital are also taxable, with some caveats (reductions in the tax rate if certain conditions are met, etc.) The tax rate applied to pensions is currently 20%.[198]

Estate tax is progressive, with a maximum rate of 25%. If a significant amount of the estate is bequeathed to the surviving spouse, when the spouse passes that on to their children, it is taxed again.

3.3 Decumulation phase—consumer journey

3.3.1 Sources of retirement income

The state pension is means-tested and equal to CLP82,058 (£86) per month (indexed). Individuals are entitled to this basic solidarity pension if they have not paid into the system (e.g. because they worked in the informal sector). Otherwise, if the retiree has not contributed enough for the pension to equal a set minimum (CLP255,000 (£153) in June 2011, wage-indexed thereafter), the state provides a pension solidarity complement.[199]

As Chile's pension system is fully funded, individual savings constitute almost the entirety of the system. The size of the (non-contributive) Pillar I is relatively small, as is the degree of employer-matching within Pillar III.

For income drawdown products, the account balance is held in one of the three lower-risk funds (C–E) in order to avoid risk-taking that may result in premature account exhaustion. However, while this system reduces longevity risk, it does not entirely eliminate it: in the case of negative market outcomes that reduce the

[197] Information provided by the Superintendencia de Pensiones (Chilean pensions supervisor).
[198] http://www.sii.cl/aprenda_sobre_impuestos/impuestos/imp_directos.htm.
[199] http://www.spensiones.cl/portal/orientacion/580/w3-article-5784.html.

value of the fund, or unexpected longevity, it is still possible for the individual to run out of funds and have to fall back on the state pension.

3.3.2 Decision-making process

The retiree decides which decumulation product to purchase (or whether to opt for planned withdrawal) on retirement. Approximately five years before the official retirement age, they start to receive information from insurance companies and their AFP about the level of return their products can provide.

Financial advice on which retirement plan to choose or which type of retirement product to purchase is provided by the AFP, the SP and the SVS, as well as independent financial institutions. The Chilean regulator supplies consumers with quarterly reports comparing fund cost and performance, in an attempt to improve consumer financial literacy and facilitate access to information; however, it is reported that only about half of the individuals read them.[200]

3.3.3 Consumer behaviour

A large number of consumers seem to opt for security (i.e. annuities). As at June 2009, approximately 57% of retirees chose life annuities, with 40% opting for planned withdrawal (the remaining 3% mostly comprised those covered by the previous pension system).[201]

Temporary planned drawdown with deferred annuity is popular in Chile, which may indicate that individuals place a high value on present consumption relative to future consumption. The temporary planned drawdown monthly income can be, at most, 200% of the amount of the annuity; this option is mainly intended for individuals who still have high expenses at retirement (e.g. because they still have a mortgage or are paying off their children's college fees).

Furthermore, there is evidence of fairly sophisticated understanding of risk in the Chilean pension market,[202] which could contribute to a higher number of individuals choosing annuities.

There is some correlation between the size of individuals' pension pots at retirement and the retirement plan that is chosen. Those with small pension pots, as noted, are unable to access SCOMP and therefore cannot opt for an annuity. However, some individuals with very large pension funds also choose planned withdrawal, possibly because they already have assets that protect them from longevity risk, and thus have no need for an annuity.[203]

3.4 Regulatory developments

The pensions market in Chile, especially pension funds, was initially fairly tightly controlled, but has tended towards liberalisation over time—for example, before 2000, AFPs could offer only one type of fund, but are now able to offer five funds, differentiated by risk.

Regulation has been modified to facilitate consumer switching between AFPs, with the understanding that this should lead to competitive fees among AFPs.

[200] Krasnokutskaya, E. and Todd, P. (2009), 'Investor behavior and fund performance under a privatized retirement accounts system: evidence from Chile', University of Michigan Retirement Research Center Working Paper WP2009-209.
[201] http://www.safp.cl/portal/informes/581/articles-8557_recurso_1.pdf
[202] Rusconi, R. (2008), 'National Annuity Markets Features and Implications', OECD Working Papers on Insurance and Private Pensions.
[203] Information provided by the Superintendencia de Pensiones (Chilean pensions supervisor).

Furthermore, in the past, the regulator took steps to make it as easy as possible for individuals to compare rates and switch between pension funds. However, there was some debate over whether individuals truly made use of these services, as fees among AFPs remained quite high.[204] This led to the tender for new affiliates being introduced in the 2008 reforms, to stimulate price competition among AFPs.

Arguably, one of the most important regulatory developments from a competition perspective has been the introduction of the SCOMP system. Larraín and Morales (2011) found that it had been effective in increasing price competition, and that price dispersion decreased following its introduction, suggesting a reduction in information asymmetry.[205]

Until the 2008 reforms, by law, financial intermediaries could charge a commission only to those customers that chose to purchase an annuity, creating definite incentives for pension advisers to recommend these. (However, the SP does monitor the advice provided by these financial institutions, to ensure that consumers are not being misinformed.) Since 2008, pension advisers have been able to charge a commission for those customers who choose planned withdrawal. The proportion of pensioners choosing this plan has increased since, but whether this is truly attributable to the change in regulation is not yet clear.[206]

As noted previously, the 2008 reforms also took steps to increase the coverage and density of contributions, and to improve competition in both the accumulation phase (via the tender for affiliates) and the decumulation phase (via the electronic quotation system).

Whether the most recent round of reforms has been successful in increasing coverage rates will remain important for the near future. Additionally, it remains to be seen whether the electronic quotation system will be effective at reducing price ranges in the annuities market.

[204] See, for example, Shelton, A.M. (2012), 'Chile's Pension System: Background in Brief', CRS Report for Congress.
[205] Larraín, G. and Morales, M. (2011), 'The Chilean Electronic Market for Annuities (SCOMP): Reducing Information Asymmetries and Improving Competition', Working Paper No. 5 (http://www.udp.cl/descargas/facultades_carreras/economia/pdf/documentos_investigacion/wp05_morales_larrain.pdf).
[206] Information provided by the Superintendencia de Pensiones (Chilean pensions supervisor).

4 Denmark

Glossary of terms

ATP	Arbejdsmarkedets Tillaegspension, a large-scale DC scheme
AMB	Arbejdsmarkedsbidrag, gross tax on income
Danish FSA	Danish Financial Supervisory Authority
DIA	Danish Insurance Association

Box 4.1 Key findings

The Danish pension system is considered to be robust, delivering good benefits in a sustainable way, and operating with a high level of integrity. Some of its main features are as follows.

- Occupational DC schemes are designed along the lines of civil service DB schemes, and set up by collective agreements between social partners. Individuals have no choice on occupational pension schemes.
- Consumers decide among three options for where to invest their pension pot during the accumulation phase:
  - lifetime annuities—contributions are fully tax-deductible;
  - term annuities—contributions are tax-exempt for the first £5,500;
  - lump sum—contribution limit of £3,000 a year. The contribution is not tax-deductible, which acts as a strong deterrent (with low uptake).
- Approximately 52% of payments go into lifetime annuities, most likely owing to the regulatory and taxation structure.
- The high demand for term life annuities (46%) points towards consumer demand for income drawdown-type solutions.
- There have been several successful initiatives to improve financial literacy and disclosure. Advice and information websites run by the government and by pension companies provide simple and comprehensive material on pensions, and offer advice on how best to manage pension funds. Their success is reflected in high customer satisfaction and financial literacy rates. Leading this attempt to provide information are insurance and pension providers.

Source: Oxera.

4.1 Accumulation phase

4.1.1 Structure of defined-contribution schemes

There are two types of occupational pension schemes in Denmark:

- *Arbejdsmarkedets Tillaegspension* (ATP), a large-scale DC scheme based on mandatory contributions. This supplementary pension covers around 90% of all Danish people of working age.[207] ATP is a non-profit organisation that

[207] Jørgensen, M. (2008), 'The Danish contributions to pensions / Danskernes Indbetalinger Til Pension (original)', SFI – Det Nationale Forskningscenter for Velfærd,(http://www.sfi.dk/Files/Filer/SFI/Pdf/Rapporter/2008/0811-Pension.pdf).

caters for all Danish employees who work more than nine hours a week. These employees must, by law, pay into the ATP fund on a monthly basis. The resulting pension makes up a small proportion of the final total pension, but is important for anyone receiving a low state or occupational pension. The ATP pension fund is currently over DKK600bn (approximately £64bn);[208]

- privately managed mandatory DC schemes, designed along the lines of civil service DB schemes,[209] and set up by collective agreements between social partners.[210] As at 2008, 93% of workers between the age of 30 and 60 were covered by this type of supplementary pension under an occupational scheme.[211]

DB schemes are now extremely rare in Denmark, with the only such schemes covering state civil servants and employees in local and regional authorities.[212]

There are two broad categories of occupational pension schemes in Denmark:

- one established between trade unions and employers for specific sets of workers—for example, the company, Industriens Pension, covers the pensions of 400,000 industry workers in 9,000 businesses;[213]
- the other type is established by an individual firm. In this case, a board of company representatives and workers agree the basis of the scheme, which is then delivered by a pension or insurance company. The general trend is away from firm-specific pension schemes, with most employers favouring industry-wide collective agreements.

Outside of the occupational schemes, there is a third pillar of private pension provision, although this market is far smaller than that for occupational schemes. In 2012, 87% of total payments into pension schemes were to Pillar II schemes, and only 13% were to Pillar III schemes.[214]

4.1.2 Size of retirement savings

Contributions to occupational pension schemes are determined by the collective bargaining process. They typically range between 9% and 17% of gross wages, with the average in 2012 being 11%.[215] Employers usually contribute two-thirds towards the pension scheme.[216] These rates apply both to the occupational schemes and the ATP.[217]

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[208] ATP Group (http://www.atp.dk/X5/wps/wcm/connect/atp/atp.dk/om/omatp/investeringer/forside_investering.htm#.U9jKAkyCOSN).
[209] Information provided by the Danish Financial Supervisory Authority.
[210] Jørgensen, M. (2008), 'The Danish contributions to pensions / Danskernes Indbetalinger Til Pension (original)', SFI – Det Nationale Forskningscenter for Velfærd, p. 28 (http://www.sfi.dk/Files/Filer/SFI/Pdf/Rapporter/2008/0811-Pension.pdf).
[211] Guardiancich, I. (2010), 'Denmark: Current pension system: first assessment of reform outcomes and output', European Social Observatory.
[212] Jørgensen, M. (2008), 'The Danish contributions to pensions / Danskernes Indbetalinger Til Pension (original)', SFI – Det Nationale Forskningscenter for Velfærd,(http://www.sfi.dk/Files/Filer/SFI/Pdf/Rapporter/2008/0811-Pension.pdf), p. 30.
[213] Industriens Pension (www.industrienspension.dk).
[214] Forsikring og pension (http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/indbetalinger/Documents/Pensionsindbetalinger.xls).
[215] Forsikring og pension, 'Gender and pension / Køn og pension (original)' (http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/analyser/Sider/koen_og_pension.aspx).
[216] Guardiancich, I. (2010), 'Denmark: Current pension system: first assessment of reform outcomes and output', European Social Observatory and information provided by the Danish Financial Supervisory Authority.
[217] Forsikring og pension, 'Tax for citizens / Skat for borgere (original)' (www.skat.dk).

The average pension pot for people aged 60 differs depending on whether they work in the public or private sector. For workers aged 60 in the public sector, the average pension pot in 2013 was DKK1.7m (about £180,000). For workers aged 60 in the private sector, the average pension pot in 2013 was DKK1.4m (about £150,000).[218] These pension pots are large relative to the average in other countries in this study.

A considerable amount of these funds was invested in Pillar II schemes, and a comparatively small amount in Pillar III schemes. On average, 1.5% of income was paid into Pillar III schemes, while 9.7% of income was paid into Pillar II schemes.[219]

4.2 Decumulation phase—the retirement income market

4.2.1 Overview of the decumulation phase

Denmark has high levels of lifetime pension income across the income distribution relative to the other countries studied. This is due to the combined state and mandatory DC pension systems.

- Pillar I plays a significant role in providing retirement income for lower-income retirees, with the OECD estimating that the state pension makes up an estimated 68% of the income of low-income retirees, and 31% of the income of those on average earnings.[220]
- Occupational pension schemes provide a significant part of retirement income for wide parts of the population and see a very high rate of annuitisation, because of both regulatory requirements and tax incentives. Within Pillar II, the availability of different retirement income options is in general restricted, and depends on the specifics of the collectively bargained pension fund agreement.

4.2.2 Products

The main products available are deferred life annuities, term annuities and lump-sum payments. Regulation introduced in 2013 limited the availability of lump-sum payments (explained further below), which resulted in an increase in payments towards deferred annuities.

Table 4.1 Payments into pension schemes by product type

	2012	2013[1]
Life annuities	48%	52%
Term annuities	36%	46%
Lump-sum payments (pre-2013)	16%	0%
Lump-sum payments (post-2013)	n/a	2%

Notes: [1] Provisional figures.

Source: Forsikring og pension (http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/indbetalinger/Documents/Pensionsindbetalinger_beloeb.xls).

[218] Forsikring og pension, 'Pension wealth for 60 year olds / Pensionsformuer for 60-årige (original)' (http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/formuer/Sider/Pensionsformueriarbejdsgiveradministreredeogprivattegnedeordninger(fordeltpaaansaetelsesforhold).aspx).

[219] Ibid.

[220] OECD Pensions database, percentage gross replacement ratio from state pension for person on half average earnings.

In occupational plans, the choices available vary by fund. Some funds are flexible and allow lump sums, term annuities and life annuities; others may only allow life annuities. These life annuities can be unit-linked policies or offer guaranteed benefits together with performance-based bonuses. Term annuities typically take the form of life expectancy phased withdrawals. The withdrawal amount takes into account the account holder's and spouse's life expectancy (in case of joint policies), updated annually.[221]

The ATP provides deferred life annuities, including guaranteed minimum benefits and annual performance-based bonuses. Annual contributions to the scheme are converted into annuities using long-term market interest rates and forward-looking life tables.

4.2.3 Providers

Occupational schemes are often negotiated by employers and trade associations, and managed by a board and a management team. Both employer and employee representatives sit on a fund's board, with employees often holding the majority of seats.[222] There is also a commercial market of pension providers, with prominent providers being Danica Pension and PFA Pension. Banks are not allowed to provide pension products themselves, but can and do own pension companies competing in the market. While, in general, insurance companies operate on a for-profit basis, pension funds are usually mutual not-for-profit organisations.[223]

The assets invested by the Pillar II and 3 companies in 2012 came to DKK2,250bn (£242bn), which was invested in property, shares, bonds, and other investments.[224] Concentration in the market for annuities and pensions has traditionally been high, although individual market shares have changed significantly in the last 20 years, indicating contestability in the market. The introduction of new providers to the market has meant that the share of the top 5 companies fell from 70% of total premiums in 1995 to 57% in 2012.[225] In total, there are 34 firms in the market, with the firms outside the top 5 catering mostly for specific occupational groups, such as teachers (Lærernes Pension), nurses (Sygeplejersker) and lawyers and economists (Jurister og *Økonomer*). These smaller firms control small shares (~0.01% to ~5%) of the market.

Table 4.2 Pension company market share, 2012

	%
PFA Pension	17.33
Danica Pension	13.41
Nordea Liv A/S	11.25
Pension Danmark A/S	8.58
Sampension KP	6.31

Source: Forsikring og pension, 'Pension funds – market shares / Pensionsselskaber – Markedsandele (original)'

[221] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[222] Guardiancich, I. (2010), 'Denmark: Current pension system: first assessment of reform outcomes and output', European Social Observatory.
[223] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[224] Forsikring og pension, 'Pension industry assets / Aktiver for pensionsbranchen (original)' (http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/branchetal/Sider/Aktiverforpensionsbranchen.aspx).
[225] Forsikring og pension, 'Pension funds – market shares / Pensionsselskaber – Markedsandele (original)' (http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/markedsandele/Sider/Pensionsselskaber-markedsandelse.aspx).

(http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/markedsandele/Sider/Pensionsselskaber-markedsandelse.aspx).

Typically, competition does not take place at the level of the individual worker; rather, insurance companies and multi-employer pension funds compete for mandates by individual firms.

4.2.4 Intermediaries

In occupational pension schemes, access to employer-chosen independent advisers is provided at no additional cost, and some companies run seminars for their employees when they approach retirement. These independent advisers are not allowed to receive commission payments from product providers.

The Danish prohibition on receiving commissions applies to all insurance brokers, who are expected to provide objective and independent advice. The Danish FSA considers this to be a positive policy, as it has reduced conflicts of interest, improved transparency of advisers' remuneration, and established a clearer link between remuneration and performance.[226]

In Pillar III, non-life and life insurance policies to individuals are mainly sold through tied agents and direct in-house sales channels. Tied agents enter into explicit agreements with insurance companies and are therefore not expected to offer objective advice; hence, commissions are not banned for their business. However, they are required to inform the customer that they are tied to and paid by a specific insurance company. On request, they also have to disclose details about their remuneration.[227]

4.2.5 Taxation structure

In Denmark, the taxation of pension savings in both the accumulation and the decumulation phase depends on the type of retirement product purchased.

Within Pillars II and III there are incentives to save, as people can make tax-deductible contributions to their pension savings plans. The extent of deductibility depends on the product, in general favouring annuity products and discouraging lump-sum payments.[228]

Table 4.3 Taxation rules for types of pension plan, 2014

	Life annuities	Term annuities	Lump sum (pre-2013)	Lump sum (post-2013)
Contribution limit (a year)	Unlimited	DKK50,900 (£5,500)	n/a	DKK28,100 (£3,000)
Tax on contributions	Tax-deductible	Tax-deductible	n/a	Not tax-deductible
Tax on withdrawals	Liable to personal income tax	Liable to personal income tax	40% tax	Not liable to tax

Source: PFA Pension, 'How do you want your pension paid? / Hvordan vil du have din pension udbetalt? (original)' (http://www.pfa.dk/private/viden%20om%20din%20pension/hvordan%20vil%20du%20have%20din%20pension%20udbetalt/).

[226] Forsikring og pension, 'Pension funds – market shares / Pensionsselskaber – Markedsandele (original)' (http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/markedsandele/Sider/Pensionsselskaber-markedsandelse.aspx).
[227] Danish Financial Supervisory Authority (2011), 'Response from the Danish FSA regarding the consultation on the Review of the Insurance Mediation Directive (IMD)', 2 March (https://www.finanstilsynet.dk/~/media/temaer/2011/responsefromthedanishfsa-imd.ashx).
[228] Information provided by the Danish Financial Supervisory Authority.

Until 2013, it was possible to take a pension as a tax-deductible lump sum (*kapitalpension*), which carried a 40% charge. From January 2013, the lump sum was replaced by a new, non-tax-deductible scheme (*aldersopsparing*). Anyone with the original scheme was able to transfer their funds to the new scheme.[229] Payments are made after tax has been paid, but no tax is levied on withdrawal of the funds upon retirement. Furthermore, there is a yearly tax of 15% (2014) on interest and dividends during the accumulation phase.

Inheritance tax is payable on the estate of a deceased individual. While the first DKK268,900 (£28,900) is tax-free, thereafter a estate tax of 15% is levied on the part of the estate inherited by the relations closest to the deceased: their children and descendants, stepchildren and descendants, parents and cohabitants for the two years prior to death. For other individuals, a further 25% tax applies, taking the effective rate of tax to 36.24%.[230]

4.2.6 Contributions

There is a gross tax of 8% on all income (*Arbejdsmarkedsbidrag*, AMB). Contributions to pension plans are not exempt from this. After the AMB has been deducted, all contributions to occupational or personal pension plans are tax-deductible. The extent of deductibility depends on the type of annuity product that is being saved for. For lifetime annuities, all contributions are fully tax-deductible, without limit. For term annuities, the annual limit on tax-deductible contributions is DKK50,900 (£5,500).

4.2.7 Investment earnings

Interest earnings are taxed at a pension income tax rate of 15.3% during the accumulation phase. The pension fund deducts these taxes directly.

4.2.8 Withdrawals

For lump-sum withdrawals, the tax rate was 40% under the *Kapitalpension*. The new lump-sum system (*Aldersopsparing*) has no tax on withdrawing the lump sum. However, contributions are not tax-deductible, which may make the system unattractive in terms of tax treatment (if a high rate of marginal taxation applies).[231]

By contrast, annuity income is liable to personal income tax. All term annuities have a fixed term of 10–25 years and are taxed as personal income. In the case of death, 40% of the holder’s balance or annuity payments are withheld as tax. These payments are not counted as ordinary income for the heirs or beneficiaries. Withdrawals before reaching the statutory retirement age are penalised with a 60% tax. [232]

4.3 Decumulation phase—consumer journey

4.3.1 Sources of retirement income

In addition to occupational schemes, pensioners receive income from the state pension (*folkepension*) in the form of a flat-rate state pension (DKK5,908 per

[229] Danske Bank, ‘Change of capital / Ændring af kapitalpension (original)’ (http://www.danskebank.dk/da-dk/Privat/Pension/Raadgivning/Pages/skattereform-kapitalpension.aspx).
[230] PricewaterhouseCoopers, ‘Denmark Individual – other taxes’ (http://taxsummaries.pwc.com/uk/taxsummaries/wwts.nsf/ID/JDCN-89HS76).
[231] Forsikring og pension, ‘Tax for citizens / Skat for borgere (original)’ (www.skat.dk).
[232] Forsikring og pension, ‘Tax and pensions / Skat og pension (original)’ (http://www.forsikringogpension.dk/pension/pensionsabc/skat-pension/Sider/skat-pension.aspx).

month—about £630), as well as a means-tested benefit (DKK6,100 per month or £640) based on the length of residence, marital status and total income.[233] This is financed by the general tax pool on a pay-as-you-go basis. Pensioners also receive an income from the ATP, which is dependent on contributions during their working life. Assuming that an individual has paid in the maximum contribution over their working life (DKK77,000 (£8,300)), the yearly payment on retirement will be around DKK2,000 per month (£200) for the rest of their life.[234]

Low- to middle-income earners who have been paying into the system for their entire life will receive roughly half of their retirement income from Pillar I. This can be up to €20,000 a year (£16,000) from the state pension system. Occupational pensions roughly account for the other half of low- or middle-income households, together achieving replacement rates of between 80% and 100%. Those on higher incomes will receive a smaller state pension, and hence have lower replacement rates from Pillar I.[235]

For low-income groups, there are additional means-tested medical aid and housing benefits, which may give rise to missing savings incentives. In addition, there have been some concerns that pensioners may retire early, as any additional contribution to their occupation pension pots would reduce their means-tested benefits.[236]

In terms of Pillar III, many people set up personal pension schemes for various reasons.[237] Some feel that they are not adequately covered by the state pension (e.g. workers who are self-employed do not receive Pillar II pensions), while others feel that Pillar I and 2 schemes do not provide adequate cover for ill health and death, or provide cover for dependants.

The most significant proportion of retirement income is therefore in the form of annuity payments. Those who opted for unit-linked annuities individually bear the inherent investment risk, while longevity risk is in general shared by all annuitants of a fund.[238] However, since membership in occupational pension schemes is linked to coverage by collective agreements, some people are precluded from these schemes (e.g. during phases of unemployment). These labour market risks are to the largest extent compensated for by Pillar I benefits.

4.3.2 Decision-making process

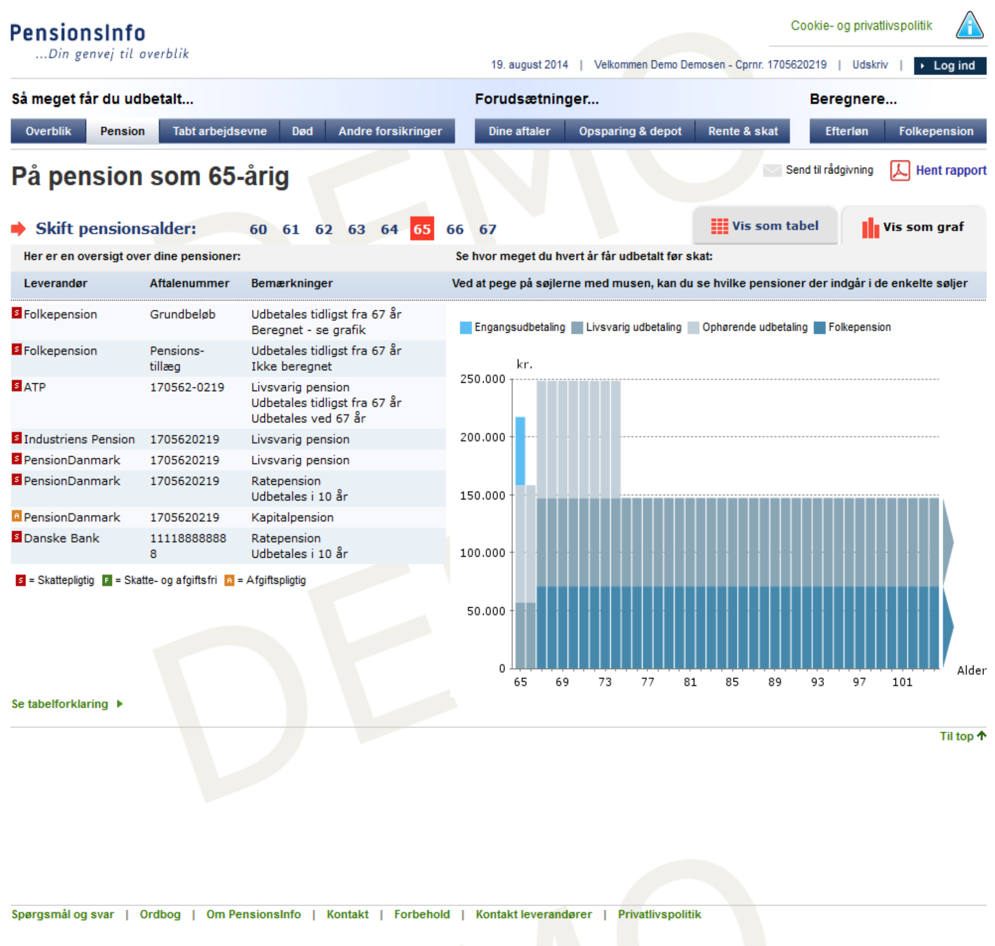
A notable feature of the Danish retirement process is that employees are involved in choosing their products early on in the accumulation phase. When approaching retirement, the pension fund informs employees about their choices and options to change them. Access to employer-chosen advisers is provided at no additional cost. Companies run seminars for their employees to help them understand the pensions system.

[233] Borger, 'Old age pension / Folkepension (original)' (https://www.borger.dk/Sider/Folkepension.aspx?NavigationTaxonomyId=710c34e6-1a8d-4584-8d15-85e10a75319e).
[234] ATP Group, 'Questions and answers / Spørgsmål og svar (original)' (http://www.atp.dk/X5/wps/wcm/connect/ATP/atp.dk/om/omatp/profil/spoergsmaal_og_svar/#.U_3ZTPldWhY).
[235] Information provided by the Danish Financial Supervisory Authority.
[236] Ibid.
[237] Jørgensen, M. (2008), 'The Danish contributions to pensions / Danskernes Indbetalinger Til Pension (original)', SFI – Det Nationale Forskningscenter for Velfærd,(http://www.sfi.dk/Files/Filer/SFI/Pdf/Rapporter/2008/0811-Pension.pdf).
[238] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.

The statutory retirement age is 65 (in the process of being raised to 67), although, for some occupational groups, earlier retirement is possible. This reference age is the same for all the pillars.

A 2008 report from the Danish Insurance Association (DIA) shows that, in contrast to the UK, literacy and transparency initiatives are often led by the association itself, with a limited role for government initiatives.[239] Examples of these initiatives include PensionsInfo and Pensions Overview (*Pensionsoverblik*). PensionsInfo is an online portal that summarises all pension and life insurance entitlements from all providers, to ease access for consumers (see Figure 4.1 for a screenshot). Pensions Overview requires pension providers to inform consumers regularly about their entitlements, contributions, insurance premium, the costs of their policy, the return on investment, and the value of their pension pot. This information must be provided in an easily accessible way, through annual statements or continuously on the Pensions Overview website. From a behavioural viewpoint, consumers are then more likely to engage with their retirement planning as the information comes in a personalised format.[240]

Figure 4.1 PensionsInfo online portal showing the disaggregated pension entitlement of a 65-year-old



[239] The Danish Insurance Association (2008), 'Financial literacy and transparency on the Danish life and pensions market', November (http://www.forsikringogpension.dk/Documents/FogP%20dokumenter/%C3%85rsm%C3%B8de2008_2/resume_liv_eng.pdf).

[240] Towers Watson (2013), 'Evaluation of openness and transparency initiatives of the Danish Insurance Association', October (http://www.forsikringogpension.dk/Documents/Webpjecer/Evaluation%20of%20openness%20and%20transparency%20initiatives%20pb%20Web.pdf).

Source: PensionsInfo, 'Get an overall view of your pension / Få et samlet overblik over din pension (original)' (https://www.pensionsinfo.dk/Borgerservice/velkommen.html).

The insurance association also provides a cost calculator (*Omkostningsmåler*) which allows consumers to get an idea of their future expected pension costs. In addition, it runs an initiative requiring pension providers to disclose the annual costs of a policy to consumers, after passing an external audit. With the *Pensionsmåler* (pensions calculator), also on the DIA website, consumers can calculate their projected pension and replacement rate, expressed in terms of their current salary (see Figure 4.2 for a screenshot). Parameters can be freely adjusted to see the impact of early retirement or higher savings.[241]

Figure 4.2 Pensions calculator provided by the Danish Insurance Association

Source: Forsikring og pension, 'Pension measures / Pensionsmåler (original)' (http://www.forsikringogpension.dk/pension/pensionsmaaler/Sider/pensionsmaaler.aspx).

With the aim of furthering financial knowledge and interest in financial decisions, the Danish Parliament established the Money and Pension Panel in 2007.[242] A 2009 study commissioned by the Panel on how providers should be required to

[241] Towers Watson (2013), 'Evaluation of openness and transparency initiatives of the Danish insurance association', 30 October (http://www.forsikringogpension.dk/Documents/Webpjecer/Evaluation%20of%20openness%20and%20transparency%20initiatives%20pb%20Web.pdf).
[242] Danish Financial Supervisory Authority, 'About the money and pension panel' (https://www.finanstilsynet.dk/en/Om-os/Penge-og-Pensionspanelet.aspx).

present information found that consumers value simplicity in the way their payments are described, and that assumptions needed to be made clear.[243]

4.3.3 Consumer behaviour

The Danish system does not offer consumers a wide range of choices, which results in retirees mainly being members of occupational schemes that provide annuities. This may have its roots in Danish culture and history, and be difficult to replicate in other countries. In a July 2014 article in *FT Advisor*, a subsidiary of the ATP operating in the UK is quoted as saying that 'huge differences in cultural attitude to collectivism, trade union membership levels and compulsion in contributions mean a solution that works in Denmark will not necessarily work in the UK'.[244]

It is, however, notable that demand for term annuities, which are essentially a form of income drawdown product with fixed payments, is strong. This suggests that underlying consumer demand for lifetime annuities may be weaker than the observed uptake of these products, which is driven by regulation.

Another notable aspect of the Danish pension scheme is the quality of information provided to the customer. Advice and information websites run by the government, trade associations and pension providers, give simple and comprehensive material on pensions, and offer advice on how best to manage pension funds.

The positive results of the availability of these websites is especially evident in Pillars II and III, where 66% and 74% respectively of respondents are satisfied with the level of information available. This level of information provides a foundation for a high-level of trust in the pension system: 77% and 72% respectively are confident that they will receive their forecast pension. Satisfaction remains high regarding Pillar II and III pensions, with only 29% of people finding it easy to access information about the Pillar I state pension.[245]

Leading this attempt to provide information are insurance and pension providers, which operated 70% of initiatives regarding transparency and openness. Government and regulatory sources provided only 10% of initiatives over the same time period.[246]

4.4 Regulatory developments

The regulatory approach in Denmark tends to be rather prescriptive, with the aim of guiding the consumer through rules and tax incentives. Following a report some 15 years ago on introducing more freedom of choice into the Danish

[243] Danmarks Statistik (2013), 'Knowledge of and attitudes to private and public pension schemes / Viden om og holdning til private og offentlige pensionsordninger (original)', July (http://www.forsikringogpension.dk/temaer/evaluering-af-aabenhed-og-gennemsigtighed/Documents/Viden%20om%20og%20holdning%20til%20private%20og%20offentlige%20pensionsordninger%20-%20Danmarks%20Statistik.pdf).

[244] Groves, S. (2014), 'Which nation has the best pension scheme?', *Financial Times Adviser*, 03 July (http://www.ftadviser.com/2014/07/03/pensions/annuities/which-nation-has-the-best-pension-scheme-oLtZkPBTYI3uPN5EDdgr9L/article.html).

[245] Danmarks Statistik (2013), 'Knowledge of and attitudes to private and public pension schemes / Viden om og holdning til private og offentlige pensionsordninger (original)', July (http://www.forsikringogpension.dk/temaer/evaluering-af-aabenhed-og-gennemsigtighed/Documents/Viden%20om%20og%20holdning%20til%20private%20og%20offentlige%20pensionsordninger%20-%20Danmarks%20Statistik.pdf).

[246] Towers Watson (2013), 'Evaluation of openness and transparency initiatives of the Danish insurance association', 30 October, p. 8 (http://www.forsikringogpension.dk/Documents/Webpjecer/Evaluation%20of%20openness%20and%20transparency%20initiatives%20pb%20Web.pdf).

system, the national debate has largely arrived at the consensus that, for low- and middle-income groups, compulsory annuitisation should be prioritised over freedom. This is motivated both by the aim to prevent moral hazard and by redistributive considerations.[247]

A recent regulatory issue has arisen from the availability of means-tested benefits in Pillar I giving people incentives to take out excessive lump sums from occupational pension pots. This was combated by tax changes in 2010 and 2013. In 2010, a ceiling on tax-deductible payments into term annuities was introduced, and, in 2013, tax-deductible lump-sum schemes were phased out. This has led to a significant increase in payments to life annuities.

Life insurance companies and pension funds are subject to tight regulation, to a large part owing to the EU requirements of Solvency I and II. 'Fair value' accounting rules and regular stress-testing have been introduced in the context of these requirements. In 2001 investment rules were relaxed to a certain extent, allowing for more investments into risky assets, although this was coupled with stricter oversight.[248] The impact of prudential regulation can be expected to be primarily on annuity rates, rather than product innovation, as annuity products in Denmark are tightly controlled by regulation.

[247] Information provided by the Danish Financial Supervisory Authority.
[248] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.

5 Ireland

Glossary of terms

ARF	Approved Retirement Fund
AMRF	Approved Minimum Retirement Fund
IAPF	Irish Association of Pension Funds
PRSA	Personal Retirement Savings Account
RAC	retirement annuity contract

Box 5.1 Key findings

Ireland has relaxed its rules on annuitisation, leading to an increase in the demand for income drawdown products. The main features of the Irish pension system are as follows.

- The Finance Act 1999 introduced more flexibility for retirees, allowing individuals to take the balance of their pension fund as a lump sum or to purchase an income drawdown product.
- Consumers are able to take up to 25% of their pension fund as a tax-free lump-sum.
- While annuities are in demand (approximately 30%), another popular option for Irish retirees is the Approved Retirement Fund (ARF), a form of flexible income drawdown that offers the consumer freedom in how much they can withdraw each month. To purchase the ARF, an individual must have a minimum guaranteed income of approximately £10,000 from other sources. In order to encourage consumers to withdraw a certain amount each year, each fund is taxed on the premise that each consumer withdraws 5% of the value of the fund; thus, each consumer is incentivised to withdraw at least 5% each year.
- Guidance for annuity products is mainly provided by pension fund administrators, which shop around for retirement products and presents those options to retirees.
- Consumers purchasing an ARF product will typically engage with an investment adviser who provided guidance on the appropriate investment strategy for the funds. Advisers can be paid on a fee or commission basis.

Source: Oxera.

5.1 Accumulation phase

5.1.1 Structure of defined-contribution schemes

There are three main types of private (i.e. non-state) pension arrangement:[249] occupational pensions schemes, personal retirement savings accounts (PRSAs), and retirement annuity contracts (RACs). Individuals who are members of occupational pension schemes cannot take out a PRSA or RAC unless it is

[249] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 30 (http://dx.doi.org/10.1787/9789264208834-en).

funded by additional voluntary contributions.[250] PRSAs and RACs are offered by financial services firms, banks and life insurance companies.

A PRSA is a more flexible alternative to a personal pension plan. Individuals do not have to be earning an income to take out a PRSA and such an account can be taken out by anyone up to the age of 75. In effect, they are portable pension savings vehicles that offer significant tax relief, in a government effort to encourage saving for retirement.[251]

Historically, DB schemes have dominated: approximately 60% of individuals are still with DB schemes, many of which are in the public sector.[252] The larger DB schemes have assets of over €1bn and tend to be offered by utility companies.[253] Nevertheless, these schemes—not least because they were particularly badly affected by the global financial crisis[254]—have been in steady decline as companies move towards DC schemes.[255,256,257] The largest DC schemes are in the USA multinationals sector, which dates back to when these organisations established themselves in Ireland in the 1970s.[258] There are also about 50,000 small or single-member DC schemes, which is a considerable number, given the size of the Irish market.[259]

However, employer schemes are not mandatory, and, lacking a mandatory contributions scheme, Ireland faces the problem of filling the retirement savings gap.[260] In an attempt to address the savings gap, the National Pensions Policy Initiative recommended the creation of PRSAs, introduced in 2002. Employers must provide employee access to PRSAs and must designate a PRSA for their workforce, but employer contributions to PRSAs are not mandatory.[261] The success of these accounts has been limited.[262]

The Pensions Authority regulates employer schemes, RACs and PRSAs, and is particularly concerned about retirees' pension pots being too small in terms of coverage (the proportion of individuals who have a pension) and adequacy (the size of the pension pots that individuals accumulate).[263]

5.1.2 Size of retirement savings

According to a recent estimate, the average contribution rate for a DC member is 10.3% of salary.[264] Estimates of actual DC fund sizes at retirement are difficult to obtain, but data acquired by the Pensions Authority suggested that the average

[250] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 31.
[251] Tax relief is offered at 15% for individuals younger than 30, increasing with age up to 40% as a percentage of earnings for individuals 60 and over. See Citizens Information, 'Personal retirement savings accounts' (http://www.citizensinformation.ie/en/money_and_tax/personal_finance/pensions/personal_retirement_savings_accounts.html).
[252] Information provided by the Irish Association of Pension Funds.
[253] Ibid.
[254] Information provided by the Pensions Authority.
[255] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 31 (http://dx.doi.org/10.1787/9789264208834-en).
[256] Information provided by the Pensions Authority.
[257] Information provided by the Irish Association of Pension Funds.
[258] Ibid.
[259] Information provided by the Pensions Authority.
[260] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 11 (http://dx.doi.org/10.1787/9789264208834-en).
[261] Information provided by the Pensions Authority.
[262] In 2011, PRSAs covered only 6.6% of the working-age population. See OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 48 (http://dx.doi.org/10.1787/9789264208834-en).
[263] Information provided by the Pensions Authority.
[264] Irish Life (2014), 'Defined Contribution retirement readiness report', June, p. 4 (http://www.irishlifecorporatebusiness.ie/sites/default/files/IL_Retirement_Readiness_Report.pdf).

DC pot was less than €100,000 (£80,000).[265] In today's terms, an average member of a DC scheme retiring at 65 has a projected[266] fund of €190,500 (£152,000) at retirement, with an average of €45,000 (£36,000) at age 43. [267]

Employers do not have to offer an occupational pension scheme or contribute to a PRSA,[268] although they are obliged to ensure that employees have access to a PRSA. In a survey of 6,430 DC schemes, the IAPF found that the average contribution rate was 11.1% of an employee's salary, with the employer contributing 5.7% and the employee contributing 5.4%.[269]

On top of contributions to an occupational scheme or a PRSA, individuals can make additional voluntary contributions to improve their retirement benefits.[270] To encourage individuals to make such contributions, they are subject to tax relief. Early withdrawal before the age of 60 for occupational or PRSA schemes is permissible only in special circumstances, such as ill health.

The paucity of pension coverage is reflected in consumers' attitudes. In a recent survey, 56% of individuals were concerned that they would not have enough money to provide an adequate standard of living when they retire, with 49% subsequently expecting to work past the normal retirement age.[271]

5.2 Decumulation phase—the retirement income market

5.2.1 Overview of the decumulation phase

There have been some significant legislative changes in Ireland in recent years. The Finance Act 1999 introduced more flexibility for retirees, allowing individuals to take the balance of their fund as taxable cash or to invest it in an ARF or Approved Minimum Retirement Fund (AMRF), rather than buy an annuity.[272] These income drawdown products allow individuals to elect how much they can withdraw each month. They can be purchased with an individual's retirement fund (or remaining balance if the individual has taken a lump sum) and enable retirees to keep their funds invested.

To qualify for an ARF, an individual must have a minimum guaranteed lifetime income of €12,700 (£10,100) a year from sources aside from their ARF investment.[273] If an individual cannot meet this minimum income retirement, they can invest in an AMRF, provided that they deposit €63,500 (£50,700) as an

[265] The Pensions Authority (2011), 'Strategy 2011-2015', September (http://www.pensionsauthority.ie/en/Dealing_with_us/Mission_statement_and_strategy/The_Pensions_Authority_Strategy_2011_-_2015.pdf).
[266] This is a projected figure for an average 43-year-old individual retiring approximately 20 years in the future, and does not refer to current data on pension funds at retirement. This projected figure is based on a number of assumptions such as annual fund growth of 4% and annual inflation of 2%. As stated by Irish Life (Irish Life (2014), 'Defined Contribution retirement readiness report', June, p. 5), actual fund performance depends on the performance of underlying investments, and these figures do not account for the government pension levy. This figure is likely an overestimate and should be treated with caution, but provides some indication.
[267] Irish Life (2014), 'Defined Contribution retirement readiness report', June, p. 5.
[268] Information provided by the Pensions Authority.
[269] Irish Association of Pension Funds (2014), '11.1%: Average employer-employee contribution across defined contribution pension schemes', press release, 26 May (http://www.iapf.ie/newspress/iapfpressreleases/2014/default.aspx?iid=527).
[270] The Pensions Authority, 'How does my pension scheme work', p. 40 (http://www.pensionsauthority.ie/en/Publications/Information_Booklets/How_does_my_pension_scheme_work.pdf).
[271] Aviva (2014), 'Consumer attitudes survey' (http://www.aviva.com/media/upload/CASREPORT_colour_new.pdf).
[272] The Society of Actuaries in Ireland (2000), 'Retirement options and approved retirement funds', 26 November (https://web.actuaries.ie/sites/default/files/story/2000/11/001126-BS_Retirement%20OptionsARFs.pdf).
[273] Guaranteed income can come from the state pension, lifetime annuities or a DB pension income. This minimum is expected to increase to €18,000 (£14,400) in 2016.

initial capital investment which cannot be touched.[274] When an individual reaches 75, their AMRF becomes an ARF,[275] enabling the fund holder to withdraw the initial capital investment. Once the individual's money is in an ARF, they can decide how to invest the funds, which accumulate without tax.[276] The Finance Act 2011 made a further policy change and broadened the availability of ARFs to all DC plan members, not just the self-employed.[277]

Individuals with an RAC or PRSA can take up to 25% tax-free and then invest in an ARF, an annuity, or take the rest as taxable cash. Similarly, an individual on an occupational DC scheme is faced with options at retirement:

- take up to 25% as a tax-free lump sum and invest the remaining funds in an ARF, or take the rest as taxable cash (which, if desired, can then be used to purchase an annuity);
- take a salary- and service-dependent amount from the employer worth up to 1.5x final salary, with an obligation to buy an annuity.

An ARF is an investment contract where money is invested with a Qualifying Fund Manager.[278] Banks, building societies and insurance companies are the typical providers.[279]

In practice, it is common for individuals to take the maximum permissible lump sum[280] and then opt for an ARF or AMRF.[281] Investing the remaining money after an individual has taken a lump sum in an ARF enables the individual to stay invested in funds and accrue tax-free investment-earnings. Withdrawals from an ARF are at the individual's marginal rate of tax.

Most people do not purchase an annuity—the annuitisation rate in Ireland is approximately 30%,[282] according to estimates from 2007.[283] If an individual's pension fund is small, after taking a tax-free lump sum they will typically take the rest out as cash; if the remaining balance is larger, they will opt for an ARF.[284] Partially as a result of the minimum requirements on annual income imposed by ARF/AMRF products, they are products more relevant to individuals of higher net worth.[285]

5.2.2 Products

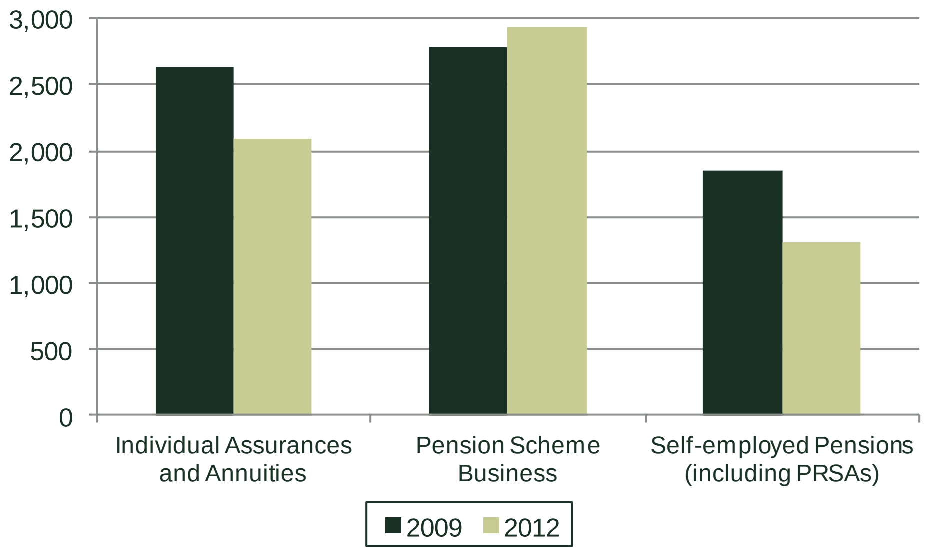
Following the introduction of ARFs in 1999, they have proven a popular alternative for the retiree, demonstrating strong and increasing sales

[274] Irish Life, 'Approved retirement funds – ARFs' (http://www.irishlife.ie/pensions/approved-retirement-fund.html).
[275] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 34 (http://dx.doi.org/10.1787/9789264208834-en).
[276] Ibid.
[277] Information provided by the Irish Association of Pension Funds and Revenue Commissioners (2011), 'Revenue eBrief No. 72/11', 28 November (http://www.revenue.ie/en/practitioner/ebrief/archive/2011/no-722011.html).
[278] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 34 (http://dx.doi.org/10.1787/9789264208834-en).
[279] Ibid.
[280] Information provided by the Pensions Authority.
[281] The maximum tax-free lump sum is €200,000 (£160,000), with amounts between €200,000 and €500,000 (£399,000) taxed at 20% and above €500,000 at the individual's marginal rate.
[282] Indecon and Life Strategies (2007), 'Review of the Irish Annuities Market', July, report for the Partnership Pensions Review Group, p. 29 (http://www.welfare.ie/en/downloads/reviewoftheirishannuitiesmarket.pdf).
[283] While the estimate is likely to be out of date, communication with the Irish Pensions Authority confirmed that this is a reasonable estimate for current annuitisation levels.
[284] Information provided by the Irish Association of Pension Funds.
[285] Information provided by the Pensions Authority.

performance.[286] Annuities are often perceived as bad value.[287,288] Part of this perception is due to the high cost and low rates to have typically been offered for annuities. The Indecon report makes a further suggestion that this perception of bad value is intertwined with psychological and behavioural factors that jointly reduce demand.[289] As a result of individuals underestimating their longevity and overestimating the ability of ARF funds to earn them high returns, the insurance quality of an annuity can be overlooked.[290] ARFs and annuities are essentially the only income stream options available to the consumer in the decumulation phase.

According to data provided by members of the Irish Insurance Federation, the representative body for insurers in Ireland covering 95% of the market, total incomes for the individual assurances and annuities sector as well as pensions for the self-employed (including PRSAs) fell, whereas pension scheme business (such as employer schemes) increased (see Figure 5.1).[291]

Figure 5.1 Life assurance gross premium income (£m)



Source: Irish Insurance Federation (2010), 'Factfile 2010' (http://www.insuranceireland.eu/media/documents/fact_file/Factfile%202010.pdf) and Irish Insurance Federation (2012), 'Factfile 2012' (http://www.insuranceireland.eu/media/documents/fact_file/Factfile%202010.pdf).

5.2.3 Providers

As outlined above, ARF/AMRF products are offered by banks, building societies and life insurance companies.[292] Since these are investment products, they can be offered only by a Qualifying Fund Manager. Annuities are offered more

[286] Indecon and Life Strategies (2007), 'Review of the Irish Annuities Market', July, report for the Partnership Pensions Review Group, p. 107 (http://www.welfare.ie/en/downloads/reviewoftheirishannuitiesmarket.pdf).
[287] Information provided by the Pensions Authority.
[288] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 133 (http://dx.doi.org/10.1787/9789264208834-en).
[289] Indecon and Life Strategies (2007), 'Review of the Irish Annuities Market', July, report for the Partnership Pensions Review Group, p. 136 (http://www.welfare.ie/en/downloads/reviewoftheirishannuitiesmarket.pdf).
[290] Ibid.
[291] The total income for the individual assurances and annuities sector was €2,629.5m in 2012, down from €3,320.8m (£2,700m) in 2009. Self-employed pensions, including PRSAs, totalled €1,644.4m (£1,300m) in 2012, a decrease from €2,319.6m (£1,900m) in 2009. However, the pension scheme business totalled €3,695.8m (£2,900m) in 2012, an increase on €3,503.6m (£2,800) in 2009.
[292] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 34 (http://dx.doi.org/10.1787/9789264208834-en).

commonly by life insurance companies.[293] Both the annuity and ARF markets are quite small and concentrated.[294]

Within Pillar III pension schemes, such as PRSAs, there is a degree of provider continuity between accumulation and decumulation products, with many of the largest PRSA providers (e.g. Irish Life, Standard Life and Canada Life) also providing post-retirement products.

There remains an issue with lack of competitiveness in the post-retirement products market:[295] the competitiveness of the annuity and ARF markets is reportedly quite weak, with a limited size and moderately concentrated market for post-retirement products.[296] There are, however, no significant barriers to market entry or expansion.[297]

5.2.4 Intermediaries

The Central Bank, which regulates intermediaries involved in pension advice, estimates that there are around 2,000 intermediaries authorised to provide pension and investment advice in Ireland.[298]

A central source of retirement guidance for individuals on an occupational DC scheme is a letter from their administrator setting out their options at retirement.[299] DC schemes are administered by third parties or form an element of an insurance package and operate as insured contracts. Administrators, rather than the retirees themselves, typically ‘shop around’ for post-retirement products and then offer retirees options. This is facilitated by Irish Life and Aviva, with an online service that provides a plan member with options (to take into account considerations such as any dependant’s pensions and a preference for indexation).

Once the member has selected their preferred pension type, the administrator searches among all annuity options and chooses the best for the member. Given that individual members are unlikely to have the same level of market knowledge, third-party shopping around is likely to improve consumer outcomes.[300] However, in general such third parties only quote their own insurance rates and, if an open-market option is offered, it will typically not be prominently displayed. Recently, the Pensions Authority has been asking trustees of insured contracts about what steps are taken to ensure that members get the best annuity rates and regarding the possibility of including other annuity providers’ rates.[301]

Intermediaries are frequently paid on commission,[302] through a commission payment from the company selling the pension product to the client or a fee structure agreed with the client receiving advice.[303] The payment structure for

[293] Information provided by the Irish Association of Pension Funds.
[294] Indecon and Life Strategies (2007), ‘Review of the Irish Annuities Market’, July, report for the Partnership Pensions Review Group, p. 116 (http://www.welfare.ie/en/downloads/reviewoftheirishannuitiesmarket.pdf).
[295] Information provided by the Irish Association of Pension Funds.
[296] Indecon and Life Strategies (2007), ‘Review of the Irish Annuities Market’, July, report for the Partnership Pensions Review Group, p. 116 (http://www.welfare.ie/en/downloads/reviewoftheirishannuitiesmarket.pdf).
[297] Ibid., p. 124.
[298] Department of Social Protection (2012), ‘Report on pension charges in Ireland’, p. 29 (http://www.welfare.ie/en/downloads/pensionchargesireland2012.pdf)
[299] Information provided by the Irish Association of Pension Funds.
[300] Ibid.
[301] Ibid.
[302] Indecon and Life Strategies (2007), ‘Review of the Irish Annuities Market’, July, report for the Partnership Pensions Review Group, p. 57 (http://www.welfare.ie/en/downloads/reviewoftheirishannuitiesmarket.pdf).
[303] Department of Social Protection (2012), ‘Report on pension charges in Ireland’, p. 29 (http://www.welfare.ie/en/downloads/pensionchargesireland2012.pdf).

financial advisers may be complex, and no universal approach to pensions' charges is evident.

- Most annuity sales occur through a financial intermediary or broker,[304] and commission levels, particularly for annuities, have shown little variation over time. Corroborating the perception that annuities are bad value is data on the Money's-worth ratio of annuities, which is estimated at 87.4.[305]
- Individuals who opt for an ARF product will also commonly engage a pension adviser who advises them on matters such as their choice of life assurance company and appropriate investment funds.[306] As such, ARF products are typically purchased on an advised basis. Advisers can be paid on a fee basis, which may be accompanied (or replaced by) a commission payment from the life assurance company to the adviser. The costs of commission are levied on the policyholder via management and administration charges. For ARF sales, commission terms of between 0% and 5% of funds are common, with 3% the most prevalent commission arrangement.[307] Whereas commission is clearly payable on advised sales, clear evidence of whether commission is payable on intermediated but non-advised sales was not available.

The issue of high commission charges for decumulation products is part of a broader picture of high charges in the pension product market more generally. An important part of the explanation for these high charges is diseconomies of scale. There is a proliferation of small or single-member DC schemes, around 50,000,[308] but there is evidence that larger DC pension schemes are more cost-efficient. [309]

5.2.5 Taxation structure

The Irish Pillar II (earnings-related) pension schemes can be described as an EET system, as contributions and investment earnings are tax-exempt (EE), while withdrawals are taxed (T). Occupational pension schemes are typically tax-approved by the Revenue Commissioners:[310] employer contributions are not taxed and employee contributions are subject to tax relief (the rate depends on the individual's age). Tax is not charged on the investment income or capital gains accrued by pension funds.[311]

All pension payments, including from ARF products,[312] are taxable as income under the PAYE system in the decumulation phase, including the additional

[304] Indecon and Life Strategies (2007), 'Review of the Irish Annuities Market', July, report for the Partnership Pensions Review Group,(http://www.welfare.ie/en/downloads/reviewoftheirishannuitiesmarket.pdf), p. 54.
[305] Ibid.
[306] Department of Social Protection (2012), 'Report on pension charges in Ireland', p. 176 (http://www.welfare.ie/en/downloads/pensionchargesireland2012.pdf).
[307] Ibid. p. 179
[308] Information provided by the Pensions Authority.
[309] Department of Social Protection (2012), 'Report on pension charges in Ireland', p. 212 (http://www.welfare.ie/en/downloads/pensionchargesireland2012.pdf).
[310] The Pensions Authority, 'How does my pension scheme work', p. 65 (http://www.pensionsauthority.ie/en/Publications/Information_Booklets/How_does_my_pension_scheme_work.pdf).
[311] The Pensions Authority, 'How does my pension scheme work', p. 67 (http://www.pensionsauthority.ie/en/Publications/Information_Booklets/How_does_my_pension_scheme_work.pdf).
[312] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 38 (http://dx.doi.org/10.1787/9789264208834-en).

income-related tax, the Universal Social Charge.[313,314] This includes lump-sum payments, which could push the person into a higher tax bracket.

When ARF funds were first introduced, individuals tended to be cautious about withdrawing funds, but it is not clear that this speaks to a wider culture of cautious pension decumulation. On first introduction, ARFs were limited to pension plans for the self-employed, directors who had more than 5% of the voting rights in a company, and for any additional voluntary contributions, and so tended to be an option for high-net-worth individuals. [315] ARFs were also exempt from inheritance tax and were thus often used as tax-efficient investment funds.[316] The 2011 Budget and Finance Act introduced a notional distribution of 5% of the value of assets of an ARF, where the notional amount is taxed at the owner's marginal rate even if the person takes out less than 5%.[317] This notional distribution was introduced to incentivise individuals to withdraw from their ARF as a retirement vehicle as intended,[318] and most individuals ensure that they withdraw a minimum actual distribution of 5% to avoid additional taxation.[319,320] ARF funds were extended to all DC plan participants only under the 2011 Finance Act, and it is difficult to know up front whether different dynamics would apply. [321] ARFs are now subject to inheritance tax[322] unless the fund is passed to a spouse.[323]

5.3 Decumulation phase—consumer journey

5.3.1 Sources of retirement income

Aside from occupational pension schemes and annuities, PRSAs or RACs (and AVCs) comprise the main sources of retirement income. As stated above, PRSAs were introduced in 2002 to extend pension coverage, but have had limited success.[324] Occupational pension funds make up the vast majority of pension fund assets in comparison with PRSA contracts.[325]

[313] The Pensions Authority, 'How does my pension scheme work', p. 68 (http://www.pensionsauthority.ie/en/Publications/Information_Booklets/How_does_my_pension_scheme_work.pdf).
[314] The Universal Social Charge is an additional form of income tax, set at 2% on the first €10,036 in annual earnings, 4% on the next €5,980 (£4,800), and 7% on the balance. See Revenue Commissioners, 'Universal social charge' (http://www.revenue.ie/en/tax/usc/).
[315] Information provided by the Irish Association of Pension Funds.
[316] Ibid.
[317] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 38 (http://dx.doi.org/10.1787/9789264208834-en).
[318] Ibid, and information provided by the Irish Association of Pension Funds.
[319] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 38 (http://dx.doi.org/10.1787/9789264208834-en).
[320] There is also a maximum lifetime limit for pension contributions, known as the Standard Fund Threshold, which is currently set at €2,000,000 (£1,596,000). If this limit is exceeded, the excess is taxed at the highest rate of income tax. See Revenue Commissioners (2014), 'Limit on tax relieved pension funds', July (http://www.revenue.ie/en/about/foi/s16/pensions/chapter-25.pdf?download=true), and The Pensions Authority, 'How does my pension scheme work', p. 68 (http://www.pensionsauthority.ie/en/Publications/Information_Booklets/How_does_my_pension_scheme_work.pdf).
[321] Information provided by the Irish Association of Pension Funds.
[322] Known as capital acquisitions tax.
[323] Revenue Commissioners (2014), 'Capital acquisitions tax', January (http://www.revenue.ie/en/about/foi/s16/capital-acquisitions-tax/capital-acquisitions-tax-manual.pdf?download=true).
[324] In 2011 PRSAs covered 6.6% of the working-age population. See OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 48 (http://dx.doi.org/10.1787/9789264208834-en).
[325] As of July 2014, the Pensions Authority has 215,892 PRSA contracts on record, totalling €3.99bn (£3.18bn). In comparison, at the end of 2011, Irish occupational pension funds (DB and DC) managed €72.3bn (£57.7bn) of assets. See information provided by the Pensions Authority and OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 31 (http://dx.doi.org/10.1787/9789264208834-en).

The state pension scheme in Ireland is mandatory for all private sector workers and offers two types of flat-rate benefit:[326] a basic flat-rate benefit to individuals who meet the minimum contribution conditions; and a means-tested benefit for those who have not contributed sufficiently. The state pension is payable from the age of 66, with a maximum weekly payment of €230.30 (£184).[327] This is approximately 33.1% of average weekly earnings,[328] roughly in line with the UK.

While Pillars II and III remain crucial in ensuring a comfortable retirement, the state pension often makes up the bulk of a pensioner's income.[329] Indeed, the majority of Irish pensioners receive the contributory component of the state pension—71.2% by 2010.[330,331] That the main source of income is the state pension suggests that it is used to mitigate much of the risk from longevity and inflation. In addition, the Household Benefits Package—a set of allowances to help with the costs of running a household, such as electricity—is also taken by many pensioners.[332,333]

Despite the comparatively generous state system, the total replacement rate for an Irish worker after a full career is estimated at 36.7%[334] (relative to the OECD average of 54.4%).

5.3.2 Decision-making process

Individuals most commonly decide on their post-retirement options close to the point of retirement.[335] The Life Assurance (Provision of Information) Regulations 2001, which cover RACs, buy-out bonds, annuities and ARFs/AMRFs, aim to ensure that individuals are provided with clear information that enables them to make rational choices with respect to their retirement options.[336]

A report by the Financial Regulator found mixed levels of financial literacy in Ireland: individuals are reportedly good at managing their money, although there is room for improvement regarding consumers' ability to plan ahead, choose financial products and stay informed about financial products.[337] In particular, consumers tend to have little knowledge about more complex financial products such as pensions.[338]

The Pensions Authority is a central source of guidance for the public and pension managers. [339] As part of its 2011–15 strategy, the Authority aims to

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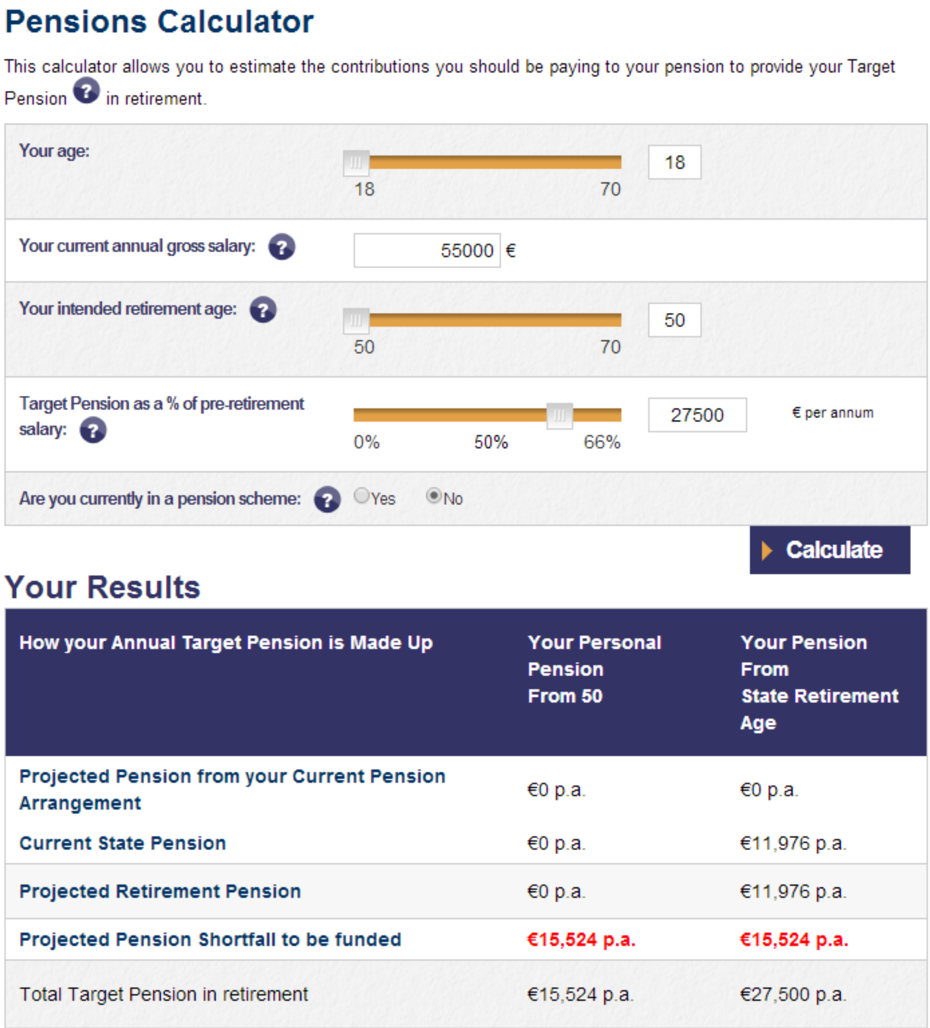
[326] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 28 (http://dx.doi.org/10.1787/9789264208834-en).
[327] Citizens Information, 'State pension (contributory) (http://www.citizensinformation.ie/en/social_welfare/social_welfare_payments/older_and_retired_people/state_pension_contributory.html).
[328] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 28 (http://dx.doi.org/10.1787/9789264208834-en).
[329] Information provided by the Irish Association of Pension Funds.
[330] OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 44 (http://dx.doi.org/10.1787/9789264208834-en).
[331] In 2010, social transfers accounted for 63.4% of the income of Irish people aged 65 and older, with earnings from work accounting for 12.7% of income, occupational pensions accounting for 17.1%, and private pensions 3.4%. See OECD (2014), 'OECD reviews of pension systems: Ireland', OECD publishing, p. 46 (http://dx.doi.org/10.1787/9789264208834-en).
[332] Ibid.
[333] In 2012, this benefits package cost €335m. Source: Ibid.
[334] OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2013-en).
[335] Information provided by the Irish Association of Pension Funds.
[336] Department of Social Protection (2012), 'Report on pension charges in Ireland', p. 188 (http://www.welfare.ie/en/downloads/pensionchargesireland2012.pdf).
[337] Financial Regulator, 'Financial capability in Ireland – an overview' (http://www.financialregulator.ie/publications/Documents/Financial%20Capability%20An%20Overview.pdf).
[338] Information provided by the Irish Association of Pension Funds.
[339] The Pensions Authority (http://www.pensionsauthority.ie/en/).

promote and encourage initiatives to improve financial literacy.[340] Its website features a pension calculator to assist individuals with their retirement planning (see Figure 5.2).

Figure 5.2 The Pensions Authority Pensions Calculator



Source: The Pensions Authority (http://www.pensionsauthority.ie/en/Calculators/Pensions_Calculator/).

Disclosure requirements cover the pre- and post-policy agreement phases, and are moderately detailed.[341] The Central Bank Consumer Protection Code 2012 sets out rules relating to disclosure, guided by the aim of ensuring 'full disclosure of all material information, including all charges, in a way that seeks to inform the consumer'.[342]

[340] The Pensions Authority (2011), 'Strategy 2011-2015', September (http://www.pensionsauthority.ie/en/Dealing_with_us/Mission_statement_and_strategy/The_Pensions_Authority_Strategy_2011_-_2015.pdf).
[341] Department of Social Protection (2012), 'Report on pension charges in Ireland', pp. 188–9 (http://www.welfare.ie/en/downloads/pensionchargesireland2012.pdf).
[342] Central Bank of Ireland (2012), 'Consumer protection code' (http://www.centralbank.ie/regulation/processes/consumer-protection-code/documents/consumer%20protection%20code%202012.pdf).

5.3.3 Consumer behaviour

Retirees are often concerned with ensuring that they withdraw their entire pension and are wary of dying early—a concern that can override concerns about longevity risk.[343] The possibility of relying on the state pension may dissipate concerns about long-term financial security.

Consumers tend to be averse to financial products.[344] Although the popularity of ARF products may indicate consumer engagement, this popularity is more likely to be driven by the lower costs of these products compared with alternatives such as annuities.[345] Annuities are unpopular,[346] and perceived as bad value,[347] whereas ARFs are perceived as less costly and offering more flexibility, which can be particularly helpful with estate planning.[348] Where a 'do-it-yourself' culture exists, it is more likely to be found among high-net-worth individuals.[349]

Despite some initial concerns that individuals would deplete their funds with income drawdown products, this does not appear to be happening.[350] Indeed, there is evidence that (at least historically, for high-net-worth individuals) consumers are too cautious with their ARF funds, and are not depleting them as an income drawdown product as intended—this was one of the motivations for introducing the 5% notional distribution of the value of assets of an ARF.[351]

5.4 Regulatory developments

There have been several changes to the regulation of the retirement income market in recent years. The Pensions Authority regulates occupational pension schemes, RACs and PRSAs[352] (accumulation products). The Central Bank of Ireland is responsible for the regulation of decumulation products such as ARFs and annuities.

As explained above, the relatively recent Central Bank Consumer Protection Code 2012 set out specific disclosure regulations. However, it does not appear likely that the Code has had a significant impact on consumer awareness.[353] The introduction of the Funding Risk Reserve legislation for DB schemes, imposing greater capital requirements, has had a particularly strong impact on many schemes and caused many DB schemes to close.[354] Some DB funds have identified this regulation as a 'threat to good governance.'[355]

[343] Information provided by the Irish Association of Pension Funds.
[344] Information provided by the Pensions Authority.
[345] Ibid.
[346] Information provided by the Irish Association of Pension Funds.
[347] Indecon and Life Strategies (2007), 'Review of the Irish Annuities Market', July, report for the Partnership Pensions Review Group,(http://www.welfare.ie/en/downloads/reviewoftheirishannuitiesmarket.pdf), p. xi.
[348] Information provided by the Pensions Authority.
[349] Information provided by the Pensions Authority.
[350] Information provided by the Irish Association of Pension Funds.
[351] Ibid.
[352] The Pensions Authority (http://www.pensionsauthority.ie/en/).
[353] Information provided by the Irish Association of Pension Funds.
[354] Information provided by the Pensions Authority and Irish Association of Pension Funds (2014), 'Survey shows pension schemes making considerable progress in de-risking', press release, 17 February (http://www.iapf.ie/newspress/iapfpressreleases/2014/default.aspx?iid=522http://www.iapf.ie/newspress/iapfpressreleases/2014/default.aspx?iid=522).
[355] Irish Association of Pension Funds (2014), 'Survey shows pension schemes making considerable progress in de-risking', press release, 17 February (http://www.iapf.ie/newspress/iapfpressreleases/2014/default.aspx?iid=522).

6 Netherlands

Glossary of terms

AFM	Netherlands Authority for the Financial Markets
CDC	Collective Defined Contribution
DNB	De Nederlandsche Bank, the Dutch Central Bank
SVB	Sociale Verzekeringsbank, the social security bank

Box 6.1 Key findings

The Dutch pension system has historically been dominated by DB schemes, provided by large industry-wide pension funds. DC schemes and a hybrid between DB and DC schemes (‘collective DC schemes’, CDC schemes) are becoming increasingly popular, however. Some of the features of these schemes are as follows.

- Annuitisation is compulsory. Trivial commutation into a lump sum is allowed only if pension funds produce an annuity income of £330 or less.
- The only choices besides a life annuity are a joint life annuity and an annuity that provides higher payments during the first few years. There is extensive debate at the moment about expanding the choices available to retirees—in particular, consumers have expressed the desire to have more flexibility and control over their retirement products.
- A new information sharing tool—the ‘pensions dashboard’—has recently been introduced, providing information on all the pension entitlement that the individual has accumulated across all three pillars. The tool has been visited at least once by more than 3m users.

Source: Oxera.

6.1 Accumulation phase

6.1.1 Structure of defined-contribution schemes

Pillar II consists of three types of fund: industry-wide pension funds, corporate pension funds, and funds for independent professionals such as medical specialists and dentists. These funds are classed as non-profit organisations and are essentially DB schemes. They could also be described as hybrid schemes, as contributions can be increased to ensure the stability of a fund if it gets into difficulties. Although there is no legal obligation to become a member of a pension fund, the government can make it mandatory for a given sector or profession if a plan is agreed on by the social partners. More than 90% of employees are members of such schemes. Most funds of this type contract out the fund’s management to a private organisation such as an insurance company. At the end of 2008, there were around 600 of these funds, managing €700bn (£560bn) in assets. In these Pillar II schemes, all individuals contribute the same rate. A little more than 10% of Pillar II pensions are in the form of DC schemes.[356]

[356] Smitte, J. (2013), ‘The right to retirement pension information’, July (http://ec.europa.eu/social/BlobServlet?docId=10403&langId=en).

Pillar III is formed by individual pension products, mainly used by the self-employed and those in an industry without a CDC scheme.

Currently, DC schemes are mostly used by the self-employed, who contribute to tax-deferred savings accounts with banks and insurers.[357]

6.1.2 Size of retirement savings

Reliable estimates for the size of DC pension fund assets for people at retirement age were not identified by this study for the Netherlands. DC pension schemes are relatively new and growing, and schemes are often ‘hybrid’ in nature (e.g. CDC schemes, as discussed below). These factors mean that DC pension assets are relatively small and ill-defined at the level of the individual.

6.2 Decumulation phase—the retirement income market

6.2.1 Overview of the decumulation phase

The majority of schemes, which are DB, pay out a sum based on final or average salary. There is no option to take any of these benefits as a lump sum unless the value of the pension is below the ‘trivial commutation’ amount (see below).[358]

There are also CDC schemes, in which payments can be lower if insufficient contributions are made during the accumulation phase. These schemes are growing in popularity as they are seen to maintain the Dutch collective pension model (collectivism is inherent in DB schemes) while reducing risk for the pension scheme.[359]

For DC schemes, an annuity must be purchased at the age of 65. ‘Trivial commutation’ of DC pension funds into a lump sum is possible only for funds that would produce an annuity income of less than €417 a year (£330)[360] (suggesting a fund of around €12,000 (£9,600)[361]).

6.2.2 Products

A lifetime annuity must be purchased with DC pension funds, unless the amount of the fund is small (see above).

6.2.3 Providers

Pension assets are managed by both pension funds and insurance companies. The latter cater for smaller firms in the main, who cannot afford to have their own scheme, and make up around 20% of the market for occupational pensions. DC schemes tend to be more popular in newer industries such as consultancy and telecommunications, and with multinational firms that try to pool retirement assets across countries.[362]

[357] Information provided by Verbond van Verzekaars (Dutch insurance association).
[358] Pensioenfederatie ‘The Dutch pension system – an overview of the key aspects’ (http://www.pensioenfederatie.nl/Document/Publicaties/English%20publications/Nederlandse_pensioensysteem_Engelstalige_versie.pdf).
[359] For a description of the Dutch pension system, see Pensioenfederatie ‘The Dutch pension system – an overview of the key aspects’ (http://www.pensioenfederatie.nl/Document/Publicaties/English%20publications/Nederlandse_pensioensysteem_Engelstalige_versie.pdf).
[360] Ibid., section 6.2.
[361] On the basis of an index-linked annuity rate of 3.5%.
[362] Information provided by Verbond van Verzekaars (Dutch insurance association).

In the light of Solvency II requirements, longer life expectancy and a number of employers fixing premiums over the last couple of years, insurers have been debating how to make the design of the annuities more flexible and offer higher pensions. Currently, all assets underlying an annuity have to be invested in riskless assets (no stocks are allowed, for instance), which limits the return that insurers can generate on this part of their capital.[363] This applies to conventional annuities only (which guarantee a certain income), but these are the only annuities that are allowed within the Dutch system.

Annuities are provided by life insurers.

6.2.4 Intermediaries

The Netherlands has banned commission payments and financial advisers are tightly regulated. The retail market for independent financial advice for retirement planning is understood to be small, although this may not be due to regulation, given that mortgage advice, which is similarly regulated, is a significantly larger market. The business market, where insurance companies offer their services to firms, is now dominated by representatives of these insurers, as regulation is reported to have made it difficult for smaller independent advisers to operate in this field.[364]

6.2.5 Taxation structure

The Netherlands has an EET regime (exempt from during the accumulation phase and taxed at withdrawal). Building up a pension is tax-free, even in Pillar III, although the tax-free contributions are limited to 70% of the individual's average income over their lifetime. Benefits are taxed when they are paid out, at income tax rates, although the tax rates are lower for retired people below a given threshold, see Table 6.1.

Table 6.1 Tax brackets in the Netherlands

Bracket	Taxable income (£)	Tax percentage when retired	Normal tax percentage
1.0	0–15,700	18.35%	36.25%
2.0	15,700–26,800	24.1%	42%
3.0	26,800–45,200	42%	42%
4.0	45,200+	52%	52%

Source: Belastingdienst.nl.

Annuities and lump-sum payouts (for those with small retirement funds) are both treated as income, and thus taxed at income tax rates. There are no other tax treatments for different products, mainly due to the obligation in most cases to buy annuities.

Inheritance tax in the Netherlands and the tax rate vary according to the relationship with the deceased and value of the estate. Up to €117,214 (£94,000), it is 10% for partners and children, 18% for grandchildren and other relatives, and 30% for all other named beneficiaries. Above that amount, the rates rise to 20%, 36% and 40% respectively.[365]

[363] Information provided by Verbond van Verzekaars (Dutch insurance association).
[364] Ibid.
[365] Dutch Tax Administration, 'How much inheritance tax do you pay? / Hoeveel erfbelasting betaalt u?' (http://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/prive/relatie_familie_en_gezondheid/erven/erfenis_krijgen/hoeveel_erfbelasting_moet_u_betalen/).

6.3 Decumulation phase—consumer journey

6.3.1 Sources of retirement income

Pillar I is not very large in the Netherlands. All individuals are entitled to a state pension amounting to the equivalent of 50% of the minimum wage per person if living together, or 75% of the minimum wage for single households. The state pension is therefore not means-tested, but provides a basic flat income to everyone. For every year between the ages 15 and 65 that a person lived abroad, 2% a year will be deducted.

Should retirees experience financial difficulty, they can apply for the normal benefits that accrue to all people under a certain income threshold. These are paid in addition to the state pension.

6.3.2 Decision-making process

As far as their occupational pension savings are concerned, people in general do not have much choice in their retirement income planning. Within DB schemes, people automatically start receiving their pension after retirement, paid directly from the fund. In the case of DC schemes, the law requires the accumulated balance to be converted into a fixed lifetime annuity. No lump sum may be taken unless the account balance is below the size limit (see above). The only choices currently available to retirees are whether to opt into joint-life insurance with their spouse or to structure the annuity such that payments are higher for the first couple of years in retirement.[366]

Owing to the mandatory nature of the occupational pension schemes, it seems that people are less aware of the choices they could have—for instance, further insurance. As the choices are very limited, there is not much role for financial advisers, although some firms offer some advice to their employees on a voluntary basis.[367]

Pillar III is comparatively small in the Netherlands. It accounts for only about 10% of all Pillar II and III retirement assets combined. This may be attributed to a lack of tax incentives for those who have already made the maximum of tax-deductible contributions within their Pillar II schemes.

Those who have bought savings plans in Pillar III can choose to buy an annuity or a bank drawdown product that returns principal and interest over a fixed number of years. A wide range of term annuities is also available.[368]

6.3.3 Consumer behaviour

An extensive study commissioned by the Dutch Insurance Association analysed consumer behaviour and satisfaction in detail. One of the findings was a correlation between consumers' low levels of satisfaction with their pension scheme and a wish for more flexibility. This tends to be the case for younger people, who are adopting a new approach to their retirement planning and want more responsibility. This may be a temporary phenomenon, as people's perception of whether they need more control also appears to depend on the economic performance of the schemes, and recent years have been difficult for Dutch pension funds.[369] However, the study also shows that while the current

[366] Information provided by Verbond van Verzekaars (Dutch insurance association).
[367] Ibid.
[368] Ibid.
[369] Information provided by Verbond van Verzekaars (Dutch insurance association).

low trust—resulting in low satisfaction—in the pension system causes many people to *say* that they want more flexibility, what they really want is control, not self-responsibility.[370]

In 2011, the pension federation, together with the Dutch pension funds and the social security bank (SVB), invented a tool (the ‘dashboard’) for informing every inhabitant of the Netherlands about all pension entitlements built up so far with different pension funds over the working lifetime.

Within the dashboard, people can view Pillar I, Pillar II and some of the Pillar III contributions to their pensions, giving the total pension entitlement in retirement. This tool has been visited by more than 3m users at least once, and should help to make pensions more visible and tangible.[371]

It is possible to log into the tool with an account log-in that is used for all government interaction, called DigiD. This account is strictly personal, so only the individual should be able to see it—not pension insurers or other intermediaries. The fact that this account is already in use for all interactions with government (such as paying taxes, etc.) contributes to the accessibility and user-friendliness of the dashboard.

Figure 6.1 Example of the pension dashboard

Source: Duuren, I. (2012), ‘Knab brings all your information together and gives you insight into your financial future / Knab brengt al je financiële gegevens bij elkaar en geeft je inzicht in je financiële toekomst (original)’ (http://finno.wordpress.com/2012/11/06/knab-brengt-al-je-financiele-gegevens-bij-elkaar-en-geeft-je-inzicht-in-je-financiele-toekomst/).

There are plans to expand the dashboard with scenario and risk analysis. The regulator, the Dutch Authority for the Financial Markets (AFM), is also pushing

[370] Visser, J. and Maarten, de P. (2013), ‘Research results in the context of consumer pension needs / Onderzoeksresultaten in het kader van consumentenbehoeften pensioenen (original)’, June, para. 7.2 (https://www.verzekeraars.nl/verzekeringsbranche/dossiers/pensioenen/Documents/PensioenenConsumentenonderzoek.pdf).
[371] Annual report 2012 pensioenregister.nl, available at Foundation Pensioenregister (2012), ‘Annual report’ (http://www.pensioenregister.nl/Pensioenregister%20jaarverslag%202012.pdf).

for a financial dashboard which would combine the pension platform with other financial indicators, such as the amount of capital in houses, etc. The platform has caused a shift in communication between the pension funds and the customer, which has become more digital and more consumer-driven.

6.4 Regulatory developments

Oxera understands that fundamental reform of the pension system is not currently high on the political agenda in the Netherlands, with the preference being to adapt the current system to be more sustainable. Dutch public opinion suggests that occupational pension schemes form part of the social security system more broadly, with the main purpose of providing people with a lifelong income.[372]

Pensions are regulated by the Dutch Central Bank (DNB) and the AFM.[373] The DNB ensures that pension funds are financially healthy and can fulfil all future obligations. This involves setting minimum standards for coverage ratios. The AFM focuses more on the behaviour of pension funds, including the information they provide to consumers. Under the 2007 Pensions Act, administrators are required to inform consumers of their pension rights, allowing savers to assess fully their financial situation and plan accordingly. The Act also requires that clear language is used and that annual pension statements are provided.

[372] Information provided by Verbond van Verzekaars (Dutch insurance association).
[373] Pensioenfederatie, 'The Dutch pension system – an overview of the key aspects' (http://www.pensioenfederatie.nl/Document/Publicaties/English%20publications/Nederlandse_pensioensysteem_Engelstalige_versie.pdf).

7 New Zealand

Glossary of terms

AFA	authorised financial adviser
ANZ	ANZ Bank New Zealand
CFLRI	Commission for Financial Literacy and Retirement Income
ESCT	employer superannuation contribution tax
FMA	Financial Markets Authority
FWT	Fund Withdrawal Tax
NZS	New Zealand Superannuation
PIEs	portfolio investment entities
PIR	prescribed investor rate

Box 7.1 Key findings

New Zealand represents a country undergoing significant changes to their pension system. The key areas of interest are as follows.

- In 2007 the government introduced KiwiSaver, a DC workplace-based savings product, which works on an opt-out basis and has had high uptake.
- There is no market for annuity products in New Zealand, and, more generally, decumulation products are rare. Several reasons for this are cited, such as low demand due to a 'do-it-yourself' investment culture in New Zealand, the absence of tax incentives, and unwillingness on the part of suppliers, who see these products as being of low profit and unattractive to price accurately.
- As a result of the immaturity of the KiwiSaver, pot sizes are small (with a median value of around £7,600). As a result, most savers entering retirement take out their pension pot as a lump sum. Early surveys have shown that drivers for withdrawals are evenly spread between spending (holidays, travelling) and reinvestment or paying back debt.
- Another option is for consumers to leave their pension savings in their KiwiSaver accounts after retirement and withdraw at will. This option has the advantage that fees are regulated and therefore lower than with other savings or investment products.
- The government has made a concerted effort to improve financial literacy and raise consumer engagement in recent years, which is widely perceived as successful. While the current focus is on the accumulation phase, as pot sizes grow, there will be a greater need for better information during the decumulation phase.

Source: Oxera.

7.1 Accumulation phase

7.1.1 Structure of defined-contribution schemes

The retirement income landscape in New Zealand has changed substantially over the last decade. The NZ Superannuation (NZS)—a non-contributory state pension in Pillar I—is still a fundamental part of the pensions system. The most significant change has occurred in Pillar II, in which the exponential growth of

KiwiSaver marks a shift towards DC schemes.[374] Prior to KiwiSaver, private retirement income came mainly from conventional savings products and occupational schemes, with little government involvement and few incentives provided.

Introduced in 2007, KiwiSaver is a quasi-mandatory DC scheme. Working on an opt-out rather than opt-in basis, employees are automatically enrolled in the pension scheme and have to actively opt out should they wish to.[375] Uptake has been high, with 53% of the eligible population being members as at 30 June 2013. It is open only to those under 65 at present, although there is pressure for it to be made available to older people.[376] The goal of KiwiSaver is to *'*encourage a long-term savings habit and asset accumulation by individuals who are not in a position to enjoy standards of living in retirement similar to those in pre-retirement*.'*[377] Membership of KiwiSaver has been relatively even across age groups, but with slightly fewer savers at low-income levels.

As at March 2013 there were 45 KiwiSaver schemes in the market,[378] the bulk of which were provided by banks, investment management and financial services companies.[379] Schemes run by the three main Australian banks control a significant majority of all funds.[380] The industry remains highly concentrated, with the eight largest providers accounting for 96.5% of assets.[381] KiwiSaver accounts are investments and therefore do entail risk. The schemes available offer consumers a variety of investment strategies, each associated with a different risk profile.

There are three ways to join a KiwiSaver scheme: automatic enrolment when starting a new job, opting in directly through a KiwiSaver provider; or opting in through your employer. If automatically enrolled through an employer, the Inland Revenue allocates employees either to the employer's chosen scheme if they have one, or to one of nine default schemes. The allocation to one of the default schemes is performed at random. Default schemes all offer a balanced product in terms of risk. Banks are said to have an advantage in capturing consumers switching between schemes because they can offer their KiwiSaver scheme as part of a broader package of savings products. The 2013 Inland Revenue Annual Report on KiwiSaver shows that, as at June 2013, a quarter of all members had stuck to their default allocated scheme.[382] This shows some degree of inertia in the market. The number of individuals choosing their own scheme has been increasing, however. Associated with this is a 24% rise in the number of scheme transfers from 2012 to 2013.[383] Savers then have eight weeks to opt out of the scheme entirely. If they do not opt out in this period, they

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[374] KiwiSaver and how it works alongside the NZS is discussed at http://www.globalaging.org/pension/us/2010/BrookingsPension.pdf.

[375] Such schemes, which take advantage of the workers' natural inertia, have received publicity for their explicit use of behavioural economics. A prominent paper in this literature is Madrian, B. and Shea, D. (2001), 'The power of suggestion: inertia in 401(k) participation and savings behaviour', *The Quarterly Journal of Economics*, **116**:4, pp. 1149–87.

[376] Information provided by Workplace Savings NZ.

[377] Inland Revenue, 'KiwiSaver Annual Report 6', 1 July 2012 – 30 June 2013 (http://www.ird.govt.nz/aboutir/reports/research/report-ks/research-ks-annual-report-2013.html).

[378] Ibid.

[379] A recent report on the performance of KiwiSaver funds is found at http://www.morningstar.co.nz/s/documents/kiwisaver_surveyQ12014.pdf.

[380] For a discussion of the evolution of the market for KiwiSaver schemes, see http://media.nzherald.co.nz/webcontent/document/pdf/201343/chaplinKiwiSaver.pdf.

[381] Morningstar (2014), 'KiwiSaver Survey March Quarter 2014', 30 April (http://www.morningstar.co.nz/s/documents/kiwisaver_surveyQ12014.pdf).

[382] Inland Revenue, 'KiwiSaver Annual Report 6', 1 July 2012 – 30 June 2013 (http://www.ird.govt.nz/aboutir/reports/research/report-ks/research-ks-annual-report-2013.html).

[383] Ibid., Table 4.

cannot leave KiwiSaver. However, they are entitled to switch scheme at any time, even in the decumulation stage if they choose to leave savings in the scheme after 65.

Finance minister, Bill English, has stated that the government would like to have a one-off auto-enrolment of all employees not currently covered by the scheme, although no date has been set for this.[384]

Occupational and private superannuation schemes were originally developed as stand-alone schemes, run mostly by employers themselves. Since the 1990s, schemes have consolidated into 'Master Trusts', managed by external providers. There still remain stand-alone schemes, but these are limited to few large companies.[385] Taken together, superannuation schemes are mainly small and cover less than 10% of the market.[386] There was the option for DC schemes to be converted into KiwiSaver products, although it is unclear how many schemes chose to do so. This option is no longer open to employers, who are now encouraged to open a KiwiSaver scheme alongside their existing plan.[387]

7.1.2 Size of retirement savings

KiwiSaver contributions are made by savers themselves, employers and the government. Upon joining, members can choose to contribute 3%, 4% or 8% of their earnings, with the default option set to the lowest of the three. As at 30 June 2013, 58% of KiwiSaver members were contributing at this default.[388] Employers have more flexibility but must also contribute at least 3%, with the majority again choosing this lower bound.[389] Government incentives are twofold:

- a one-off bonus of NZ$1,000 (£500)[390] upon the opening of an account;
- a contribution of NZ$521 (£260) if the saver contributes at least NZ$1,046 (£530) each year.[391]

KiwiSaver pot sizes are small, with a median value of under NZ$15,000 (£7,600),[392] mainly due to the scheme having been in place for less than eight years. KiwiSaver funds can, in theory, be accessed early to buy a first home and in exceptional circumstances of medical difficulty or financial hardship. However, owing to the small size of the pots, it is not yet clear whether participants draw on their pots for such emergencies.

For people covered by superannuation schemes, contributions are made by employees and employers. Average assets per member are NZ$63,137 (£32,000) in employer-sponsored schemes and NZ$27,724 (£14,000) in retail

[384] ONE News website, 20 October 2013 (http://tvnz.co.nz/politics-news/auto-enrolment-in-kiwisaver-remains-policy-english-5654174).
[385] Workplace Savings, 'Stand alone super' (http://www.workplacesavings.org.nz/stand-alone-super/).
[386] Financial Markets Authority (2013), 'Superannuation schemes report', September, p. 10 (http://www.fma.govt.nz/media/1897908/fma-superannuation-report-2013.pdf).
[387] Inland Revenue, 'KiwiSaver for employers' (http://www.ird.govt.nz/kiwisaver/employers/how/working-with-providers/existing-schemes/).
[388] Inland Revenue, 'KiwiSaver Annual Report 6', 1 July 2012 – 30 June 2013, Table 5 (http://www.ird.govt.nz/aboutir/reports/research/report-ks/research-ks-annual-report-2013.html).
[389] Ibid., Table 11.
[390] Currency converted using latest rates at www.oanda.com.
[391] 50c per dollar contributions, up to a maximum government contribution of $521.
[392] Commission for Financial Literacy and Retirement Income (2013), 'Focusing on the future: report to government', *2013 Review of Retirement Income Policies*, Table 18 (http://www.cflri.org.nz/sites/default/files/docs/RI-Review-Report-to-Govt-Dec-2013.pdf).

schemes (those available to the general public and not associated with an employer).[393] These are not suggestive of actual pension pot size at retirement.

7.2 Decumulation phase—the retirement income market

7.2.1 Overview of the decumulation phase

As KiwiSaver is in its nascent period, there is little evidence of its impact on the decumulation phase. Over coming years, its introduction is set to have a significant impact on the retirement income market.

Provided that an individual has been a member for at least five years, savers can withdraw all funds after they turn 65, the age at which the state NZS is available. Once pensioners retire, they have effectively two options for their KiwiSaver funds:

- keep the funds in their KiwiSaver account and draw them at their own discretion;
- withdraw the full amount.

The focus of KiwiSaver has been on the accumulation rather than the decumulation phase. Advice and options are currently limited for those retiring with KiwiSaver savings. As pot sizes grow, it seems evident that interest in the decumulation phase will increase. The government does not currently provide any incentives for savings to be taken as an income stream, with the exception of giving savers the option to leave funds in KiwiSaver schemes earning high returns. It must be emphasised that the New Zealand pensions market does not currently offer any annuity products whatsoever.

7.2.2 Products

Owing to the small size of KiwiSaver pots, most savers entering retirement take out their pension pot as a lump sum.[394] At the same time, many providers actively encourage consumers to leave their savings in KiwiSaver accounts after retirement, enjoying good rates of interest and withdrawing in stages.

When looking at the limited set of products, it is important to ask why there has been little development of an annuities market. After years of stagnant demand, the last provider exited the market in 2013. There is a range of possible underlying factors, including negative tax incentives, a ‘DIY’ culture and an inflexible product offering.[395] Additionally, annuities are not perceived as good value for money in New Zealand.[396] Reasons cited for this include that for individuals expected to live a further 20 to 40 years, a large amount of wealth is given up for a relatively modest income stream—descendants of an annuitant can see this as giving up their inheritance. This is compounded by the tax treatment of annuities.[397]

[393] Financial Markets Authority (2013), ‘Superannuation schemes report’, September (http://www.fma.govt.nz/media/1897908/fma-superannuation-report-2013.pdf).
[394] Inland Revenue (2013), ‘KiwiSaver early retirement withdrawal survey’, 21 May, p. 4 (http://www.ird.govt.nz/resources/d/a/da38fa80400b580d8174ef5d802abedf/ks-report-withdrawal-with-members.pdf).
[395] These explanations were provided during discussions between Oxera and the regulator and trade associations in New Zealand.
[396] The Retirement Policy and Research Centre et al. (2012), ‘Spending the savings: decumulation and middle-income retirement’, 30 November, pp. 30–31 (http://docs.business.auckland.ac.nz/Doc/2012-Proceedings-Spending-the-Savings-Symposium.pdf).
[397] Ibid.

Other research attributes the underdevelopment of the annuities market to the very low levels of private pension saving resulting from the comprehensive social security and absence of tax incentives.[398] The argument for the lack of an annuities market is summarised as follows:

> From the individual's point of view traditional annuities are largely seen as illiquid, inflexible products that offer little room for movement when circumstances change, and that can be poor value for money. From the provider point of view they are low profit and unattractive products to price accurately.[399]

A 2009 report by the consultancy Mercer describes the main demand-side limiting factors as the lack of an 'annuity culture', no government incentives (in fact disincentives) and a perception of annuities as expensive. On the supply side, prohibitive costs in the form of prospectus and statement updating, small market size, capital requirements, lack of matched investments and tax burdens are given as issues in the development of such a market.[400]

There is a growing discussion on the future development of the annuity market.[401] The architect of KiwiSaver has proposed compulsory annuitisation of half of KiwiSaver balances.[402] The motivation for this comes not out of a concern that retirees will run down savings, but the potential for KiwiSaver to be used to ease the fiscal burden of the state NZS by linking the two (i.e. introducing a means-tested state pension). This would represent a step change from the current non-means-tested system of state provision. One group, the New Zealand Income Guarantee, is seeking to develop a variable annuity product to fill the void of private pensions products in the market. This is specifically designed with KiwiSaver funds in mind, and may represent a wider movement towards the development of such products.[403]

Providers of private and occupational superannuation schemes mostly offer a set of options for withdrawal, including income drawdown. In a similar way to KiwiSaver, it is the same providers of accumulation products who offer these decumulation options. These tend to echo those offered by KiwiSaver providers, in that savers can withdraw all funds as a lump sum or choose to spread withdrawals over a longer period. One provider, 'Superlife', states that most savers choose the 'Kiwi Way' of lump-sum withdrawal.[404]

7.2.3 Providers

Providers of KiwiSaver schemes do not provide decumulation products as such, but give savers a set of options upon retirement. Information on the market for KiwiSaver providers is given in the accumulation section of this report. Providers

[398] For an analysis of some of the typical barriers to the provision of annuities that apply equally to other countries—e.g. adverse selection and excess longevity—but in the specific context of New Zealand, see St John, S. (2009), 'The annuities market in New Zealand', October, report prepared for the Ministry of Economic Development (http://docs.business.auckland.ac.nz/Doc/The-annuities-market-in-New-Zealand-prepared-for-the-Ministry-of-Economic-Development.pdf).
[399] Rusconi, R. (2008), 'National Annuity Markets Features and Implications', OECD Working Papers on Insurance and Private Pensions.
[400] Mercer (2009), 'Securing retirement incomes', July, pp. 32 and 33, (http://www.workplacesavings.org.nz/assets/KiwiSaver/SecuringretirementincomesAug09.pdf).
[401] A recent working paper discusses the establishment of a public annuity fund in New Zealand. See Ministry of Social Development (2013), 'Assuring retirement income', May, Working Paper 01/13 (http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/working-papers/wp-01-13-assuring-retirement-income.pdf).
[402] The Treasury (2013), 'Affording our future', July, p. 57 (http://www.treasury.govt.nz/government/longterm/fiscalposition/2013/affordingourfuture/ltfs-13-aof.pdf).
[403] New Zealand Income Guarantee (2013), 'Submissions 2013 review of retirement income, commission for financial literacy and retirement income', 30 May (http://www.cflri.org.nz/sites/default/files/docs/RI-Review-2013-Submissions-NZIG.pdf).
[404] SuperLife, 'Benefit payments and options' (http://www.superlife.co.nz/benefit-payments-and-options.html).

give retirees flexibility with how much they would like to withdraw from their scheme at different points during retirement. They do not refer savers to any type of decumulation products which funds could be used to purchase.

NZ Workplace Savings lists ten providers of workplace superannuation 'Master Trust' schemes.[405] These are mainly large banks and insurance companies. The lack of providers of stand-alone income products is notable, and is likely to share many of the factors underlying the lack of an annuities market described above.

7.2.4 Intermediaries

The role of financial advisers for pensions products is quite limited. Numerous sources describe the quality of advice given in New Zealand as poor, which is likely to be related to insufficient regulation of the industry until recent years.[406] KiwiSaver states that neither employers nor the Inland Revenue should advise an individual on whether to become a KiwiSaver scheme member.[407] Choices of KiwiSaver schemes are guided mainly by Internet advice rather than consultation with financial advisers.

In recent years, financial advisers have become highly regulated. The Financial Advisers Act, introduced in 2008 and amended in 2010, contains regulations intended to ensure the sound and efficient delivery of financial adviser and broking services, and to encourage public confidence in the service. This contains disclosure requirements on fees and remuneration, as well as any associations with organisations providing financial products. The financial reforms in Australia have sparked a discussion in New Zealand regarding a ban on commissions, although no such regulation is planned.[408]

7.2.5 Taxation structure

Overall, there are strong incentives to engage in KiwiSaver schemes, due to the government contributions to the scheme. This represents a significant departure from previous NZ pensions policy, as since 1990 there have been no incentives for private pension provision.[409] However, the tax regime for pensions by itself provides few incentives to save.

The tax regime for pensions products is tax-exempt. KiwiSaver contributions are calculated on pre-tax pay, but tax is still paid on full earnings, and thus in practice the contributions are subject to full marginal income tax.[410] Investment income is also taxed, with the relevant rate determined by the type of fund.[411] All of the KiwiSaver default funds are portfolio investment entities (PIEs), with investment tax rates (the 'prescribed investor rate', PIR) determined by personal

[405] See Workplace Savings, 'Compare providers' (http://www.workplacesavings.org.nz/compare-schemes-2/).
[406] One such article is Consumer (2011), 'Financial disputes resolution', 5 October (https://www.consumer.org.nz/articles/financial-disputes-resolution).
[407] The relevance of financial advisers in KiwiSaver schemes is covered in KiwiSaver (2007), 'The role of financial advice in KiwiSaver', 9 November (http://www.kiwisaver.net.nz/The-role-of-financial-advice-in-KiwiSaver).
[408] Robertson, F. (2009), 'IFA cautious over move away from commission', 5 May, *The National Business Review* (http://www.nbr.co.nz/article/ifa-cautious-over-move-away-from-commission-101970).
[409] The history of pensions policy in NZ is described in Retirement Policy and Research Centre (2008), 'PensionBriefing', May (http://docs.business.auckland.ac.nz/Doc/PensionBriefing-2008-05-History-of-Public-and-Private-Provision-1975-2008.pdf).
[410] A person on average earnings of around NZ$44,000 (£22,600) a year pays a marginal income tax rate of 17.5%, but this rises to 30% for income above NZ$48,000 (£24,600) a year. See Statistics New Zealand (2013), 'New Zealand Income Survey: June 2013 quarter', 4 October (http://www.stats.govt.nz/browse_for_stats/income-and-work/Income/NZIncomeSurvey_HOTPJun13qtr.aspx); and Inland Revenue, 'Income tax rates for individuals and ACC earners' levy rates' (http://www.ird.govt.nz/how-to/taxrates-codes/itaxsalaryandwage-incometaxrates.html).
[411] Taxation of KiwiSaver is discussed in 'KiwiSaver and tax' (https://www.kiwisaver.govt.nz/already/contributions/tax/).

income levels, with rates of 10.5% up to an income level of NZ$48,000 (£24,000), 17.5% for income up to NZ$70,000 (£36,000) and 28% for income above NZ$70,000. The rate of investment income taxation for 'widely-held superannuation funds' is 28%.[412] These investment income tax rates apply to pensioners as well as during the accumulation phase.

Employers must pay 'employer superannuation contribution tax' (ESCT), which is dependent on the employee's wage and ranges between 10.5% and 33%.[413] While contributions are taxed in full, there is a significant government 'tax credit' for KiwiSaver accounts, which is a contribution from government to account. A person on average earnings would expect to receive the maximum credit available.[414]

Withdrawals are not taxed, but investment income continues to be subject to taxation. This results in an important tax disincentive to buy annuities (if they were available) compared with keeping money in the PIEs typical during the accumulation phase of the KiwiSaver account. For superannuation payments, those in high income-tax brackets may have to pay a Fund Withdrawal Tax (FWT), which is 5% of the benefit that can be attributed to employer's contributions.[415]

Tax disincentives have been described as one of the fundamental reasons for the lack of an annuities market in New Zealand.[416] The tax rate on investment income of an annuity (not the capital withdrawals, which are not taxed) is the life insurer company rate of 30%. This rate is usually higher than the purchaser's marginal tax rate (PIR), which for a pensioner is typically 10.5% or 17.5% (see above).

New Zealand abolished inheritance tax in 1992. The lack of inheritance tax provides an additional incentive to leave bequests, which in turn reduces the demand for life annuities.

7.3 Decumulation phase—consumer journey

7.3.1 Decision-making process

KiwiSaver members decide how they would like to withdraw their money at age 65. Providers write to savers in the run-up to their 65th birthday explaining the options for withdrawal. In general, savers are not prompted to consider decumulation early on in the accumulation phase, although these choices are explained in the initial information when joining the scheme. In these documents, providers present the option to leave funds in the account at retirement and take income drawdown at regular intervals.[417] It is also evident in the associated withdrawal forms that the option of taking an income drawdown is clearly given, although not explicitly encouraged.[418]

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[412] From Inland Revenue, 'Investment Income' website, http://www.ird.govt.nz/toii/pir/workout/
[413] Inland Revenue, 'Employer responsibilities', http://www.ird.govt.nz/payroll-employers/make-deductions/deductions/super-contributions/esct.html.
[414] With average earnings of NZ$44,000 (£22,600) and an employer contribution rate of 3%, the contributions would be NZ$1,320 (£680) a year, which would attract the full government contribution.
[415] SuperLife, 'Retirement savings – taxation' (http://www.superlife.co.nz/retirement-savings-taxation.html).
[416] St. John, S. (2009), 'The annuities market in New Zealand', October, report prepared for the Ministry of Economic Development, p. 4 (http://docs.business.auckland.ac.nz/Doc/The-annuities-market-in-New-Zealand-prepared-for-the-Ministry-of-Economic-Development.pdf).
[417] ANZ KiwiSaver Scheme (2014), 'How are you saving for your future?', 31 July, p. 27 (http://www.anz.co.nz/resources/3/0/305b84004f5ceea49072f73a134e099b/kiwisaver-investment-statement.pdf?MOD=AJPERES).
[418] ANZ Investments (2013), 'Retirement withdrawal application form', September (http://www.anz.co.nz/resources/b/a/bae0a423-94f4-42e3-809c-51a8c4e27709/Active-Member-retirement.pdf?MOD=AJPERES).

Alongside the introduction of KiwiSaver, the government has taken a keen interest in improving consumers' understanding and awareness of products. In 1995 the government established the Retirement Commission, now known as the Commission for Financial Literacy and Retirement Income (CFLRI). This preceded similar projects internationally, with most countries following suit in the 2000s. Mostly publicly funded, it is independent of both government and industry. The current focus is on accumulation and encouraging workers to be more proactive in managing their savings, rather than specifically encouraging greater engagement with pension products. It is reasonable to assume that, as DC pots grow, there will be more of a need for information on the options in the decumulation phase and the government's approach is likely to reflect this.

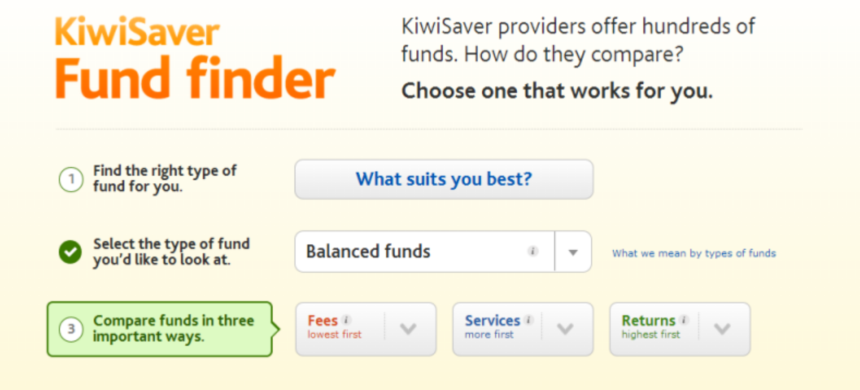
One of the CFLRI's activities is running the website 'sorted.org.nz', which provides support and information on aspects of financial planning.[419] The website is widely perceived as successful in aiding consumers in their financial choices. It has proven to be highly used, which is attributed to it being user-friendly and easy to read, advertised heavily and having personalisation capabilities.[420] As at 2007, 28% of New Zealanders aged 18–65 had used the site to help them evaluate their options under KiwiSaver.[421] It is important to note that the financial literacy focus in New Zealand is clearly on saving and investing, as opposed to decisions post-retirement (due to the immaturity of the KiwiSaver scheme). New Zealanders rank highly on financial awareness internationally. The 2013 Financial Knowledge and Behaviour survey shows that banks provide the most financial advice, with only 15% of respondents using financial advisers.[422] Positive responses to questions such as 'I believe that I am personally responsible for my financial future' and 'It is important to shop around to get the best deal for financial products and services such as insurance, loans and credit cards' have all increased in recent years.

On the other hand, only AFAs (authorised financial advisers) are able to advise on investments and they are perceived to have only a limited role in New Zealand.[423] This may not assist in encouraging retirees to buy more complex retirement income products.

As part of their broader push for financial literacy/awareness, the government has established 'Fund finder', a KiwiSaver comparison tool.[424] This flexible tool, shown in Figure 7.1, allows the comparison of funds across fees, services and returns. Note that there is no similar tool for the decumulation phase.

[419] Sorted (https://www.sorted.org.nz/).
[420] A 2006 PPI report describes several lessons for the UK to learn from sorted.org.nz: The Pensions Policy Institute (2006), 'Lessons from New Zealand's Retirement Commission for UK policy on financial awareness and advice' (http://www.pensionspolicyinstitute.org.uk/publications/reports/lessons-from-new-zealands-retirement-commission-for-uk-policy-on-financial-awareness-and-advice).
[421] Retirement Commission (2008), 'Statement of Intent 2008/11'.
[422] Colmar Brunton (2013), 'Financial knowledge and behaviour survey', 11 June (http://www.cflri.org.nz/sites/default/files/docs/FL-2013-Fin-Knowledge-Behaviour-Survey-11-06-2013.pdf).
[423] Inland Revenue, 'KiwiSaver Annual Report 6', 1 July 2012 – 30 June 2013, p. 86 (http://www.ird.govt.nz/aboutir/reports/research/report-ks/research-ks-annual-report-2013.html).
[424] KiwiSaver, 'Fund finder' (http://fundfinder.sorted.org.nz/).

Figure 7.1 KiwiSaver Fund finder tool



Source: KiwiSaver, 'Fund finder' (http://fundfinder.sorted.org.nz/).

In addition to the above tool, individual KiwiSaver providers are encouraged to play an active role in helping consumers become informed. As an example, Figure 7.2 presents the choices and tools provided by ANZ, the largest KiwiSaver provider. ANZ offers a choice of six funds, which vary in risk and return. It also provides a 'Lifetimes' option, which automatically shifts the investment to safer funds over a person's lifetime up until retirement.

The bank provides a 'futurewise' sub-site to help consumers understand the scheme and choose the right fund.[425] The screenshot below illustrates one of its tools, designed to help savers pick a contribution rate based on their retirement income aspirations. This is only provided as the total pension pot, not as a calculation of the associated predicted income level. Other default providers provide similar tools.

Figure 7.2 Fund returns for ANZ

Source: ANZ, 'FutureWise' (https://futurewise.anz.co.nz/).

In addition to the information provided by the government and financial institutions, numerous non-profit and education organisations work towards improving financial literacy.[426] For example, the Young Enterprise Trust runs

[425] ANZ, 'FutureWise' (https://futurewise.anz.co.nz/).
[426] O'Connell, A. (2009), 'Financial literacy in New Zealand', May, Appendix 1 (http://www.med.govt.nz/business/economic-development/pdf-docs-library/cmd-taskforce-research/financial-literacy-in-nz.pdf).

workshops and creates tools for primary and secondary school students to improve financial literacy.

7.3.2 Sources of retirement income

The state NZS still plays a large role in retirement income for those at the lower end of the income distribution. Currently, 60% of those aged 65 and over depend entirely or largely on NZS for their income.[427] 97% of people aged 65 plus receive the state NZS and 53% earn investment income (including workplace schemes such as KiwiSaver) on top of this. The NZS is not means-tested.

One feature of KiwiSaver is that savers have the option to leave all funds in the scheme after the age of 65. As fees are regulated at a competitive level,[428] leaving money in a scheme may represent a sensible investment. Whether individuals will capitalise on this is yet to be seen.

The first cohort of KiwiSaver members was eligible to withdraw funds on 1 July 2012. Although data is not sufficient to draw firm conclusions, there are some indications of how these withdrawals are being made, most notably given by a 2013 Inland Revenue survey.[429] At 31 December 2012, 32.5% of members who were eligible to withdraw had withdrawn their full funds and closed their accounts. Members with smaller balances were more likely to make full withdrawals. This trend of high withdrawals continues, with 28,549 (39%) of the 73,992 becoming eligible to withdraw in 2013 withdrawing fully.[430] Nearly three-quarters of these savers planned to withdraw in the next five years as at early 2013. This does not include partial withdrawals, but the survey states that full withdrawals made up the overwhelming majority of all withdrawals. According to providers, most members have not sought or received information or advice on how to allocate their savings after withdrawal.

According to the survey, drivers for withdrawals are evenly spread across spending and reinvestment, with some role for paying off debt also. The most desired purchases for those choosing to spend their savings are holidays or travel, followed by home improvements and large purchases, such as cars or boats. This is very early evidence, however, and should be treated with caution. Current trends in withdrawals are likely in part to be driven by the small size of pension pots.

Corporate superannuation schemes are designed to supplement the NZS and KiwiSaver funds. One attractive feature of such schemes is that, unlike KiwiSaver, in which funds are locked away until age 65, withdrawals can be made earlier from superannuation schemes.

7.3.3 Consumer behaviour

It has been noted that savers in New Zealand tend to prefer a ‘DIY’ approach, in which they retain control of their wealth. This also suggests that any annuity developed would need to have flexibility to be adopted, which has not been the case with previous offerings. As previously discussed, when the market did exist,

[427] Commission for Financial Literacy and Retirement Income (2013), ‘Focusing on the future: report to government’, *2013 Review of Retirement Income Policies*, p. 6 (http://www.cflri.org.nz/sites/default/files/docs/RI-Review-Report-to-Govt-Dec-2013.pdf).
[428] According to one commentator, the fees charged to retail clients under KiwiSaver are equivalent to wholesale fees.
[429] The full withdrawal survey report is found at http://bit.ly/IRD-KSwithdrawal-members.
[430] Inland Revenue, ‘KiwiSaver Annual Report 6’, 1 July 2012 – 30 June 2013, p. 5 (http://www.ird.govt.nz/aboutir/reports/research/report-ks/research-ks-annual-report-2013.html).

annuities were not perceived as good value for money in New Zealand,[431] a perception that was strongly influenced by their tax treatment. Additionally, and in line with other countries, New Zealanders are reported to tend to underestimate their life expectancy, thus making annuities appear less good value for money.[432]

7.4 Regulatory developments

A key objective of pension reform in New Zealand has been to raise the engagement of consumers with pension products, although with little focus on the decumulation phase. The regulator has introduced various mechanisms of financial literacy and product comparison in order to encourage consumers to take initiative when making retirement savings decisions. New Zealand was one of the first OECD members to put forward a National Strategy for Financial Literacy, which was launched in June 2008. As part of this, five distinct activity streams have been identified.[433]

- **Talk**: shifting cultural norms such that individuals feel comfortable discussing financial issues.
- **Learn**: building financial literacy into part of the educational pathway.
- **Plan**: encouraging all New Zealanders to undertake financial planning.
- **Debt-smart**: ensuring that people manage debt appropriately, getting out of high-interest debt quickly.
- **Save/invest**: making sure more people save and invest in a range of financial assets.

As noted before, the strategy does not explicitly focus on the decumulation decisions faced by pensioners, but rather on aspects of financial education important in earlier stages of life.

In government, several other organisations also promote financial literacy. The Ministry of Consumer Affairs, The Reserve Bank and the Securities Commission all have commitments to provide education on financial topics. Since 2009, the Ministry of Education has been responsible for financial education in schools. The Exchange, a consortium of financial institutions coordinated by the CFLRI, represents a collaborative partnership between the financial services and public sectors. It was introduced in December 2013 with the aim of helping savers make better decisions. Members meet regularly to discuss how best to allocate resources to improve financial literacy.[434]

KiwiSaver funds are fairly tightly regulated. Fees must be deemed 'reasonable' by the Financial Markets Authority (FMA). As of last year, funds must release regular reports disclosing performance, fees, asset allocation and other information in a simple, readable form.[435] Default funds are more closely

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[431] The Retirement Policy and Research Centre et al. (2012), 'Spending the savings: decumulation and middle-income retirement', 30 November, pp. 30-31 (http://docs.business.auckland.ac.nz/Doc/2012-Proceedings-Spending-the-Savings-Symposium.pdf).
[432] O'Connell, A. (2012), 'Underestimating lifespans? Why longevity risk exists in retirement planning and superannuation policy', Ph. D thesis, Victoria University of Wellington.
[433] Commission for Financial Literacy and Retirement Income (2014), 'National strategy for financial literacy', 26 May, p. 3 (http://www.cflri.org.nz/sites/default/files/docs/National-Strategy-for-Financial-Literacy-2014.pdf).
[434] Commission for Financial Literacy and Retirement Income, 'The exchange' (http://www.cflri.org.nz/financial-literacy/the-exchange).
[435] The full disclosure regulation document is found here: http://www.legislation.govt.nz/regulation/public/2013/0047/13.0/whole.html.

regulated, with their fees directly negotiated by government. These default schemes have a portfolio of 15–25% growth assets and the rest as income assets.[436] Workplace superannuation schemes fall under the Financial Markets Conduct Act 2013, replacing the Superannuation Schemes Act 1989. The more-recent legislation has a focus of making sure that funds are consistent with being purely for the purpose of providing retirement income.[437]

[436] Information provided by the Financial Markets Authority.
[437] Financial Markets Authority (2013), 'A guide to the Financial Markets Conduct Act 2013 reforms', November, p. 15 (http://www.fma.govt.nz/media/1901900/a-guide-to-the-financial-markets-conduct-act-reforms-november-2013.pdf).

8 Singapore

Glossary of terms

CPF	Central Provident Fund
CPFIS	Central Provident Fund Investment Scheme
CPF Life	A mandatory deferred annuity scheme
MAS	Monetary Authority of Singapore
MSS	Minimum Sum Scheme
SRS	Supplementary Retirement Scheme

Box 8.1 Key findings

As one of the oldest pensions systems in Asia, Singapore has developed a unique system, with the following key characteristics relevant for this study.

- Retirement income falls chiefly under the umbrella of the Central Provident Fund (CPF), a publicly managed DC scheme. There is little formal pension provision outside this scheme.
- Contribution rates are very high (36%); however, pension pot sizes are not as high because members can withdraw funds to purchase a home, invest in education, or cover medical expenses. Out of concern that members may use up all their pension funds before they retire, the government sets a minimum sum that members must have by the age of 55.
- In 2009 Singapore introduced CPF Life, a mandatory deferred annuity scheme; there are two plans under this scheme:
  - the ‘standard plan’, a standard life annuity;
  - the ‘basic plan’, an annuity offering lower payout but higher bequests.

  These two plans were selected out of an original 12 plans offered to consumers. Demand for the basic plan has revealed a strong preference for bequests in Singapore.
- Although other pension savings products exist, CPF controls a large share of the retirement market. One barrier to entry is the difficulty of finding long-term assets to match the provider’s liability, as the government does not issue tradable bonds.

Source: Oxera.

8.1 Accumulation phase

8.1.1 Structure of defined-contribution schemes

The CPF was introduced in 1955 as a publicly managed DC scheme purely for the provision of retirement income, but has since evolved into a broader social security system. CPF savings are invested by the CPF board into Special Singapore Government Securities, with guarantees provided on interest rates. The floor rate is currently set to 2.5%.[438] Over a set amount, savings can also be

[438] As described by the CPF Board at Central Provident Fund Board, ‘Improve the returns on CPF savings’ (http://mycpf.cpf.gov.sg/Members/Gen-Info/CPFChanges/Improve_Returns_on_CPFSavings.htm). It was changed at the start of 2014, see http://mycpf.cpf.gov.sg/CPF/News/News-Release/N_26September2012.htm.

invested in the CPF Investment Scheme (CPFIS), which allows savers more control over their investments. A variety of financial investment products is available under the CPFIS.

Outside the CPF, there is little in the way of private pension provision, with a limited role for occupational employer-sponsored schemes. These types of scheme fall into two groups: those established under regulations set out in Section 5 of the Income Tax Act;[439] and those that are part of the Supplementary Retirement Scheme (SRS).

Section 5 schemes are managed by employers and are almost exclusively used by large multinational companies. Although there have recently been some efforts by the Singapore government to encourage such schemes, the Singapore Actuarial Society estimates their prevalence to be extremely low, at around 20 schemes in total.[440]

The number of account holders in the SRS programme has been growing steadily since its introduction in 2001 and, as at December 2013, stands at 91,652,[441] which is a relatively small fraction of Singapore's working population. These schemes allow contributions by both the employee and employer up to a maximum of S$12,750 (£6,100).[442] To encourage the use of such schemes, the government has recently amended the law such that there is no longer a maximum age for making contributions. SRS schemes are provided by one of three banks: DBS, UOB or OCBC.

8.1.2 Size of retirement savings

Contribution rates to each employee's CPF savings vary by age, and represent about one-third of wages on average.[443] For savers up to the age of 50, employers contribute 16% of wages and employees 20%, summing to a total contribution rate of 36%. Although no data is available on the size of savings at the age of withdrawal, a 2010 CPF report shows that, at that time, around 40% of members aged 55 could meet the 'minimum sum' of S$120,000 (£58,000).[444]

During accumulation, CPF savings are distributed into three separate accounts: Ordinary, Special and Medisave. Funds in the Ordinary Account can be used only for pensions, but also for purchasing a home or investing in education. The Special Account is devoted to providing pension income, and the Medisave Account is for medical expenses.

Out of concern that workers may use too much of their CPF savings for purposes other than pensions, the government instituted the Minimum Sum Scheme (MSS). At the age of 55, workers must set aside a minimum sum to buy

[439] The government clarified the Section 5 plans in 2011. See https://www.kpmg.com/sg/en/IssuesAndInsights/tax/TaxAlert-201122.pdf.
[440] Singapore Actuarial Society Retirement Committee (2013), 'Employer-sponsored retirement schemes in Singapore: the need for change', 27 June (http://www.actuaries.org.sg/files/library/committee_reports/Employer-Sponsored%20Retirement%20Schemes%2027Jun2013.pdf).
[441] Ministry of Finance, 'Cumulative SRS statistics' (http://app.mof.gov.sg/data/cmsresource/Our%20Policy/SRS/Cumulative%20SRS%20Statistics%202013.pdf).
[442] Currency converted using latest rates at www.oanda.com.
[443] Central Provident Fund Board (2014), 'Guide to CPF contribution rates', October (http://mycpf.cpf.gov.sg/NR/rdonlyres/9557AE3D-D9C7-4DAB-A12C-E7E94DE8E50B/0/conrates_guide_2014.pdf).
[444] Central Provident Fund, 'CPF trends – minimum sum scheme', p. 2 (http://mycpf.cpf.gov.sg/NR/rdonlyres/957F7D54-B236-45EA-89FE-29890B6E0AB9/0/CPFTrendsMinimumSum_Feb2011.pdf).

a retirement product. Funds from all three accounts are combined into a Retirement Account, which forms the basis for CPF retirement income.[445]

The introduction of the SRS programme in 2001 and more recent efforts to clarify the rules for Section 5 schemes represent part of government efforts to encourage private pensions alongside the CPF. Data on the size of savings at retirement from SRS schemes is not readily available. Due to its relatively recent inception, pension pot sizes are likely to be small. Withdrawals during the accumulation phase are not permitted in general, but the SRS does allow early withdrawals upon payment of a 5% penalty fee.

8.2 Decumulation phase—the retirement income market

8.2.1 Overview of the decumulation phase

When CPF members reach 55, all savings can be withdrawn after setting aside the minimum sum in the Retirement Account—currently set to S$155,000 (£74,000). Any shortfall can be made up by using the value of the member's property.

Prior to 2009, the CPF regulated the decumulation phase with the MSS. Under this system, Singaporeans had the option to take drawdowns directly from the CPF for approximately 20 years, or to use the funds to purchase an annuity from a private insurer. As at 2007, there were nine such annuity products, offered by eight private insurers, whose offerings were all deferred life annuities.

The decumulation phase of Singaporean pensions changed substantially with the introduction of CPF Life in 2009, a mandatory deferred annuity scheme. The scheme was proposed by the National Longevity Insurance Committee, tasked with creating a solution to the growing problem of longevity insurance. The minimum age at which members can draw down their CPF savings has gradually been rising, and currently stands at 65. There is an option to choose private annuities over the CPF Life product, but few seem to taking it up.

8.2.2 Products

CPF Life products are deferred annuities, which provide income from the drawdown age. There are only two options for retirees when choosing their method of decumulation: the Standard Plan and the Basic Plan. Broadly, monthly payouts are higher under the Standard Plan and bequests left to beneficiaries are higher under the Basic Plan. [446] The table below highlights the differences between the two products.

[445] In recent years the government has in increased the size of the Minimum Sum it requires to be put aside for retirement income, in response to the high and rising life expectancy of Singaporeans. This has caused controversy, with some complaining that the required amount of savings is unachievable. See Wong, C. (2014), 'Concerns grow over Singapore pension system', *The Wall Street Journal*, 9 June (http://online.wsj.com/articles/concerns-grow-over-singapore-pension-system-after-weekend-protests-1402319551).

[446] The differences between the plans are explained in http://blog.moneysmart.sg/saving/compare-and-contrast-the-new-cpf-life-schemes/. Another useful discussion is available here http://business.asiaone.com/personal-finance/investments-and-savings/which-go-cpf-life-basic-or-standard-plan.

Table 8.1 CPF Life products

	CPF Life Standard	CPF Life Basic
At 55	Half of the minimum sum is deposited as the first premium payment	A small percentage of savings (determined by the CPF Board) is deposited as the first premium payment
At the drawdown age	The remaining balance in the Retirement Account is deposited as the second premium payment and annuity payments start	An equally small percentage is deposited as the second premium payment. Payouts from the Retirement Account begin
Aged 90	–	Annuity payments start

Source: CPF website.

One feature of CPF Life's short history is the change in the offerings available. The initial CPF Life proposal suggested that 12 plans be offered, but upon its introduction, this was condensed to four. These plans differed in the trade-off between bequests and monthly payments. After receiving feedback that it took 'significant effort to understand and choose among the four plans,'[447] in January 2013 the scheme was reformed again, offering only the two plans described above.[448] Having four options could not be described as expansive, so lessons can be drawn about consumers' limited ability to make a decision even when the choice set is narrow. One of the two plans completely dropped from the system was unique as it consisted of the highest monthly payouts coupled with zero bequests. This had been unpopular, chosen by only 3% of members. Savers clearly demonstrated the desire to leave money behind for their survivors.

Interest in Section 5 schemes is growing, although the growth of such schemes appears to have been limited by a lack of clarity and administrative costs associated with their formation.[449]

Also of interest is the nature of products prior to the introduction of CPF Life, when there were far more annuities on offer. All had fixed nominal payouts, with two having a 'participating bonus' feature, in which bonuses were paid based on the profits of the insurer. These also included a 'guaranteed amount' feature, in which beneficiaries would receive at least the premium paid less the annuities already paid at death. This, again, is evidence of the bequest culture exhibited by Singaporeans.

Before the introduction of CPF Life in 2009, only 4–5% of retiring cohorts purchased annuities. However, when exemptions were taken into account, of those who had the choice of an annuity, approximately one in six chose it.[450] Fong, Mitchell and Koh (2009)[451] discuss the desire for liquidity as the fundamental factor for consumers' choice of non-annuity products. Also, the fact that phased withdrawal was the default option for CPF savers suggests that inertia may have played a role. The authors find a money's-worth ratio value of

[447] Ministry of Manpower (2012), 'A simpler CPF LIFE', press release, 5 March (http://www.mom.gov.sg/newsroom/Pages/PressReleasesDetail.aspx?listid=410.
[448] Information on the reform is found here: http://mycpf.cpf.gov.sg/CPF/Templates/SubPage_PrinterFriendly_Template.aspx?NRMODE=Published&NRORIGINALURL=%2FCPF%2FNews%2FNews-Release%2FCOS_Speech-A-Simpler-CPFLIFE.ht&NRNODEGUID=%7B07D5676C-5ED3-4336-9E4F-AC1AB64FBFA6%7D&NRCACHEHINT=Guest
[449] An example of innovation in providing such schemes to smaller employers is discussed here http://www.btinvest.com.sg/wealth/wealth-planning/pension-scheme-smaller-firms-20121103/
[450] Fong, J., Mitchell, O., and Koh, B. (2009), 'Longevity risk and annuities in Singapore', October, Insurance and Risk Management Working Paper 2009-23 (https://bepp.wharton.upenn.edu/files/?whdmsaction=public:main.file&fileID=1791).
[451] Ibid.

0.854 for the market at this time, which is broadly similar to that found in other countries.

The introduction of CPF Life has had a substantial effect on the market for private annuities. Statistics from the Monetary Authority of Singapore show a significant fall in the number of annuities sold by private providers in recent years, standing at only 652 for 2013.[452] In 2008, after the announcement of CPF Life but before its introduction, there was a strong market response, with the number of schemes being offered reducing from nine to just two. Financial advice websites tend to suggest that CPF Life offers a better value annuity than that made available by private providers.

For those with SRS savings, lump-sum and phased withdrawals are available. The withdrawal age for these schemes is currently 62.

8.2.3 Providers

The CPF provides and manages its CPF Life annuities itself. There is the opportunity for savers to opt for private pension providers, although the current offering seems limited. It is not noted as an option on the CPF website, suggesting that CPF Life sees this as appropriate only for a minority of savers. The only evidence of a scheme offering transfer of CPF funds is the Lifetime Income annuity offered by Great Eastern Life, the largest life insurer in Singapore.

For SRS savings, the insurer, NTUC Income, offers a set of lifetime annuity products,[453] which include immediate and deferred annuities. This evident lack of private pensions providers may, in part, be due to the large scale of the CPF Life system, and to barriers to entry. One such barrier may be the difficulty of finding long-term assets to match the provider's liabilities.[454] Although the government does issue some domestic debt ('Special Singapore Government Securities'), these are non-tradable bonds issued primarily to meet the investment needs of the CPF.[455]

8.2.4 Intermediaries

While there is a financial advice market in Singapore, it does not appear to play a prominent role in the pensions market. For example, at no point does the CPF recommend seeking the help of a financial adviser when choosing retirement products. Most of the advice given to future retirees comes from the CPF itself.

Commissions for financial advisers are allowed, but the regulator has recently taken an active interest in improving the regulatory framework under which advisers operate.

8.2.5 Taxation structure

Tax is not paid on mandatory CPF contributions, nor on interest or withdrawals, which means that the system is classed as exempt-exempt-exempt (EEE). Supplementary CPF contributions are eligible for income tax relief. In line with

[452] Monetary Authority of Singapore, 'Life Insurance Data' (http://www.mas.gov.sg/~/media/resource/data_room/insurance_stat/2013/Life%20Insurance%20Data_2013.pdf).
[453] These products are described here: http://www.income.com.sg/forms/brochure/Annuity.pdf.
[454] Information provided by the Monetary Authority of Singapore.
[455] Ministry of Finance (2013), 'Singapore government borrowing', November (http://app.mof.gov.sg/data/cmsresource/Public%20Debt%20Report%202013.pdf).

the relatively low taxation across all aspects of Singaporean life, there is no inheritance tax in the country.

For the small number of Section 5 corporate pensions plans, a tax deduction can be claimed for contributions against income, and investment income is tax-exempt. Payouts are fully taxable.

There are significant tax incentives to engage in an SRS scheme. Neither contributions nor investment returns are taxed. Only 50% of benefit payments are taxable, under normal circumstances.[456] Annuities, if chosen, are taxed at the same rate as lump-sum withdrawals. Phased withdrawals (over ten years) will tend to result in lower tax being paid. For example, if S$20,000 (£9,600) is withdrawn every year for ten years, no tax is paid since the income tax rate is zero for the first S$20,000 of taxable income.

8.3 Decumulation phase—consumer journey

8.3.1 Decision-making process

Initially, the CPF Life scheme was available on an opt-in basis to those aged 55 and over. However, since 1 January 2013 it has been applied automatically to those turning age 55 with S$40,000 (£19,000) in their Retirement Account at age 55 or S$60,000 (£29,000) at age 65. For savers meeting either of these criteria, CPF Life is essentially now compulsory. It is not possible to leave other than in exceptional circumstances. To encourage uptake of CPF Life, the government provides a means-tested bonus (L-Bonus) to Singaporeans born between 1958 and 1962 who join CPF Life before reaching the age of 56. Bonuses range from S$1,800 (£860) and S$4,000 (£1,900).

Individuals choose which type of CPF Life scheme they would like to join at the age of 55.[457] If no plan is chosen in the six-month choice window after an individual's 55th birthday, the Standard Plan is chosen by default. The government and CPF run websites helping individuals plan for retirement, which focus on explaining options in plain English, using illustrations.[458] These web tools make little mention of private pensions saving. MoneySENSE, the government's financial education programme, puts little emphasis on the decumulation phase, focusing more on advising savers to make good investment decisions. Given the relatively small size of the private pensions market, it is not surprising that there are no price-comparison sites.

One feature of the system as a whole is that the accumulation and decumulation phases are entirely integrated and centrally managed. For the majority of individuals, heavily reliant on the CPF for retirement income, this means that there are few decisions to be taken throughout the process.

8.3.2 Sources of retirement income

Singapore is notable for its lack of any formal welfare system, including a state pension. The Ministry of Manpower has stated that, for lower- and middle-

[456] Information on the taxation of SRS withdrawals is found at http://www.iras.gov.sg/irasHome/page04.aspx?id=1170.
[457] The CPF publishes a online guide to making retirement decisions: Central Provident Fund, 'Reaching 55' (http://mycpf.cpf.gov.sg/NR/rdonlyres/C7A3F0C7-F0E7-4B5A-9792-2C07D4B6C119/0/Reaching55_booklet.pdf).
[458] See Central Provident Fund, 'Retirement Ready' (https://www.cpf.gov.sg/cpf_trans/ssl/rnr/default.asp); and Central Provident Fund (2014), 'CPF Special and medisave interest rates to stay at 4%', 25 June (http://www.cpf.gov.sg/imsavvy/infohub_article.asp?readid={295527838-20263-5387820600}).

income citizens, the CPF alone provides a sufficiently high replacement rate.[459] This is illustrated by the figures in Table 8.2.[460]

Table 8.2 Net income replacement rates (CPF only)

	30th percentile	50th percentile	70th percentile
Men	88%	70%	63%
Women	80%	64%	59%

Source: Ministry of Manpower.

The Ministry of Manpower also recognises that the CPF system meets basic retirement needs, but that high-income Singaporeans will hold other assets that supplement their CPF income. Other schemes, such as the SRS scheme, are designed to provide such supplementary income. In the 2005 Monetary Authority of Singapore (MAS) survey, when asked for the three most important sources of funds for retirement, 80% listed personal savings and 74% CPF savings.

8.3.3 Consumer behaviour

The evolution of CPF Life plans has shown that consumers in Singapore exhibit a strong preference for bequests. Related to this is the potential loss aversion felt by leaving money to the CPF as opposed to family. There is a sense of responsibility for older people to leave money behind for their children. This cultural factor is illustrated by the poor demand for no-bequest options under CPF Life, and is likely to have shaped the design of the scheme. Information about bequests is given almost equal weight to that about payments on the CPF website, further demonstrating its importance to Singaporeans. A 2005 financial literacy survey found that, when asked why they engage in financial planning, 63% of respondents said that it was to provide for dependants in the family, compared with 58% saying that they wanted enough funds in retirement.[461]

There does not appear to be the 'DIY' culture discussed in reference to other countries, with the CPF controlling much of the accumulation and decumulation phases. In the 2005 survey it was found that 28% of respondents had approached financial advisers to help with finance management, although this was not specifically for retirement decisions.[462] The reception of compulsory annuitisation seems to be mixed at best. Some are critical of the lack of transparency, whereas others are supportive of the programme. Much of the criticism of the CPF stems not from the decumulation phase but from the returns made over the accumulation phase and lack of transparency in the management of funds. The extreme lack of personal control of the decumulation phase that CPF Life gives has not received significant criticism, despite the considerable impact it will have on Singaporeans over coming years.

[459] Ministry of Manpower (2012), 'CPF Members entering workforce today will have adequate savings in retirement', 14 November (http://www.mom.gov.sg/newsroom/Pages/PressReleasesDetail.aspx?listid=460).
[460] The OECD paints a different picture of CPF replacement rates, estimating the median income to be 16.2% for men and 14.3% for women. OECD (2012), 'Pensions at a glance Asia/Pacific 2011', OECD Publishing (http://dx.doi.org/10.1787/9789264107007-en).
[461] The MoneySENSE Financial Education Steering Committee (2005), 'Quantitative research on financial literacy levels in Singapore', July, Figure 4.1 (http://www.mas.gov.sg/~/media/resource/news_room/press_releases/2005/Financial%20Literacy%20Levels%20in%20Singapore%20Full%20Report.ashx).
[462] Ibid., Figure 4.3.

8.4 Regulatory developments

The bulk of the pensions system in Singapore is publicly managed, and thus outside any additional regulation. Beyond this, the regulatory regime is not particularly tight, which is likely to be because it applies to a minority of citizens.

The government has taken steps in recent years to encourage private pensions savings via the tax treatment of SRS programmes. However, given the longevity insurance provided by CPF Life, there has not been a concerted effort to encourage private annuitisation.

In the last decade, the government has sought to improve financial literacy via MoneySENSE, its national programme, which circulates publications and runs events focusing on investment decisions and the understanding of financial products. There seems to be little focus on retirement decisions in the programme, with emphasis placed on savings and investment. A 2005 financial literacy survey found that most Singaporeans had 'healthy attitudes towards basic money management, financial planning and investment matters'. However, the report does note that savers are not clear about how much they need to set aside for retirement, a finding that is likely to have contributed to the recent changes to the CPF system.[463] Across numerous questions, retirees tend to have the least engagement with their finances. For example, 55% of retiree respondents stated that they normally do not track how much they spend, compared with a median of 39%.[464]

Financial advisers are regulated by MAS under the Financial Advisers Act.[465] This Act sets out rules on disclosure, but, in contrast to the UK, does not prevent advisers working on commission. In 2012, the MAS established a Financial Advisory Industry Review panel to conduct a review of the financial advisory industry. The panel's recommendations, published in January 2013,[466] included raising the academic and professional qualifications required to become a financial adviser, and the introduction of new regulations for cases of conflicts of interest. Of the panel's 28 recommendations, MAS accepted 19, modified 8 and dropped 1. In response, the regulator stressed that it was not clear that Singaporeans were ready to move to a fee-based regime. MAS states that it had considered changing the remuneration structure via a cap or ban on fees, but decided against it, with the suggestion of further reviews to come. In an April 2012 survey, 80% of respondents stated that they were not prepared to pay an upfront fee for financial advice. Other reasons are described as follows:[467]

> It is also possible that implementation of a fee-based regime could result in consumers needing to pay more for their protection or investment needs, especially for consumers with smaller investments. In addition, there could be other unintended consequences, such as a reduction in the number of FA

[463] The full report is at: http://www.mas.gov.sg/~/media/resource/news_room/press_releases/2005/Financial%20Literacy%20Levels%20in%20Singapore%20Full%20Report.ashx
[464] Ibid., Table 3.6.
[465] The Financial Advisers Act is provided by the Attorney-General's Chambers at http://statutes.agc.gov.sg/aol/search/display/view.w3p;page=0;query=DocId%3Ab2d0479b-1890-4957-8e00-7b87fc413495%20Depth%3A0%20Status%3Ainforce;rec=0;whole=yes#pr25-he-.
[466] The recommendations are found at http://www.mas.gov.sg/~/media/resource/news_room/press_releases/2013/Annex%201%20%20Report%20on%20recommendations%20of%20the%20Financial%20Advisory%20Industry%20Review%20Panel.pdf
[467] Monetary Authority of Singapore, 'Response to feedback received – public consultation on recommendations of the Financial Advisory Industry Review', p. 55 (http://www.mas.gov.sg/~/media/MAS/News%20and%20Publications/Consultation%20Papers/Response%20to%20Feedback%20Received%20on%20Public%20Consultation%20on%20Recommendations%20of%20the%20Financial%20Advisory%20Industry%20Review.pdf).

representatives in the industry, exacerbating the lack of financial and protection planning by consumers.’

9 Switzerland

Glossary of terms

ASIP	*Schweizerischer Pensionskassenverband*, Swiss pension fund association
FINMA	Swiss Financial Market Supervisory Authority
OAK BV	*Oberaufsichtskommission Berufliche Vorsorge*, supervisory commission of occupational pensions
SNB	Swiss National Bank

Box 9.1 Key findings

Switzerland has a long history of occupational pension plans and among the highest annuitisation rates (80%). The main features of the Swiss pension system are as follows.

- Contributions rates are regulated at a high level (starting at 14% and rising to 36% as the member approaches retirement), resulting in large pension pots at retirement.
- Pension plans are negotiated collectively by the stakeholders. The accumulation and decumulation phases are integrated, and members purchase their retirement product from their existing pension provider.
- Retirees have two choices available: joint life annuity and a lump sum. Annuities are the default option; while lump sums need to be applied for three years in advance and require the signatures of both the member and their spouse. This is thought to be one of the contributing factors for the high annuitisation rate in Switzerland.
- Another reason for the high annuitisation rate is the high money's-worth ratio (108.2% according to one estimate). This is mainly due to the fact that the government sets a statutory rate that is above the market rate (6.8%) for people with small pots. Pension providers are able to maintain higher annuity rates by withholding profits from the pension fund and offering lower returns during the accumulation period.
- Annuity demand is high even though, for some people (most likely those with higher marginal tax rates—i.e. higher incomes), there are tax advantages from receiving a lump sum (at least in part).
- Consumer surveys show strong risk aversion among the Swiss, which may be another contributing factor to the high annuitisation rate.
- Research in Switzerland shows an inverted U relationship between pension pot size and annuitisation rate. Consumers with small pension pots avoid annuities as they do not offer meaningful retirement income while consumers with large pension pots are more likely to prefer a lump sum (presumably due to the favourable tax treatment).

Source: Oxera.

9.1 Accumulation phase

9.1.1 Structure of defined-contribution schemes

Occupational pension funds have a long history in Switzerland and were widespread before they became mandatory in 1985, covering about half of the labour force voluntarily or through collectively bargained agreements.[468] DC plans dominate nowadays and there has been a trend away from DB schemes.[469] Contributions to DC plans are strictly regulated and increase in four steps, from 7% for those aged 25 to 18% of pensionable salary at 55 or older.[470] The employer has to match the contributions of all of their employees to the fund.[471]

Occupational pension schemes are typically linked to a specific employer (in the case of medium-sized to large firms), or a certain branch of an industry which smaller firms in that area use. There are about 2,000 pension funds in Switzerland,[472] which manage contributions during the accumulation phase and provide the decumulation plan at a later stage.

In Pillar III, private pension savings plans are offered by banks and insurance companies. Since Pillars I and II combined are the principal sources of retirement income, Pillar III is comparatively small.

9.1.2 Size of retirement savings

In international comparison, the Swiss system is well funded, with DC pension fund assets totalling 118% of GDP.[473] Average pension fund assets on retirement range between CHF300,000 and CHF500,000 (around £200,000–£320,000).[474]

It is in general possible to access all or parts of the retirement savings before reaching statutory retirement age. If an individual is moving abroad permanently or financing a new business, access is possible. The most common motive, however, is to purchase a home in Switzerland. Up to CHF20,000 (around £13,000) may be withdrawn. Policymakers are understood to have become concerned about this practice recently, and rules may be tightened in the course of an inquiry over the next couple of years.[475]

Outside the mandatory occupational pension schemes, there are further incentives to save for retirement. Within Pillar III there is a Pillar IIIa, enabling

[468] Bütler, M. and Staubli, S. (2010), 'Payouts in Switzerland: explaining developments in annuitisation', Pension Research Council Working Paper No. 2010-23.
[469] European Actuarial and Consultancy Services (2013), 'Switzerland pension summary' (http://euracs.eu/summaries/pension-summary-switzerland/).
[470] Information provided by the Schweizerischer Pensionskassenverband (Swiss pension fund association).
[471] AXA Winterthur (2013), 'All you need to know about social security', January (http://www.igpinfo.com/igpinfo/public_documents/ss_summaries/Liechtenstein.pdf).
[472] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).
[473] Towers Watson (2013), 'Global pension assets study', January (http://www.towerswatson.com/DownloadMedia.aspx?media=%7B5AC4BED2-A4F9-4C9E-AB9D-5087579BF96D%7D).
[474] Ökonomenstimme (2011), 'Demand-oriented social benefits as a substitute for lifelong pensions? / Bedarfsorientierte Sozialleistungen als Ersatz für lebenslange Renten? (original)', 3 August (http://www.oekonomenstimme.org/artikel/2011/08/bedarfsorientierte-sozialleistungen-als-ersatz-fuer-lebenslange-renten/).
475 Billingham, D. (2012), 'Swiss debate tightening early access rules to shore up pension funds', 12 January (http://www.pensionfundsonline.co.uk/content/pension-funds-insider/swiss-debate-tightening-early-access-rules-to-shore-up-pension-funds/464).

people to save part of their income in a tax-advantaged way (up to a limit and subject to non-withdrawal until at least five years before reaching retirement).[476]

9.2 Decumulation phase—the retirement income market

9.2.1 Overview of the decumulation phase

The reference retirement age in Switzerland is 64 for women and 65 for men. In the context of the 'Pensions 2020' reform programme, this will be harmonised to 65 for schemes under both the state pension and the mandatory occupational pension.[477]

The choices available in occupational pension schemes are tightly regulated. Only lifetime annuities or lump-sum payments are available, and individual pension funds are able to limit the amount of lump sums permitted, although Oxera understands that the majority of pension funds do allow members to withdraw the full amount as a lump sum.[478]

In the private market (Pillar III), a wider range of products is available, but the majority of people appear to put any lump sums into standard bank savings or investment accounts to further accumulate or draw down continually. Term annuities are available in Pillar III, but are not allowed under Pillar II arrangements.

9.2.2 Products

Life annuities provided under Pillar II schemes are heavily regulated. They are in general joint-life annuities with the possibility of bonus payments. Switzerland is one of very few countries that directly regulate the pricing of annuities, by specifying a minimum conversion factor for the decumulation period, as well as minimum interest rates to be paid on retirement savings during the accumulation period. This arrangement means that consumers may not get a good deal during accumulation, but are compensated by a generous annuity conversion rate at retirement.[479]

This regulatory approach has its roots in reform agenda of the 1970s, when the system of occupational pensions competed with an expansion of the state pension. The more individualistic approach won, but some collective elements remain. Overall, the objective of the system is to achieve a combined replacement rate of 60% with Pillars I and II, and it is to this end that the heavy regulation was put in place.[480] This also makes the schemes more akin to the DB schemes that prevailed before Pillar II coverage became mandatory.

However, the 6.8% minimum rate applies only to insured incomes between CHF21,060 and CHF84,240 (around £14,000 and £55,000, respectively). Pension funds can also insure people with incomes exceeding this threshold, and are then freed from the obligatory minimum conversion rate. Often, pension institutions offer lower rates in this segment to achieve a sustainable average overall. The average weighted by capital is actually around 6.0–6.1% and many pension funds are moving towards rates of 5.5%. Outside the obligatory income

[476] The Swiss Authorities Online, 'How does the retirement provision system work?' (https://www.ch.ch/en/retirement-provision-system/).
[477] Information provided by the Schweizerischer Pensionskassenverband (Swiss pension fund association).
[478] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).
[479] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[480] Soziale Sicherheit CHSS (2010), '25 Jahre berufliche Vorsorge', No. 2/2010, S. 89-92.

range, pension funds can also demand higher contributions and offer better interest rates during accumulation. [481]

A 2010 referendum to reduce the legal conversion factor to 6.4% failed, and there are some sustainability issues within the Swiss system. The government has proposed to lower the conversion factor to 6.0% until 2020.[482]

No official statistics are available on the level of annuitisation in occupational pension schemes. However, a share of 80–85% has been estimated, implying that lump-sum payments make up 15–20% of distributions.[483] Survey evidence showed that, on average, 37% of pensioners drew part of their pension as a lump sum in 2013, and that this lump sum on average equalled around 40% of the account balance.[484]

Estimating money's-worth ratios for Swiss annuities for different groups of the retirement population, Bütler and Ruesch (2005) concluded that, even in the light of harmonising statutory retirement ages and a reduction in the conversion factor, the ratios remained very high in Switzerland, putting pressure on pension funds and insurance companies.[485] A more recent estimate of the average Swiss money's-worth ratio is 108.2%. This means that the net present value of the expected income stream from the annuity is estimated to be 8.2% higher than the price of the annuity.[486] These high money's-worth ratios in the decumulation phase are possible partly as a result of consumers experiencing lower returns in the accumulation phase.

9.2.3 Providers

Annuities within Pillar II are primarily provided by the pension funds themselves, except for small pension funds, which turn to life insurance companies. Consequently, life insurance companies have a market share of about 15–20% of the annuities market. They accounted for around 21% of the total of CHF793bn in 2012 (£520bn). At the same time, they companies served just below 50% of insured workers and about 25% of all current pension recipients.[487]

There are about ten life insurance companies in Switzerland, of which seven offer annuity products for the Swiss market. By contrast, there are around 2,000 pension funds, 60% of which issue annuities themselves and account for between 85 and 90% of assets under management.[488]

Competition for consumers takes place in Pillar III where banks and life insurance companies provide the majority of services. The life insurance market

[481] Vorsorgeexperten, 'Conversion rate / Umwandlungssatz (original)' (http://www.vorsorgeexperten.ch/grundlagen-der-ch-vorsorge/die-2-saeule/der-umwandlungssatz).
[482] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).
[483] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[484] Swisscanto (2013), 'Schweizer Pensionskassen' (http://www.swisscanto.ch/.magnolia/protected/pdfLink/show.set-35114.language-de.pdf).
[485] Bütler, M. and Ruesch, M. (2007), 'Annuities in Switzerland', The World Bank Policy Research Working Paper 4438 (http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-4438).
[486] Cannon, E. and Tonks, I. (2011), 'Annuity markets: Welfare, Money's worth and Policy implication', Netspar Panel Paper 24 (http://www.bath.ac.uk/management/research/pdf/tonks-cannon-annuity-markets.pdf).
[487] Swiss Financial Market Supervisory Authority (FINMA) (2013), 'Disclosure of operating accounts 2012 / Offenlegung der Betriebsrechnung 2012 (original)', 6 September (https://www.finma.ch/d/beaufsichtigte/versicherungen/betriebsrechnung-bv/Documents/br-offenlegungsbericht-bv-2012-d.pdf).
[488] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).

is dominated by six companies which controlled 8% of the market in 2013 (see Table 9.1).

Table 9.1 Market shares of life insurance companies in the Swiss market, 2013

Insurance company	Market share	Market share (cumulative)
AXA Leben	30.1	30.1
Swiss Life	26.3	56.5
Helvetia Leben	10.9	67.4
Basler Leben	9.2	76.7
Allianz Suisse Leben	6.0	82.7
Zürich Leben	5.2	87.9

Source: Swiss Financial Market Supervisory Authority (FINMA) (2013), 'Report on the insurance market in 2013 / Bericht über den Versicherungsmarkt 2013 (original)', 11 July (https://www.finma.ch/d/finma/publikationen/Documents/versicherungsreport_2013-d.pdf).

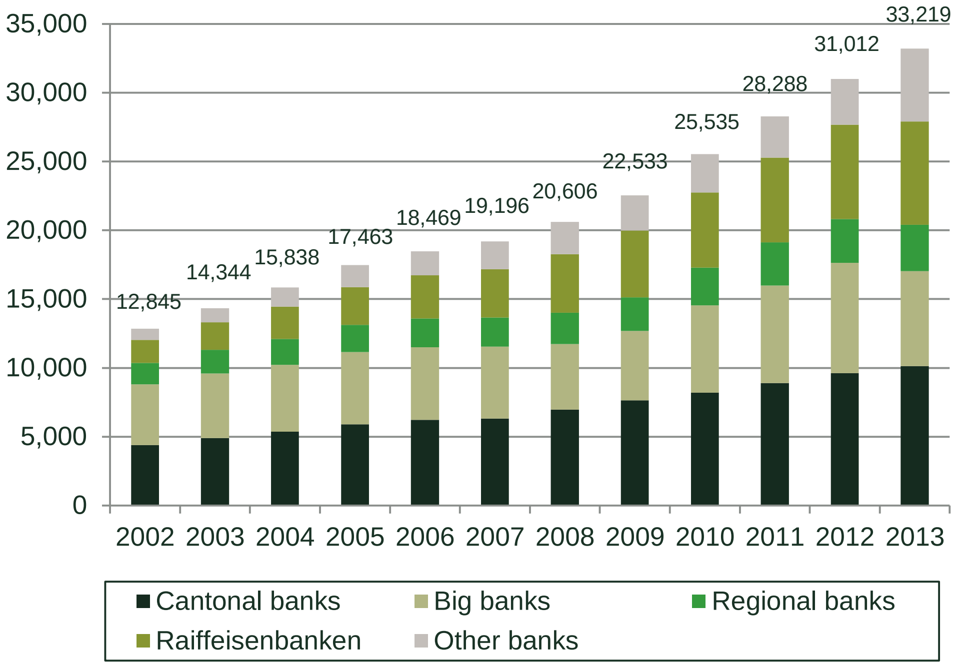
Individual retirement policies held at life insurance companies can be grouped into Pillar IIIa and IIIb, where IIIa represents regulated and tax-advantaged savings vehicles and IIIb represents the open market. As shown in Figure 9.2, Pillar IIIa accounts for about one-third of the account balances, and annuity contracts make up a very small proportion of these. In Pillar IIIb, annuity contracts are more widespread, with about one-third of all capital invested at life insurers in Pillar IIIb in 2013.

Banks form the other part of the personal retirement planning system. They cannot issue annuities, but offer standard lump-sum savings vehicles in Pillars IIIa and IIIb and cooperate with insurance companies to offer annuities as well. Figure 9.1 summarises the evolution of Pillar IIIa deposits at different types of bank from 2002. This differentiation is possible thanks to special accounting requirements for Pillar IIIa, which do not apply to Pillar IIIb. Cantonal banks took the largest share of the market, with 30.5% in 2013. The graph also shows the growing importance of the Raiffeisenbanken, as had been noted by Bütler and Ruesch in 2005. In 2013 Raiffeisenbanken had a market share of 23% compared with 13% in 2002. Big banks such as UBS and Credit Suisse came third, with 20.7%.

While the overall annuitisation rate is high, demand for annuities appears weak in Pillar III, which would be expected given the above market rates offered by annuities in Pillar II, although further data would be required to confirm this finding (available information is limited). Looking at life insurance companies (in isolation from banks due to a lack of data), annuity contracts accounted for just 20% of assets, with the remaining 80% as lump-sum policies.[489]

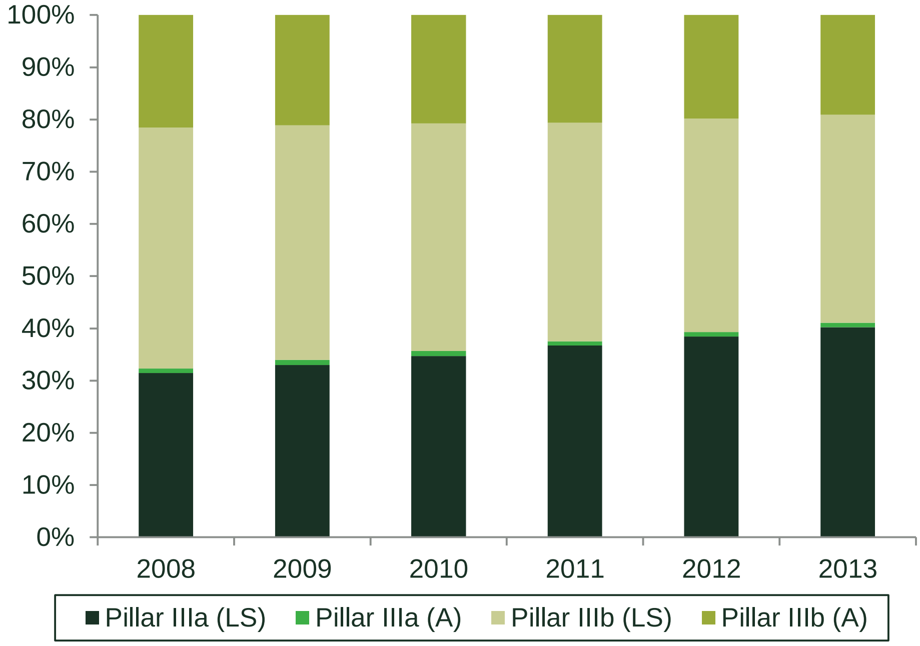
[489] It is notable that the proportion of assets as annuities differs significantly over Pillars IIIa and IIIb, Adding up Pillar IIIa accounts at banks and life insurance companies shows that only 0.9% of assets in 2013 were in annuity contracts, with the remainder in policies to be paid out in a lump sum. For Pillar IIIb, this calculation cannot be made, since there is no publicly available data on Pillar IIIb assets at banks. However, looking at life insurance companies in isolation from banks, approximately 96% of annuity contracts were found in Pillar IIIb,

Figure 9.1 Evolution of Pillar IIIa deposits at Swiss banks by type of bank (£m)



Source: Swiss Central Bank (SNB), Swiss National Bank (2013), 'Assets and liabilities – domestic and foreign' (http://www.snb.ch/ext/stats/bankench/pdf/defr/Stat24.pdf).

Figure 9.2 Evolution of Pillar III capital invested with life insurance companies



Notes: The data provides a disaggregation by savings policy type. They can be grouped into annuity contracts (A) and lump-sum contracts (LS). This is done for both Pillar IIIa and IIIb.

Source: FINMA.

Regulatory requirements are the largest potential barrier to entry. In particular:

- there are strict prudential rules for life insurance companies. All pension operations need to be fully funded and are subject to special accounting rules.[490]
- Pillar II-regulated conversion rates strongly favour lifetime annuities provided by pension funds. This is also likely to act as a strong constraint on any demand-induced entry or competition.

9.2.4 Intermediaries

Pension funds often offer financial advice to their members, but it is not clear how independent this advice is.[491] Since the pension fund typically chooses the annuity provider or provides it itself, and because the only product allowed is highly standardised and regulated, there is little effective choice and therefore less need for comprehensive advice. Nevertheless, people still need to consider tax implications when making their decision about fund allocations (e.g. lump sum versus annuity).

Financial intermediation is more relevant in Pillar III. Banks and insurance companies operate their own branches with financial advisers, but there is also a network of external intermediaries. In May 2014, 14,422 such intermediaries were registered with FINMA, of which 88% were individuals, 12% legal entities. 45% of intermediaries were non-tied. Over 90% of tied intermediaries are employed by insurers as external sales representatives.[492] Commissions are allowed in Switzerland.[493]

9.2.5 Taxation structure

Employer and employee contributions to the Pillar II pension system are both tax-deductible. The investment returns of the assets are also exempt from taxation. Withdrawals from the pension fund are taxed, creating an EET pension taxation system.

In the decumulation phase, lump sums receive special treatment, while annuity payments are simply added to all other income. Lump-sum payments are taxed separately from all other income on receipt, which can actually be more favourable for some people than the annuity option (especially for very large pension pots). A study by the Swiss government found that in all of the cantons (taxation *varies* by canton), there could be tax advantages from taking a lump sum.[494] While the approach varies by canton, the tax rate for lump-sum payments is one-fifth of the regular income tax. However, it is not clear that the consumer would benefit from taking a large amount of money as a lump sum since the large income flow for the year is likely to push them into higher tax brackets.

In Pillar III, contributions are exempt from taxation up to a limit. No withdrawals are permitted until, at most, five years before reaching pensionable age and the benefits drawn are subject to income tax. The Swiss system distinguishes between Pillar IIIa and IIIb. Pillar IIIa offers a restricted private pension plan for

[490] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[491] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).
[492] Swiss Financial Market Supervisory Authority (FINMA) (http://www.vermittleraufsicht.ch/docs/finma_content.asp?id=31569&sp=E&m1=31078&m2=31080&m3=31569&m4=&domid=1063).
[493] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).
[494] Federal Department of Finance (2009), 'Tax effects of private pension plans / Steuerliche Effekte der privaten Altersvorsorge (original)' (http://www.efd.admin.ch/dokumentation/zahlen/00578/01624/).

everyone earning an income. Contributions are tax-deductible up to a set amount, while the self-employed may pay in more since they do not have Pillar II coverage. There is access to the pension pot only in special circumstances (e.g. buying or building residential property, moving abroad permanently, setting up a business or being unable to work). Pillar IIIb offers free/unrestricted pension plans for everyone. There are no limits to the amount you can pay in, but fewer tax advantages.

The inheritance tax system is highly fragmented, with regulations varying by canton. Spouses and registered partners do not have to pay any taxes; all other groups face a progressive tax rate in most cantons, which varies by degree of relation to the deceased.

9.3 Decumulation phase—consumer journey

9.3.1 Sources of retirement income

Switzerland operates a three-pillared pension and old-age insurance system, consisting of a basic state pension layer; an occupational pension layer and; a supplementary private pension system.

- Providing cover for old age, disability and death of partner, Old Age and Survivors' Insurance is a government-funded social security system, managed by cantonal and professional compensation funds. Compulsory for everyone living and/or working in Switzerland, it is financed through contributions from employees and employers, with the level of pension depending on average salary and years in work.
- Occupational pensions cover all employees insured under Pillar I earning at least CHF21,060 (around £14,000). This pillar includes disability insurance and entitles spouses with children to a survivor's pension.
- Voluntary private pensions are intended as a supplement to the first two pillars, in particular, for the self-employed who are not covered by any occupational pension scheme. They are also important as a tax-efficient investment and savings vehicle.

According to OECD figures, the Swiss system achieves an overall average replacement rate of 57.9%, which is slightly above the OECD34 average, of which Pillar I represents 31.5%.[495]

Coverage by the occupational pension system is high and there is little scope for annuities on the open market. There does not seem to be an active market in Switzerland at all, with market annuities making up 0.5% of the total pension volume.[496]

9.3.2 Decision-making process

In Pillar II, it is not compulsory to take an annuity, but regulatory factors strongly encourage this. There is also debate whether about people should have to buy a minimum annuity, in order to ensure people do not need to rely on means-tested

[495] OECD (2011), 'Pensions at a glance 2011: retirement-income systems in OECD and G20 countries', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2011-en).
[496] Bütler, M. and Ruesch, M. (2007), 'Annuities in Switzerland', The World Bank Policy Research Working Paper 4438 (http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-4438).

benefits. Pension funds can theoretically make an individual take an annuity, but the standard is to let people choose to take a lump sum if they prefer.[497]

The principal choice is between lump sums and life annuities because regulations do not allow term annuities or phased withdrawals within the pension system (although the individual is free to buy such products with their lump sum). Taking a life annuity is the default option in Pillar II pension schemes. This may partly explain why the take-up of annuities is high in Switzerland, alongside the high annuity rates offered.[498]

Lump sums are not restricted per se, but need to be applied for three years in advance, and require the signatures of both the pension scheme member and spouse (if married). These arrangements may have removed some of the bias that can tempt individuals to access their money as quickly as possible. The terms and conditions are typically set by the plan provider, including any limits to lump-sum payments. Government regulation requires providers to offer the option to take a lump sum of at least 25% of the account balance, although most pension funds allow the full amount to be taken.[499] If the pension pot is less than CHF5,000 (around £3,200) people automatically receive a lump sum; if it is less than CHF25,000 (around £16,400), it is understood that many people would take the lump sum.[500]

The annuity provider is typically chosen by the pension fund, and larger funds will provide the annuity themselves. There is a strong link between accumulation and decumulation through the same provider. This is because, in order to fund annuities with the minimum rate of 6.8%, the returns on the pension fund are likely to be dampened.[501]

Pillar III savings may be accessed five years before reaching retirement age. Pillar III pension can also be postponed by five years if an individual continues to work beyond the statutory retirement age of 65.

Lump sums taken from the occupational pension pot or from Pillar III can be freely invested into any financial product available—e.g. phased withdrawals or term annuities—although this part of the market is very small. Most assets are held in savings accounts at banks, where they are invested in various ways; only a few people buy further life insurance products in addition to the state and occupational pensions.[502]

9.3.3 Consumer behaviour

A recent study by Allianz Suisse showed strong risk aversion among Swiss investors. Annuities provided under Pillar II schemes are perceived as a good deal due to the minimum conversion factor, which is currently set at 6.8% of accumulated balances, fixed in nominal terms. In the UK at this time, a broadly equivalent joint-life pension annuity for a person aged 65 in the open market has

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[497] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).
[498] Bütler, M. and Teppa, F. (2007), 'The choice between an annuity and a lump sum: results from Swiss pension funds', *Journal of Public Economics*, **91**:10, pp. 1944–66.
[499] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[500] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).
[501] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[502] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).

a conversion rate of about 5.7%.[503] Again, it should be noted that the minimum conversion factor applies only to the obligatory part of Pillar II, and that the overall average rate weighted by capital is lower and more in line with international benchmarks. The high take-up therefore suggests some underlying demand for annuities in Switzerland, which is likely to be related to the relative risk aversion of retirees, as described above. Bütler and Staubli (2010) pointed out that the strong historical dimension and the stringent regulation make it difficult to draw lessons for other countries regarding the demand for annuities. They showed, however, that the marginal decision to annuitise is driven by the annuity's value. Using a reduction of the conversion factor from 7.2% to 6.8%, they demonstrated that annuity demand had a responsiveness of 0.7 with respect to the change in value. They also observed anticipatory behaviour as people brought forward their planned retirement dates, and thus concluded that individuals have a strong awareness of their money's worth.[504]

Research has shown that small pension pots are strongly linked with taking a lump sum, which may be due to a different rate of time preference or high discounting.[505] The availability of means-tested Pillar I benefits may be another driver behind some households' decisions.[506] The maximum amount of standard Pillar I benefits is roughly CHF2,000 per month (£1,300) and further means-tested benefits can raise this to about CHF3,000 (£2,000). Work by Bütler, Staubli and Teppa (2011) demonstrated that individuals with less than CHF1,000 (£650) of monthly Pillar II benefits (corresponding to a pension pot of approximately CHF170,000 or £110,000) face strong incentives to withdraw their pension savings in a lump sum, spend this and then apply for means-tested benefits.[507]

Households with large pension savings are also more likely to withdraw (part of) their pension pot as a lump sum, mostly due to favourable tax treatment. As Bütler and Teppa (2007) showed, this creates an inverse U-shaped relationship between pension wealth and the annuitisation rate, where those in the middle choose to annuitise most. This was demonstrated by a regression analysis where a quadratic specification provided the best fit.[508]

High annuitisation in general has been attributed to the design of many plans' default option.[509] To opt out of an annuity, retirees need to provide both their own and their spouse's signatures.[510]

Phone calls with regulators and pension associations conveyed the impression that the high level of annuitisation is to some extent also due to tradition and culture. Taking out a lump sum was described sometimes as something to be frowned upon, and academics also pointed to the importance of the history of the Swiss pension system. Bütler and Staubli (2010) analysed both rational and behavioural motives behind annuitisation. Based on money's-worth ratios, they

[503] Based on the annuity rate table provided by the *Financial Times* on 28 July 2014, available from: http://www.ft.com/personal-finance/annuity-table.
[504] Bütler, M. and Staubli, S. (2010), 'Payouts in Switzerland: explaining developments in annuitisation', Pension Research Council Working Paper No. 2010-23.
[505] Bütler, M. and Teppa, F. (2007), 'The choice between an annuity and a lump sum: results from Swiss pension funds', *Journal of Public Economics*, **91**:10, pp. 1944–66.
[506] Means-tested benefits vary by canton.
[507] Bütler, M., Peijnenburg, K. and Staubli, S. (2011), 'How much do means-tested benefits reduce the demand for annuities?', CESifo Working Paper No. 3493.
[508] Bütler, M. and Teppa, F. (2007), 'The choice between an annuity and a lump sum: results from Swiss pension funds', *Journal of Public Economics*, **91**:10, pp. 1944–66.
[509] Ibid.
[510] Information provided by the Oberaufsichtskommission Berufliche Vorsorge (supervisory commission of occupational pensions).

found that, apart from single men, who do not benefit from survivor benefits and die earlier on average, it is rational to annuitise for all other groups studied. Behavioural factors also explain part of the decision, with default options and peer effects being particularly important. In the Swiss case, framing is also relevant because, until very recently, pension schemes used to frame their benefits as annuities so that many people were largely unaware of their accumulated wealth[511] and thought about their retirement savings in terms of annuities.

The uniform and constant annuity conversion factor has an impact on the distribution of risk among pensioners and providers. Retirees are effectively protected from interest rate fluctuations. Providers bear both the investment risk and the longevity risk. Inflation risk is in general borne by pensioners. However, providers are expected to adjust for inflation if financially feasible (which in recent years has not been the case).[512] A number of commentators consider the conversion rate too high to be sustainable ('conversion factors are way too high given the mortality structure of the population'[513]) and they are the principal explanation for high money's-worth ratios.[514]

9.4 Regulatory developments

The Swiss approach is more prescriptive than in other countries and the pension system is historically heavily regulated. Consumer choice within Pillars 1 and 2 is rather limited.

9.4.1 Regulation of occupational pension schemes

An employer's contribution to a pension fund cannot be lower than the total of all contributions of their employees. Regarding a pension fund's management, the law on occupational pension schemes regulates a fund's investment strategies, requiring different maturities and asset diversification, and encouraging a return corresponding to financial, monetary and real estate markets. Occupational pension schemes need to be registered and are subject to regular audits.

A pension fund is typically associated with a specific employer, with the accumulated assets being transferred to the new employer's pension fund when changing employer. Employees need to be represented on the board of a fund.

It has been suggested that the relatively recent regulatory requirement of offering pensioners the option of a minimum 25% lump sum was a response to people's demands and intended as a correction of the high level of annuitisation.[515] However, concerns about old-age poverty and incentives for individuals to run down their retirement savings and subsequently rely on means-tested benefits have given rise to a political debate about abolishing the lump-sum option for the obligatory part of occupational pension schemes.[516,517] Although this is at an

[511] Bütler, M. and Staubli, S. (2010), 'Payouts in Switzerland: explaining developments in annuitisation', Pension Research Council Working Paper No. 2010-23.
[512] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[513] Bütler, M. and Ruesch, M. (2007), 'Annuities in Switzerland', The World Bank Policy Research Working Paper 4438 (http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-4438).
[514] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[515] Ibid.
[516] Neue Zürcher Zeitung (2014), 'No more lump-sum payment in the BVG / Kein Kapitalbezug mehr im BVG-Obligatorium (original)', 25 June (http://www.nzz.ch/schweiz/kein-kapitalbezug-mehr-im-bvg-obligatorium-1.18330347).
[517] It should be noted that there is a paucity of hard evidence regarding these concerns (which are paralleled in Australia) about individuals depleting their savings.

early stage, it is indicative of the Swiss policy stance, prioritising a secure old-age income insurance over individual choice.

9.4.2 Provider regulation

Life insurance companies are strictly regulated. They must not be underfunded and are subject to Solvency I capital requirements. Liabilities related to pension funds under their management need to be placed into a separate fund, assets have to be separated from the assets of other lines of business, and the pension business must also be reported separately. There are rules for the distribution of investment profits requiring insurance companies to allocate at least 90% of profits to the accounts of insured individuals. Even though Switzerland has not formally implemented Solvency II regulation, it has adopted an approach of risk-based solvency requirements for the insurance sector. This extends to the use of market-based maturity-dependent discount rates, fair-value accounting rules, and a traffic light system to flag vulnerability of individual companies.

The capital and prudential regulations regarding pension funds, on the other hand, are less strict and elaborate. Assets need not necessarily be valued at fair value and funds can use their own mortality tables and discount rates. Autonomous pension funds may have temporary underfunding, while public sector pension funds may even operate with significant shortfalls on a permanent basis, with the liabilities being guaranteed by the cantons. Supervision of pension funds is very fragmented and rather lax, resulting in shortfalls persisting for several years before the funding gaps are reported and corrected. However, according to a World Bank report, the supervisory regime was under intensive review after policymakers became concerned about the shortfalls.[518]

9.4.3 Pensions 2020 reform programme

The main point of this agenda is to make the Swiss pension system more sustainable. This includes the harmonisation of statutory retirement ages for men and women to 65, but also accounting procedures and an attempt to reduce the attractiveness of early retirement. The minimum conversion rate is also to be adjusted in light of changes in life expectancy and long-term interest rates.[519] This answers calls for reform which had noted the lack of sustainability of the conversion factor in light of historically very low interest rates and demographic developments.

[518] Rocha, R., Vittas, D. and Rudolph, H. (2010), 'The payout phase of pension systems: a comparison of five countries', Policy Research Working Paper Series No 5288, The World Bank.
[519] Information provided by the Schweizerischer Pensionskassenverband (Swiss pension fund association).

10 USA

Glossary of terms

CFPB	Consumer Financial Protection Bureau
EBRI	Employee Benefits Research Institute
ESBA DoL	Employee Benefits Security Administration, Department of Labor
FDIC	Federal Deposit Insurance Corporation
FINRA	Financial Industry Regulatory Authority
GAO	Government Accountability Office
IRS	Internal Revenue Service
QRP	Qualified Retirement Plan
RIIA	Retirement Income Industry Association
RMD	Required Minimum Distributions
SEC	Securities and Exchange Commission

Box 10.1 Key findings

In the USA, the pension system is characterised by a high degree of individual freedom and responsibility. In particular, the annuitisation rate is low in international comparison, reflecting consumers' preferences for the flexibility of drawdown products and their reluctance to insure against longevity risk. The key features of the pension system in the USA are the following.

- While demand for life annuities is low, there is a wide range of retirement products available to consumers at retirement, from various kinds of income drawdown products, to complex variable annuity products.
- Given the need for flexibility and desire to control one's retirement assets, the main providers of retirement products are major asset management firms. Competition in this market is described as 'fierce'.
- While consumers prefer to have control over how much they withdraw during retirement, many follow the '4% withdrawal' rule.
- As pension plan sponsors, employers have a fiduciary duty to ensure that their employees receive proper pension advice. As such, they invite advisers and product providers to offer presentations prior to an employee's retirement.
- A possible obstacle to the development of the annuities market is the employers' reluctance to offer annuity options as part of their DC plan. In particular, employers do not want to be held liable if an annuity provider defaults.
- An apparent motivation for people's demand for more control over their retirement assets is the protection against shocks, particularly sudden medical expenses not covered by the state health insurance, Medicare.
- Concerns have been raised about the low level of financial literacy and people's ability to procure a comfortable retirement income. There have been several initiatives to improve this, by both the private sector and government bodies such as the Federal Deposit Insurance Corporation.

Source: Oxera.

10.1 Overview

Social security provides only a basic old-age benefit, yet many people rely on it as a lifetime source of income. The possibility of sudden medical expenses due to limited health insurance coverage and the wish to keep control over their assets further frames how people approach their retirement income planning. However, regulatory concerns about old-age poverty are growing and there are first attempts to encourage more annuitisation and larger savings.

10.2 Accumulation phase

10.2.1 Structure of defined-contribution schemes

Private pensions in the USA, outside of public sector employment, are dominated by DC pension schemes, and people have a relatively large degree of freedom in terms of retirement income products.

The main accumulation vehicle in the USA is a tax-advantaged DC plan managed by the employer and defined in subsection 401(k) in the Internal Revenue Code, enacted in 1978 and commonly known as a 401(k) plan. Contributions to 401(k) and comparable plans are generally tax-deductible, with some exceptions for high-income workers.

In the public sector, DB schemes still exist. However, in the private sector the prevalence of DB schemes compared with DC schemes has declined considerably in recent decades. There are very few private sector DB plans open to new members any more. Over the past 15 years or so, most plans have been terminated and transferred to 401(k)s or their equivalent.[520] Pension coverage across all workers by DB schemes has declined, from 22% in 1989 to 8% in 2010. The share of DC schemes alone has risen from 15% to 31% over the same period. Overall, 55% of all workers are not covered by either a DB or a DC plan.[521]

Many employers in the private sector offer this type of plan. However, enrolment is entirely voluntary and not automatic, and the employer is under no obligation to contribute to the account. However, as plan sponsor, the employer has fiduciary responsibilities in the plan's management.

Participation of eligible workers varies by age and income group. Overall, 87% of 60–64-year olds are enrolled, compared with 60% of the 20–29-year olds. Workers earning more than US$60,000 (£36,000) have significantly higher enrolment rates.[522]

A recent study by the Government Accountability Office (GAO) explored the effect of introducing automatic enrolment in a workplace Individual Retirement Account, with contributions deducted from an employee's payroll. This would apply to every employer, regardless of whether they offer any sponsored plans, thus providing every worker with the opportunity to save in a tax-advantaged way. The GAO projected increased retirement income coverage at all earnings levels, with the lowest income quartile benefiting in particular.[523]

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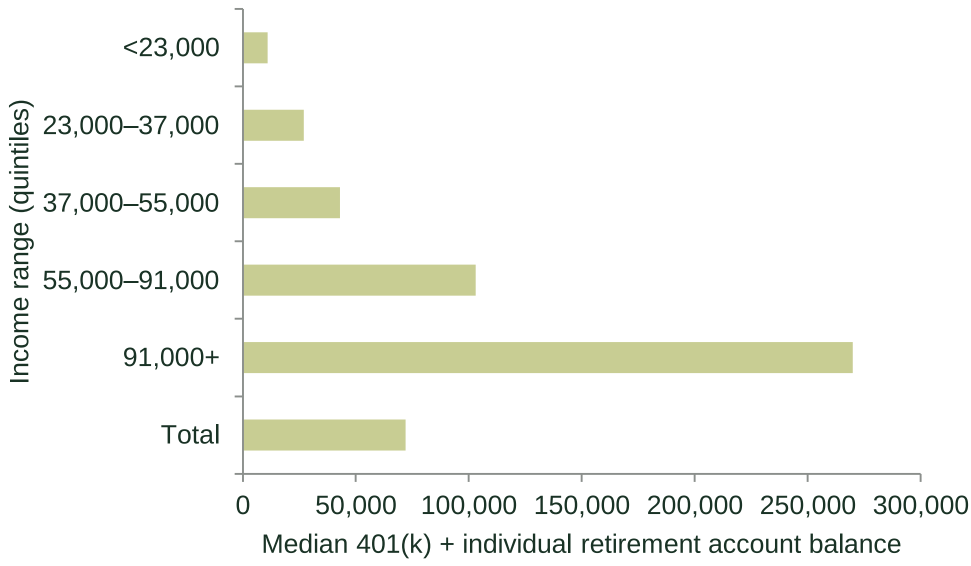
[520] Information provided by Mantell Retirement Consulting.
[521] Center for Retirement Research at Boston College, 'Pension coverage of all workers, by type of plan, 1989-2010' (http://crr.bc.edu/wp-content/uploads/1980/04/Pension-coverage.pdf).
[522] Center for Retirement Research at Boston College (2013), 'Frequently requested data – participation of eligible workers in 401(k) plans', February (http://crr.bc.edu/wp-content/uploads/1012/01/Participation.pdf).
[523] US Government Accountability Office (2013), 'Lower-Earning households could realize increases in retirement income', August (http://www.gao.gov/assets/660/657171.pdf).

10.2.2 Size of retirement savings

The accumulated savings in the age group 55–64 differ considerably by income quintile. The median balance of 401(k)s and Individual Retirement Accounts combined is US$120,000 (£72,000). However, in the lowest income quintile (defined as having income of less than US$38,000 (£23,000)), this figure is US$18,000 (£11,000), whereas the highest quintile (income greater than US$151,000 (£91,000)) has a median balance of US$450,000 (£270,000).[524]

Figure 10.1 401(k)/Individual Retirement Account balances for a median household with a 401(k), age 55–64, 2010 (£)



Source: Center for Retirement Research at Boston College (2013), 'Frequently requested data – 401(k)/IRA balances for median household with a 401(k)', July (http://crr.bc.edu/wp-content/uploads/1012/01/Table-16.pdf).

In general, holders of 401(k) plans cannot access their savings while still employed, although there may be provisions in the plan for loans from the accumulated capital or for early or hardship withdrawals, subject to penalties. Importantly, a particular plan is linked to a specific employer. When losing or changing job, an individual may access the accrued balance and transfer it to an Individual Retirement Account, leave it with the former employer, cash out, or roll over the money to the new employer's plan. The last option, however, is not always available. So, when reaching this 'trigger point', people may decide to cash out and spend the money, even when facing a 10% penalty tax. This can pose a problem where people change jobs rather frequently and are at a young age, as pot sizes are still small, making people more susceptible to taking the cash and overlooking the effect of compound interest.[525] Another perceived factor in the USA is that there is not a great savings habit; people tend to prioritise immediate consumption or may not be able to save.[526]

[524] Center for Retirement Research at Boston College (2013), 'Frequently requested data – 401(k)/IRA balances for median household with a 401(k)', July (http://crr.bc.edu/wp-content/uploads/1012/01/Table-16.pdf).
[525] Information provided by Mantell Retirement Consulting.
[526] Information provided by the American Academy of Actuaries.

10.3 Decumulation phase—the retirement income market

10.3.1 Overview of the decumulation phase

There is a considerable degree of flexibility in how people can decumulate their retirement savings, with some regulatory requirements giving general guidance and default options. Very few DC plans currently offer any in-plan options for the decumulation phase. Instead they pay a lump sum on retirement that can either be received in cash or rolled over to an Individual Retirement Account where the capital continues to have tax-deferred status. People can then decide themselves what to do with this money.

The product landscape in the USA is wide compared with that in other countries. That said, the more creative products do not make up a large share of the market. Most people are covered by structured or unstructured withdrawal programmes.[527]

10.3.2 Products

Systematic withdrawals allow the individual to withdraw a fixed or percentage amount from their account at regular intervals. There is choice over how the account balance is invested among a plan’s options, and the remainder of the account balance can be accessed and withdrawn at any point as a lump sum. Payments are subject to current taxes, but the account balance continues to grow tax-deferred and passes to beneficiaries if the owner dies.

Under a continual payout plan, a fixed amount is paid out over a fixed period of time (often five years), while the remaining balance earns interest and may therefore allow for another continual payout plan to be taken out after the five years. The account holder can access the non-annuitised portion of the account, but withdrawal options cannot be changed. Taxes are spread over the payment period. In case of death, the income stream can continue to go to the beneficiaries, depending on the terms of the contract.

Variable annuities and variable life insurance products have insurance and investment components and are among the most complex products in the market.[528] A variable annuity gives regular periodic payments during the decumulation phase, but may allow for lump-sum withdrawals, death benefits and various other in-contract options, each carrying different fees. One of these options is a guaranteed lifetime withdrawal benefit, which essentially provides insurance against fluctuations in payout.[529] The consumer may also get a say over the investment strategy. In the case of variable life insurance policies, participation in market movements may require additional premiums to be paid to maintain coverage. A tax-free death benefit is paid to the beneficiary if the policyholder dies.[530]

Equity release schemes have become more popular in recent years. A reverse mortgage allows part of the equity in residential property to be converted into cash without selling one’s home. It can be likened to a pre-sale of a house, while the homeowner retains the right to live in the property until they die. However,

[527] Ibid.
[528] There are a number of articles in the financial press about charges being high for variable annuities, with commentators recommending that consumers in the USA avoid these products. For example, see http://www.forbes.com/sites/feeonlyplanner/2012/07/02/9-reasons-you-need-to-avoid-variable-annuities/.
[529] Bank of America Corporation (2013), ‘Variable annuities with a guaranteed lifetime withdrawal benefit’ (http://www.merrilledge.com/Publish/Content/application/pdf/GWMOL/VariableAnnuity.pdf).
[530] US Securities and Exchange Commission, ‘Joint SEC/NASD report on examination findings regarding broker-dealer sales of variable insurance products’ (http://www.sec.gov/news/studies/secnasdvip.htm).

these products have complex fee structures and can be expensive. Individuals must obtain financial advice before they can sign a reverse mortgage contract.[531]

10.3.3 Providers

The main investment managers for DC plans in the USA are the major asset managers such as Blackrock, Vanguard, State Street Global Advisors, PIMCO, Fidelity Investment, and J.P. Morgan Asset Management.[532] With all these companies competing for the DC retirement savings, the market has been described to Oxera as 'fierce'.[533] Many of them are active in both the retail and the plan market, and aim to attract customers in both. Competition is helped by the fiduciary duties of employers offering DC plans to act in the interests of the members. Being the plan sponsor, they need to ensure that their employees' money is secure and well managed. By inviting advisers to give presentations and through employees' freedom of choice, competitive behaviour is induced.

Merger activity in the USA was strong in the years following the financial crisis. In 2012, mergers were driven mainly by strategic motives, with some non-US providers exiting the market. European and Canadian companies decided to divest from their US annuities businesses in light of regulatory requirements and uncertainty. The European Solvency II Directive and IFRS accounting rules required higher capital ratios, while growth prospects for the US market were low. In the years before 2012, merger activity was dominated by AIG's and other US insurance companies' divestitures from non-core lines of business, partly to repay government aid received during the financial crisis.[534]

10.3.4 Intermediaries

Advisers can be grouped into four categories, the first two of which have fiduciary duties.[535]

i. DC plan advisers, of which there are relatively few (less than 1,000), are part of large DC schemes and mainly offer advice about the accumulation phase.

ii. Registered investment advisers, of which there are around 22,000, are licensed by the SEC and focus typically on high-net-worth individuals.

iii. Wealth and money managers, of which there are about 350,000, are not under fiduciary duty and can be very flexible in the job titles they choose. For the most part they are paid by commission, but can also be fee-based (a mixture of commissions and fees) or fee-only.

iv. Insurance brokers and agents are licensed to sell certain insurance products. There are about 600,000 advisers in this category.

According to the Retirement Income Industry Association (RIIA), most financial advisers focus on households, with at least US$250,000 (around £150,000) of assets. Employers typically arrange for intermediaries (which may or may not be independent of providers) to provide advice or guidance to occupational pension

[531] Federal Trade Commission, 'Reverse mortgages' (http://www.consumer.ftc.gov/articles/0192-reverse-mortgages).
[532] Banks around the World, 'Top asset management firms' (http://www.relbanks.com/rankings/largest-asset-managers).
[533] Information provided by Mantell Retirement Consulting.
[534] Mayer Brown (2013), 'Global insurance industry 2012 year in review' (http://www.mayerbrown.com/de/Global-Insurance-Industry-2012-Year-in-Review-02-11-2013/).
[535] This categorisation follows information provided by the Retirement Income Industry Association.

schemes. In the mass market, high-street branches and extended networks of sales agents of banks and insurance companies play a major role.[536]

Intermediaries are in general paid commission by the provider of the financial products they sell or for the value of assets under management.

There is a regulatory debate in the USA about commissions and fee payments. New regulation came into force in New York State in 2011 (regulation 194), requiring advisers to disclose information to the consumer in writing and in a ‘prominent’ way, and to provide detailed information on fees and commissions on request. This has to be no later than the issuance of the insurance contract and applies to every licensed producer as defined in Insurance Law No. 2101(k) (e.g. insurance agents, insurance brokers, excess line brokers and limited licensees).[537] As a result of the policy, the National Association of Insurance and Financial Advisers started to advise all its associated agents to give full disclosure of their commissions if asked by a consumer, including securities and insurance products.[538] For annuity products, commissions typically range between 5% and 7% of the invested amount.[539]

10.3.5 Taxation structure

The large variety of products and drawdown options translates into a relatively complex tax structure. There are three principal concepts—the individual:

- makes tax-deductible contributions to a retirement savings plan, accumulates capital in a tax-deferred way and then pays taxes on the full distributions (e.g. 401(k) plans);
- contributes post-tax money to a policy, defers taxes on capital gains during accumulation, and pays taxes only on the capital gains component of the distributions (e.g. guaranteed lifetime withdrawal benefits);
- contributes post-tax money to a policy, and pays no taxes on capital gains and distributions (e.g. Roth 401(k) and Roth 403(b) plans).

The difference between qualified and non-qualified policies is important in the taxation context. Qualified policies are bought as an individual retirement annuity or as part of a 403(b) plan, 457 plan, a pension plan, a profit-sharing plan (including 401(k) plans), or an employer-sponsored retirement programme. There are no additional tax deferral benefits from placing qualified funds into a variable annuity. Non-qualified means that the policy was purchased as part of any other arrangement than those just noted, typically with post-tax money.

Treatment of qualified policies

There are important age restrictions surrounding different types of Individual Retirement Accounts and Qualified Retirement Plans, where funds from qualified policies are deposited after retirement or leaving an employer. These have an impact on when people need to be thinking about their post-retirement income.[540] Money put into these types of account can, in general, be accessed

[536] Information provided by Mantell Retirement Consulting.
[537] Department of Financial Services, ‘Regulation 194 – frequently asked questions’ (http://www.dfs.ny.gov/insurance/faqs/faqs-reg194.htm).
[538] Scism, L. (2012), ‘Insurance fees, revealed’, *The Wall Street* Journal, 30 March (http://online.wsj.com/news/articles/SB10001424052702304177104577305930202770336).
[539] Ibid.
[540] Individual Retirement Accounts include traditional, rollover and inherited Individual Retirement Accounts, Simplified Employee Pensions (SEPs), and Savings Incentive Match Plan for Employees (SIMPLE). QRPs

at any point. When taken from the account as a lump sum, ordinary income taxes and a surrender charge apply. However, if an individual has not reached age 59 years and 6 months, they are liable for a penalty tax of 10%, subject to additional rules.[541] Once an individual has turned 70 and six months, however, they required by the Internal Revenue Service (IRS) to start withdrawing from the retirement account, taking out required minimum distributions (RMDs). The required amount depends on the prior December 31 balance and the IRS's life-expectancy factor. A 50% penalty tax applies for any shortfall of the withdrawal requirement.[542]

Treatment of non-qualified policies

For non-qualified policies, only a portion of annuity payments can be included in gross income for tax purposes. As these types of policy are bought with post-tax money, only the capital gains component is taxable when distributed. Once the total amount of capital invested in the policy has been paid out, the full amount of any additional annuity payments counts towards gross income as these reflect interest earnings.

For guaranteed lifetime withdrawal benefits (essentially a structured income drawdown product), the applicable tax rules are not always clear and vary by policy. The guidance of a financial or tax adviser is recommended by insurance companies. In general, payments from drawdown products and annuities seem to differ in their tax treatment insofar as annuities spread the tax liabilities on the interest earned more evenly, whereas guaranteed lifetime withdrawal benefits start by paying out the taxable investment earnings before distributing the original investment.[543]

Estate tax

In the USA there are estate taxes at the federal level, and, in many cases, also at the state level (these vary considerably). At the federal level, all estates below US$5,340,000 (£3,200,000) are tax-exempt. This figure is adjusted to inflation on an annual basis.[544] After this deduction, a progressive tax rate rising from 18% to 40% applies. Assets passed to spouses are in general not taxable.[545]

10.4 Decumulation phase—consumer journey

10.4.1 Sources of retirement income

The situation in the USA is complex, and it is instructive to consider which sources contribute to old people's income. As the figure below shows, social security provides almost 40% of income for the population aged 65 and over, with pensions and annuities accounting for another one-fifth. Since this data

include employer-sponsored plans meeting IRS requirements, such as Keogh, individual 401(k), 403(b)(7), pensions, profit-sharing plans and others.

[541] The penalty may not apply if the individual uses the funds to purchase their first home (US$10,000 lifetime limit); the individual uses the withdrawal to pay for certain higher education expenses; certain conditions are met for qualifying medical or health insurance expenses; withdrawals are made by the individual's beneficiary after the individual dies. Taken from HSBC, 'Roth IRAs and traditional IRAs' (http://www.us.hsbc.com/1/2/home/invest-retire/retirement/ira)

[542] Charles Schwab & Co., Inc. 'Understanding Your Required Minimum Distribution' (http://www.schwab.com/public/file/P-1624444/Final_RMD_Guide.pdf).

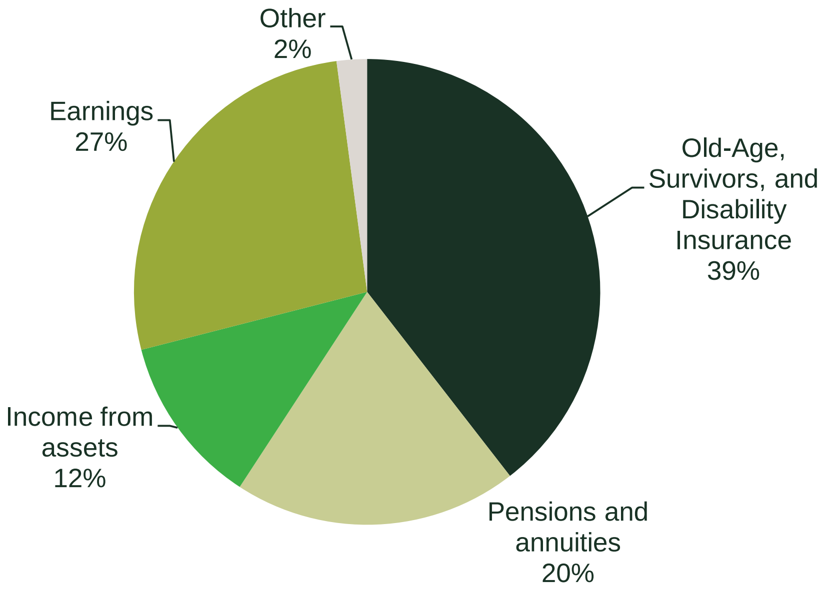
[543] This information is taken from the prospectus of a variable annuity product offered by Transamerica. Transamerica (2014), 'Transamerica variable annuity series', May (http://www.transamerica.com/Images/Transamerica-Variable-Annuity-Series-Prospectus_tcm73-23209.pdf.

[544] Internal Revenue Service (2013), 'In 2014, various tax benefits increase due to inflation adjustments', 31 October (http://www.irs.gov/uac/Newsroom/In-2014,-Various-Tax-Benefits-Increase-Due-to-Inflation-Adjustments).

[545] Internal Revenue Service (2013), 'Instructions for Form 706', August (http://www.irs.gov/pub/irs-pdf/i706.pdf).

does not necessarily include only retirees, earnings are also a major income source, with 27%.

Figure 10.2 Sources of income, population age 65 and over, 2010



Source: Employee Benefit Research Institute estimates from the Current Population Survey, March 2011 Supplement.

Among households with people aged 60-–79 with at least US$100,000 (£60,000) of financial assets and at least one member retired, roughly half do not have to make many important financial decisions since most of their income comes in the form of an annuity.[546] These are public sector workers, receiving a civil service pension (DB schemes), enrolled in 403(b) plans,[547] or dependent on social security. The other half holds about 80% of financial assets and needs to be considered separately.[548]

Social security benefits under Pillar I are not very generous. They are based on years of contribution and age, and individuals can claim benefits from the age of 62, but with a 30% discount compared with when taken at the age of 67. If the individual waits until they are 70, they receive the maximum benefits. However, few people do this, as they have a revealed preference for earlier retirement. This results in average social security benefits of US$800–900 (£480–540) per month for women and about US$1,100 (£660) for men. Given an average income of about US$50,000 (£30,000), this implies a Pillar I replacement rate of 20–25%.[549]

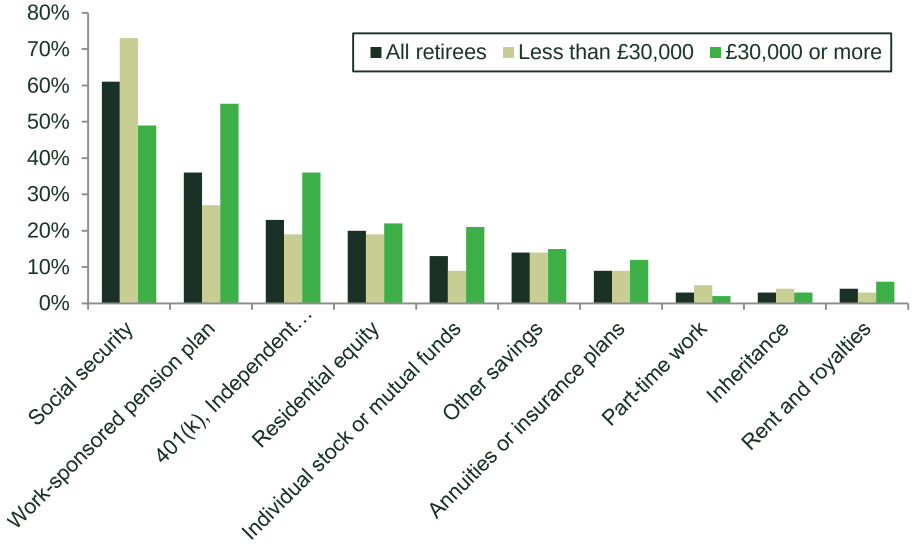
That lower-income households are more reliant on social security benefits is reflected in the results from a 2013 survey conducted by US pollster, Gallup.[550] 73% of households with less than US$50,000 (£30,000) of annual income named social security as a major source of income, followed by work-sponsored pension plans, with 27%, and retirement savings accounts and home equity,

[546] Vanguard (2014), 'Retirement income among wealthier retirees', May (https://institutional.vanguard.com/iam/pdf/CRRRIP.pdf?cbdForceDomain=false).
[547] 403(b) plans differ from 401(k) plans in that the money can only be put into a deferred lifetime annuity on behalf of the employee. This type of plan is traditionally associated with jobs in hospital, universities or the civil service. Information provided by Mantell Retirement Consulting.
[548] Information provided by the Retirement Income Industry Association.
[549] Information provided by Mantell Retirement Consulting.
[550] Gallup (2013), 'Pensions are top income source for wealthier US retirees', 21 May (http://www.gallup.com/poll/162713/pensions-top-income-source-wealthier-retirees.aspx).

19% each. Among higher-income households, 55% of respondents name work-sponsored pension plans as a major income source, and only 49% mention social security. DC savings take the third place, with 36%. Annuities and insurance plans are cited as a major source of income by 12% of households with more than US$50,000 (£30,000) of annual income, and by 9% of households earning less.

The low replacement rate of social security, coupled with it being cited as the major source of income for most households, points to a potential problem of old-age poverty. Indeed, in an OECD international comparison, the USA had a poverty rate among the over 65s of about 20%, compared with the OECD average of 12.8%.[551] A study by the Employee Benefits Research Institute (EBRI) found that, in this age group, poverty is particularly pronounced for single females. Couples face a much lower risk. Using a different poverty measure than the OECD, EBRI also reported poverty rates for different age groups. This showed a substantial difference between the 65–74-year olds and the 85+-year olds. In 2009 the former had a poverty rate of 9.4% and the latter 14.6%, which has been attributed to rising medical expenditure and the depletion of personal savings and pension account balances.[552]

Figure 10.3 'Major' sources of income, current US retirees, by annual household income



Source: Gallup (2013), 'Pensions are top income source for wealthier US retirees', 21 May (http://www.gallup.com/poll/162713/pensions-top-income-source-wealthier-retirees.aspx).

10.4.2 Decision-making process

Individuals are largely responsible themselves for planning for their retirement income. The tax system induces them to think about this to some extent between the ages of 60 and 70, and there is a wide range of products available (including lifetime annuities and income drawdown products). However, few people use a structured approach to their withdrawals, despite the variety of products and solutions available.

[551] OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD publishing (http://dx.doi.org/10.1787/pension_glance-2013-en).
[552] Banerjee, S. (2012), 'Time trends in poverty for older Americans between 2001-2009', *Employee Benefits Research Institute Notes*, **33**: 4.

If an individual decides to simply keep their money in an Individual Retirement Account, withdrawal can start at the age of 59 and six months (before this age, a 10% penalty tax applies) and must start at the age of 70 and six months with Required Minimum Withdrawals (RMDs). This forced withdrawal applies to any tax-qualified money and is the default option that many people end up taking. Since the required withdrawal rate declines over time, people will in principle never completely run out of money.[553]

Those who structure their withdrawals can choose between a systematic approach to withdrawing or a large variety of financial and insurance products. Many households follow the '4% withdrawal' rule devised by William Bengen. Based on simulations, he determined an annual drawdown rate of 4% of the original balance, inflated over time in line with general prices, to be consistent with not outliving one's assets.[554] It became popular in the 1990s and is still in people's minds, even though its assumptions on investment returns may no longer hold.[555]

The large investment managers such as Fidelity, Vanguard and Blackrock, who are both record keepers for DC plans and providers of retail products, offer consumers an easy way to manage their savings. Often only a mouse click is required to transfer 401(k) savings into an Individual Retirement Account with the same company. Consumers can then choose between structured payout plans with a variety of options since this area of the market is little regulated.[556]

When an employee is about to retire, the employer has to let the record keeper know, with the computer systems of the employer and record keeper often being linked. The record keeper will typically start an outreach campaign by phone to make sure the employee understands their choices, provide guidance to the record keeper's website, and ideally transfer the plan money to a retail Individual Retirement Account. However, the employer will also invite advisers from various other companies, thus fulfilling his fiduciary duties as plan sponsor. Only one of them will be the plan's record keeper. This induces consumers to shop around before deciding where to put their retirement money. The fiduciary duties apply to all companies, even though, at smaller companies, advice may be over the phone instead of in-house seminars. Typically, advisers take the initiative and approach firms.[557]

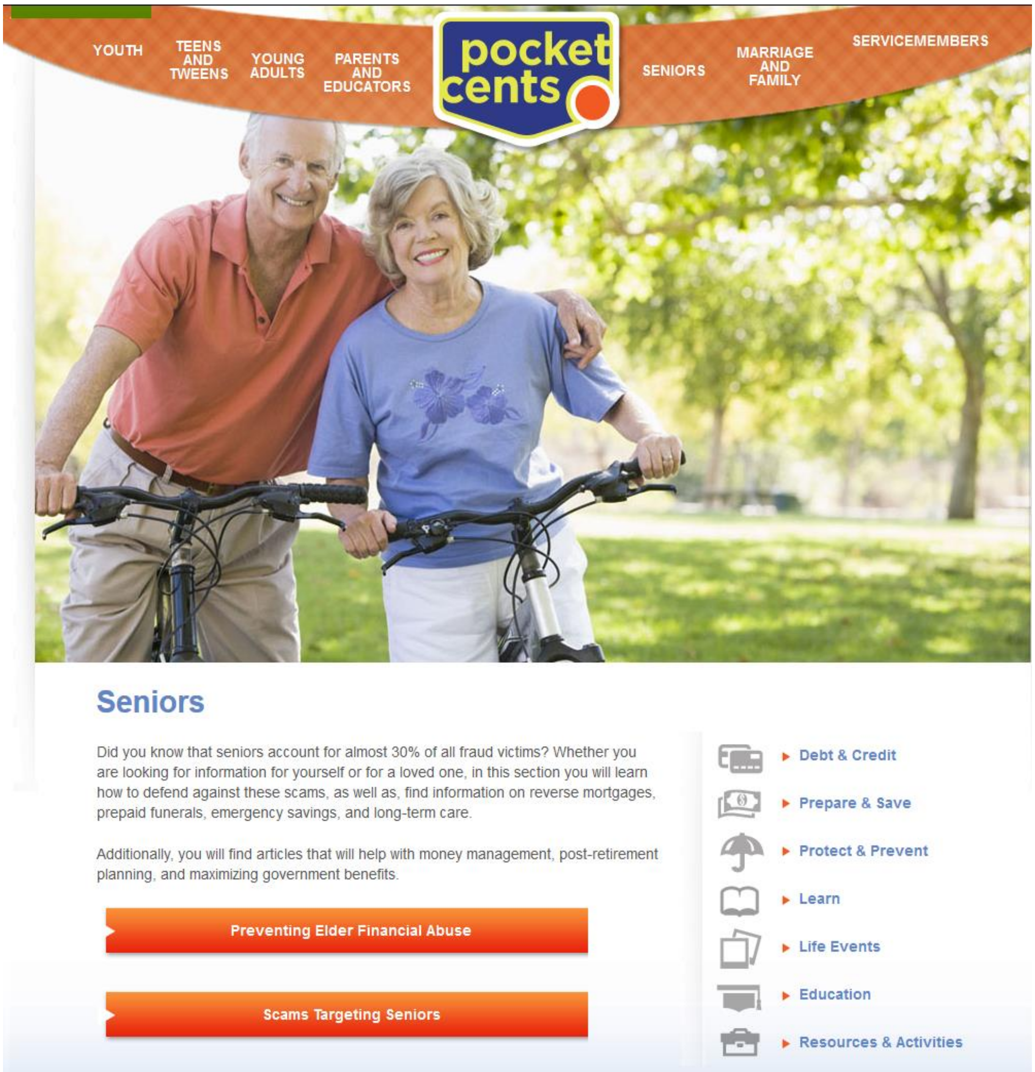
An issue within the US system is that it can prompt people to deal with retirement planning at unexpected and early points in their working life. Leaving a job, for instance, is a trigger point when individuals face the choice of what to do with their accumulated DC balance. Once the money is in an Individual Retirement Account, people have access to their savings, and, according to Oxera's interview partners, the 10% penalty tax is too low to prevent people from withdrawing before the age of 59 and six months. By contrast, a DC plan locks the money in and may, at most, give individuals the option to draw a loan from their savings that is fully repayable before retirement.[558]

To guide consumers in their financial decisions, government bodies run online resources. Websites 'mymoney.gov' and 'mycreditunion.gov' both provide general information on saving and spending behaviour, but also teaching

[553] Information provided by the American Academy of Actuaries.
[554] In this original form, it is comparable with the rates of an index-linked annuity.
[555] Information provided by Mantell Retirement Consulting and the American Academy of Actuaries.
[556] Information provided by the American Academy of Actuaries.
[557] Information provided by Mantell Retirement Consulting.
[558] Ibid.

material for schools, together with online tools such as calculators, budgeting worksheets and checklists. There is information about the financial implications of life events such as marriage, higher education, unemployment, home ownership and retirement. The website 'mycreditunion.gov' provides age group-specific information and refers consumers to further resources.[559]

Figure 10.4 Information on mycreditunion.gov targeted at seniors



Source: My Credit Union, 'Pocket cents – Seniors' (http://www.mycreditunion.gov/Pages/pocket-cents-landing-seniors.aspx).

10.4.3 Consumer behaviour

In the interviews Oxera conducted, there was reference to a distinctive US culture that may well explain market outcomes to a certain extent. Consumers are characterised as wishing to keep control over their money and being driven mainly by immediate consumption. Concern was expressed about levels of financial education or understanding necessary to make the best decisions about retirement income provision.

A 2012 SEC study on financial literacy found that investors only have a 'weak grasp of elementary financial concepts and lack critical knowledge of ways to

[559] www.mymoney.gov and www.mycreditunion.gov.

avoid investment fraud'.[560] People lack knowledge about financial concepts such as compound interest, inflation, diversification, investment costs, and how these affect returns. The study cited a Library of Congress Report that demonstrated considerable concern about people's ability to procure a comfortable retirement income, especially since more people need to make decisions themselves due to a higher prevalence of DC plans.[561]

The Federal Deposit Insurance Corporation (FDIC) runs the Money Smart scheme, which aims to help low- and moderate-income individuals improve their financial abilities and thus facilitate access to banks and financial products. It provides a comprehensive curriculum free of charge. Consumers can take a course online and at their own pace, or participate in instructor-led trainings which are often held by financial institutions to comply with their obligations towards local communities. The programme has reached more than 2.75m people since 2001 and the FDIC sees a positive impact.[562] A 2007 study found that the trainings have effects in the short and intermediate term, evidenced by increased savings activity and more people planning their budget.[563]

These types of concern about consumer behaviour can be linked to the perception of and demand for annuities. Many people do not have enough savings to buy an annuity that could cover their basic expenditure and leave them with sufficient emergency funds. Those who can afford it may be reluctant to spend such a large amount of money for an intangible product. Taking a break-even view, there is a fear of making a bad deal in case of an early death.

Moreover, commission charges of 5–7% make annuities look expensive in the eyes of consumers. However, financial advisers are often not licensed to sell annuities and actually discourage consumers from buying them as there is more earnings potential if the funds are not locked into an annuity contract. Consumers, on the other hand, value the flexibility and possibility of higher returns in structured withdrawal programmes.[564]

Another important factor is that consumers can use their retirement savings for other purposes and can be forced to do so in times of economic hardship given the weak public safety net.

10.5 Regulatory developments

10.5.1 Market and product regulation

Among the regulatory bodies, there is a general sentiment that, in light of declining DB plans, there is a problem of underinsurance against longevity risk. Initiatives to encourage more DC plans and pension funds to offer annuity options have therefore been started. The main issue here seems to be the fiduciary status of plan sponsors, which makes them in general reluctant to offer any in-plan options. They may, for instance, be held liable for a chosen annuity

[560] US Securities and Exchange Commission (2012), 'Study regarding financial literacy among investors', August, p.iii (http://www.sec.gov/news/studies/2012/917-financial-literacy-study-part1.pdf).
[561] US Securities and Exchange Commission (2012), 'Study regarding financial literacy among investors', August p. viii (http://www.sec.gov/news/studies/2012/917-financial-literacy-study-part1.pdf).
[562] Federal Deposit Insurance Corporation, 'Money Smart – a financial education program' (https://www.fdic.gov/consumers/consumer/moneysmart/).
[563] Federal Deposit Insurance Corporation (2007), 'A longitudinal evaluation of the intermediate-term impact of the Money Smart financial education curriculum upon consumers' behaviour and confidence', April (https://www.fdic.gov/consumers/consumer/moneysmart/pubs/ms070424.pdf).
[564] Information provided by the Employee Benefits Security Administration, Mansell Retirement Consulting and the American Academy of Actuaries.

provider going bankrupt. This is why pension funds have been demanding 'safe harbour' regulation to be put in place first.[565]

Recent regulation by the Treasury and the IRS allows the purchase of longevity annuities (i.e. deferred annuities) within DC plans and is to promote take-up of this type of insurance. However, it is not made a default option and is entirely voluntary. It is also discretionary on the part of plan sponsors to offer this option. There was commentary that only few companies will actually include any in-plan options because practical and fiduciary issues remain.[566] The regulator still expects a small jump in take-up rates since this type of longevity insurance now offers bequest options in the case of death before the start of the payout phase.

Another recent policy initiative, the Retirement Security Act 2014, targets access to retirement plans in smaller businesses. The proposed legislation would reduce cost by making it easier for firms to join multiple employer plans. For employees, the bill would remove the cap on annual contributions (currently at 10%) and raise the possible employer match from 6% to 10%.[567] The bill has not become law yet.[568] Meanwhile, there has been some concern about variable annuity and life insurance products which, according to an SEC report, have grown in importance, with sales being driven by high commission charges. Concerns about the suitability of the products sold and disclosure practices of broker-dealers alerted the SEC to potential supervisory issues. There is evidence that these highly complex products are not always the best deal for consumers and new rules have been issued.[569]

10.5.2 Regulation of intermediaries

Intermediaries, both sales agents and independent brokers, need to be licensed in the state they work in. In most cases they also need to pass certain exams to obtain a licence. In order to sell securities and other financial products, further exams are necessary and the brokerage activities are regulated by the Financial Industry Regulatory Authority (FINRA). [570] Money managers, investment consultants and financial planners are subject to the regulations set out by the U.S. Investment Advisers Act 1940, and amendments and additional or similar state statutes.[571] If they act as broker-dealers, they are subject to additional oversight by the SEC.

In a 2011 study of regulatory coverage of financial planners, the GAO concluded that consumer protection issues remain, despite a number of federal and state laws indirectly dealing with this type of business. The study noted that consumers may be unaware of, or unclear about, situations when an adviser is required to act in their interest, or confused about the various job titles that financial advisers can choose. The study summarises several stakeholder

[565] Information provided by the Employee Benefits Security Administration.
[566] Miller, M. (2014), 'Why your 401(k) isn't likely to offer a 'longevity annuity', *Reuters*, 22 July (http://www.reuters.com/article/2014/07/22/us-column-miller-longevityannuities-idUSKBN0FR17620140722).
[567] Special Committee on Aging (2014), 'Senate Bill introduced to encourage retirement savings', 29 January (http://www.aging.senate.gov/press-releases/senate-bill-introduced-to-encourage-retirement-savings).
[568] Congress, 'S.1970 – Retirement Security Act of 2014' (https://beta.congress.gov/bill/113th-congress/senate-bill/1970).
[569] US Securities and Exchange Commission, 'Joint SEC/NASD report on examination findings regarding broker-dealer sales of variable insurance products' (http://www.sec.gov/news/studies/secnasdvip.htm).
[570] Bureau of Labor Statistics, 'Insurance sales agents' (http://www.bls.gov/ooh/sales/insurance-sales-agents.htm#tab-4).
[571] US Securities and Exchange Commission (2013), 'Regulation of investment advisers', March (http://www.sec.gov/about/offices/oia/oia_investman/rplaze-042012.pdf).

proposals, including calls for more standards, regulation and oversight, and the extension of fiduciary standards of care to more professions.[572]

10.5.3 Dodd-Frank Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 created the Consumer Financial Protection Bureau (CFPB), which became fully operational in 2011/12. The Act mandates the CFPB to research and improve the financial literacy of consumers in the USA and makes it an independent body with rule-making and enforcement authority. The regulator is still in the process of implementing the Dodd-Frank Act and it may require some time until the impact of its proposals can be assessed.

[572] US Government Accountability Office (2011), 'Consumer finance: regulatory coverage in general exists for financial planners, but consumer protection issues remain', 18 January (http://www.gao.gov/products/GAO-11-235).

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