

Principles of Finance

FIN200

Insurance, Pensions and Collective Investments

LEARNING OUTCOMES

By the end of this chapter the reader should be able to:

- Describe the basic functions of insurance and distinguish between the different types
- Outline the proportions of insurance fund money that are invested in various assets classes
- Explain reinsurance, and the insurance markets in London, including Lloyds.

LEARNING OUTCOMES (Continued)

- Describe the different types of pension arrangements, distinguishing funded from unfunded, defined benefit from defined contribution, private from public
- Explain the roles of pension fund trustees, consultants and managers
- Discuss the regulation of the pensions industry and the protection of people's pensions.

LEARNING OUTCOMES (Continued)

- Distinguish between open-ended collective investment schemes and closed-ended investment schemes, describing the differences between funds such as unit trusts, mutual funds, investment trusts and exchange-traded funds shares (also called equity and stock)
- Explain the importance of sovereign wealth funds in shifting investment funds around the world.

Insurance

- \$4,100 billion of insurance premiums paid
- \$600 for every single human being in the world.



Exhibit 4.1 Global premium volume (2009)

Source: www.swissre.com.

Insurance (Continued)

- Rich businessmen would agree to pay for part of any losses in return for a sum of money, *writing* their name *under* the wording of the contract
- Premium
- Normal companies owned by shareholders
- Mutual organisations.

Insurance underwriting

- Assess risk involved and setting the terms and cost of the premium to be paid
- Asymmetric information
- Adverse selection
- Moral hazard.

The insurance process

- Direct from an insurer at one of their offices, over the phone, or via the internet, which is becoming increasingly popular
- Through an agent who usually works for one insurer
- Through an insurance broker or independent intermediary
- Through a bank, building society, solicitor, travel agent, mail-order agent or accountant, who will receive commission on sales.

Year	General/non-life insurance \$bn	Life/long-term insurance \$bn	Totals \$bn
2000	927	1,518	2,445
2001	970	1,446	2,416
2002	1,090	1,536	2,626
2003	1,276	1,683	2,959
2004	1,395	1,849	3,244
2005	1,442	2,004	3,446
2006	1,549	2,126	3,675
2007	1,668	2,393	4,061
2008	1,781	2,439	4,220
2009	1,735	2,332	4,067

Exhibit 4.2 Global premium income 2000–09

Source: Swiss Re.

Life/long-term insurance

- Insurance policies to cover people in different ways for loss of life
- A way of saving
- Term assurance
- Whole-of-life
- Endowment
- Annuities
- Pension schemes.

General/non-life insurance

- Property
 - Open policies
 - Named peril policies
- Casualty
- Liability.

Year Type of investment	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m
UK public sector securities	205,121	210,238	212,219	195,673	198,580
Overseas public sector securities	50,925	48,077	57,280	80,596	88,283
UK ordinary stocks and shares	315,365	345,348	343,469	210,824	236,827
Other UK company stocks and shares	157,076	142,426	161,538	153,351	172,375
Overseas ordinary stocks and shares	172,092	186,429	226,939	205,949	244,414
Other overseas company securities	117,428	141,364	144,296	221,220	220,399
Unit trusts	144,615	172,763	199,867	177,029	202,790
Property	95,201	105,293	106,364	103,535	96,924
Cash and other investments	123,966	127,871	147,789	147,836	133,229
TOTAL	1,381,789	1,479,808	1,599,762	1,496,012	1,593,820

Exhibit 4.3 UK insurance companies' investment holdings

Source: ABI.

	Life \$ billion	Non-life \$ billion	Totals \$ billion
US	4,896	1,224	6,120
UK	2,347	229	2,576
Japan	2,171	384	2,555
Germany	842	850	1,692
France	1,719	288	2,007
Netherlands	387	57	444
Totals	12,363	3,031	15,394

Exhibit 4.4 Invested assets of insurance companies (2008)

Source: IFSL (www.thecityUK.com).

Reinsurance

- Insurance companies lessen their exposure to risk by transferring the risk to a reinsurer
- Proportional reinsurance
- Non-proportional reinsurance
- Retrocession.

	Country	Net premiums \$bn
Munich Re Group	Germany	32.8
Swiss Re Group	Switzerland	21.9
Hanover Re Group	Germany	13.3
Berkshire Hathaway	US	12.4
Lloyd's of London	UK	9.5
SCOR	France	8.9
Transatlantic Holdings Inc.	US	4.0
PartnerRe Ltd.	Bermuda	3.9
Everest Re Group Ltd.	Bermuda	3.9
Korean Re	South Korea	2.4

Exhibit 4.5 Largest global reinsurers (2009)

Source: Insurance Information Institute.

Pensions

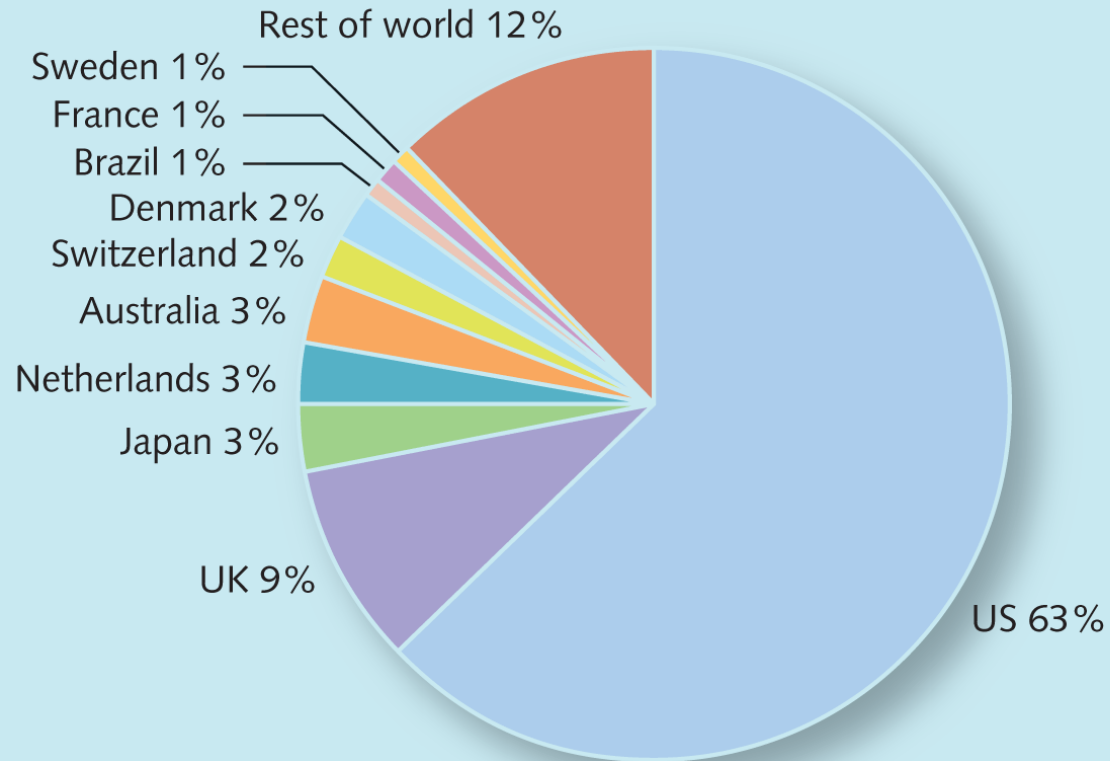


Exhibit 4.14 Global pension assets (2009)

Source: www.TheCityUK.com.

Unfunded schemes

- Public unfunded pension schemes
- Pay-as-you-go (PAYG)

Funded schemes

- The insured, and their employers, make regular payments to a pension fund.

Population aged over 65 as a percentage of working age population (15–64)

	2010 %	2050 %
Japan	35	74
Italy	31	62
Germany	31	59
France	26	47
UK	25	38
Spain	25	59
Poland	19	52
US	19	35
China	11	38
India	8	20

Exhibit 4.15 Comparative age of population

Source: UN World Population Prospects: The 2008 Revision.

Defined benefit

- A defined benefit (DB) pension pays out a fixed amount based upon the number of years worked and the level of final salary or the average level of salary
- For example, a member of one-eightieth scheme
- The number of years you have been contributing is multiplied by $\frac{1}{80}$
- Multiplied by your final year's salary (or some average over a number of years)
- Worked and contributed for 40 years
- Final salary is £30,000
- Entitled to $\frac{40}{80} \times £30,000 = £15,000$ per year
- Three times that as a lump sum on retiring

Defined contribution (DC)

- The actual pension paid out is linked to the return on the assets of the pension fund and the rate at which the final pension fund is annuitised; at retirement age, an annuity is generally purchased.

Personal/private pensions

- The recipient pays a regular amount or a lump sum to the pension provider who will invest it on their behalf
- Run by financial organisations such as insurance companies, building societies or banks
- The contributions qualify for full tax relief
- The fund can grow without tax being levied on interest income, on capital gains
- At retirement age 25 per cent of the fund may be taken in cash, tax free

Pension fund trustees, consultants and managers

- 'Float'
- Trustees
- *Consultants*
- *Managers.*

	Equities %	Bonds %	Other %
United Kingdom	54	36	10
United States	58	35	7
Japan	36	47	17
Australia	42	19	39
Netherlands	28	47	25

Exhibit 4.18 2009 Pension fund asset allocation

Source: UBS Pension Fund Indicators (TheCityUK Pensions Report 2011).

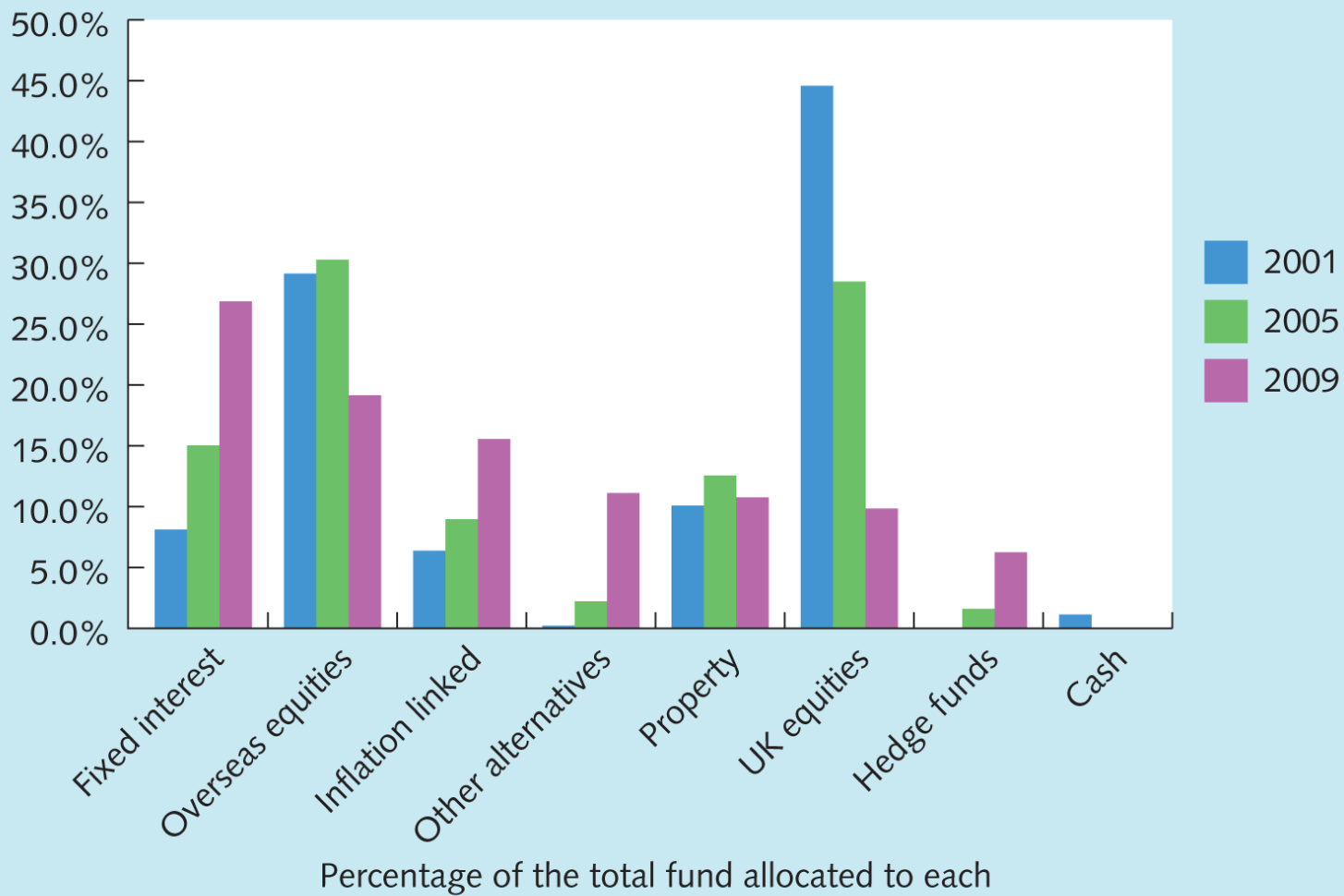


Exhibit 4.19 BT pension scheme investment assets 31 December 2001, 2005 and 2009

Source: BTPS Annual Report.

Collective investment

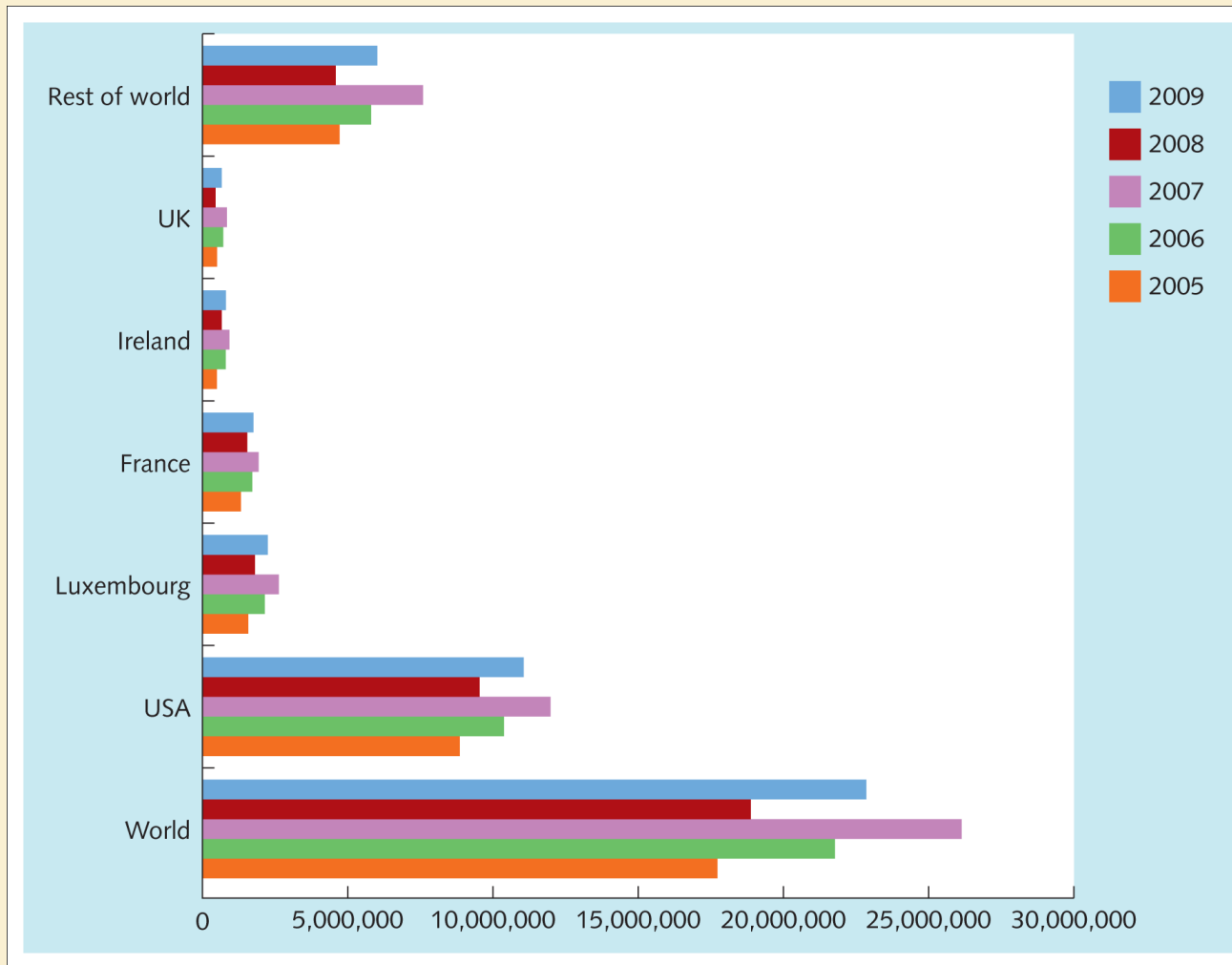


Exhibit 4.24 Worldwide mutual (collective) fund assets in millions of dollars

Source: Investment Company Institute, www.ici.org.

Collective investment offers some significant advantages to the investor.

- A more diverse portfolio can be created
- Even very small investors can take part in the stock markets and other financial markets.
- Professional management
- Investment can be made into exotic and far-flung markets
- Disadvantages
 - High fund-management
 - Possible underperformance
 - Investors lose any rights that accompany direct share investment
 - Lose the fun.

Open-ended investment vehicles

- A type of collective fund that does not have restrictions on the amount of shares (or 'units') the fund will issue
- The value of each share is dictated by the net asset value (NAV) divided by the number of existing shares
- NAV is defined as the total value of assets at current market value less any liabilities
- Open-ended funds must buy back shares when investors wish to sell
- Unit trusts, open-ended investment companies (OEICs), exchange-traded funds (ETFs) and mutual funds.

Close-ended investment vehicles

A type of collective fund that does have restrictions on the amount of shares (or 'units') the fund will issue.

Discounts and premiums

- Net asset value per share
- Discounts of 10–20 per cent are not uncommon
 - In year \times there is great interest in, say, eastern European smaller companies so an investment trust is set up and offers its shares (say, 50m) for sale at £1 each
 - £50 million of eastern European company shares are bought by the trust.
 - Next year the £1 per investment trust share and so NAV is constant
 - New buyers are willing to pay £1.08 per share – an 8 per cent premium to the NAV
 - NAV of the trust's shares falls to 60p
 - Sentiment has become so pessimistic
 - Shares for only 50p
 - Discount of 16.67 per cent to NAV (10p/60p).

Borrowing

- Freedom to borrow
- Risk associated with gearing
- Trust investing in eastern Europe
- Sold 50 million shares at £1 each and also borrowed £50 million to buy £100 million of eastern European shares
- NAV would still start at £1 per share (£100 million of assets minus £50 million debt owed, for 50 million shares)
- Underlying asset values fall by 40 per cent
- *Net* asset value per share falls dramatically from £1 to 20p

Value of eastern European shares
Less debt

$$\begin{array}{r} \text{£60m} \\ - \text{£50m} \\ \hline \text{£10m} \end{array}$$

Net asset value per share: £10m/50m = 20p.

Unit trusts

- 737 funds in the UK managing £220.8 billion
- Administered by a trustee.

Unit trusts pricing

- Fund collected together £1 million from hundreds of small investors and issued 1 million units in return, each unit would be worth £1
- The pooled fund of shares increases in value to £1.5 million the value of each unit rises to £1.50
- Unit holders sell units back to the managers of the unit trust
- Bid price and the offer price: spread and pays for two things
- First, fund administration, management of the investments, marketing, as well as commission for selling the units
- Second, the market makers' spreads and brokers' commissions payable by the fund when it buys and sells shares

Charges

- Initial charge ('sales' or 'front-end' charge)
- Annual charges
- Exit charges.

Move on unit trusts

- *Buying and selling units*
- *Who looks after the unit holders' interests?*
- *The trustee*
- *The FSA (FCA)*
- *The Financial Services Compensation Scheme.*

Open-ended investment company

- A company which can be listed on the stock exchange and it issues shares whereas a trust issues units
- An open-ended diversified collective investment vehicle
- Investment in OEICs may be made on a regular basis, or as a lump sum
- Authorised corporate director (ACD)
- Depositary (usually a large bank) supervising activities to safeguard their assets
- One price for both buyers and sellers
- Price is not based on the supply and demand for its shares
- 'Umbrella' structure.

Company	Total OEIC funds under management
Invesco Perpetual	£36,916,825,878
M & G Securities Limited	£27,479,052,205
FIL Investment Management Limited	£23,273,227,135
Threadneedle Investment Services Ltd	£19,557,757,801
Jupiter Unit Trust Managers Limited	£18,457,756,133
Legal & General (Unit Trust) Managers Limited	£18,276,625,165
HBOS Investment Fund Managers Limited	£16,144,077,702
SWIP Fund Management Ltd	£15,435,021,038
Schroder Investment Management Ltd	£14,056,537,098
BlackRock Investment Management (UK) Limited	£13,176,086,674
Capita Financial Managers Limited	£13,129,882,797
First State Investments (UK) Ltd	£11,711,290,564
Henderson Global Investors	£10,990,951,221
St James's Place Unit Trust Group Ltd	£9,812,266,813
BNY Mellon Fund Managers Limited	£9,783,645,249
JP Morgan Asset Management	£9,063,609,405
Investec Asset Management Ltd	£9,057,936,535
Aviva Investors UK Fund Services Limited	£8,576,575,168
Aberdeen Unit Trust Managers Limited	£8,535,431,787
Artemis Fund Managers Ltd	£8,387,985,486

Exhibit 4.27 The 20 largest OEIC funds, January 2011

Source: www.investmentuk.org.

Exchange-traded funds

- Companies issuing shares
- Buy a range of securities
- Open-ended funds
- Pricing is left up to the marketplace
- Buy and sell their shares at prices subject to change throughout the day
- Trade at, or near to, the underlying net asset value
- Charges range between 0.2 per cent and 0.75 per cent
- ‘Synthetic replication’ of an index.

Mutual funds

- A generic term for collective or pooled investments
- In the US and Canada the term has the specific meaning in terms of their organisation and legal structure
- Half the households in the US have shares in mutual funds, with over 7,600 mutual funds managing assets totalling over \$10.7 trillion in 2010
- Administered by a group of directors appointed by the shareholders
- Majority are open-ended funds, but there are some that are closed-ended
- Portfolio manager.

Investment trusts (investment companies)

- Set up as companies
- Floated on the London Stock Exchange
- Constitution
- Over 400 investment trusts: total assets of £80 billion
- Closed-end funds
- In-house team of investment managers
- *External managers.*

Sovereign wealth funds

- (SWFs): collective funds set up and managed by governments
- \$3,000–\$4,000 billion of investments around the world.

Custodians

- Custodians are guardians or safe-keepers of securities
- Custodian banks - investment companies, especially pension funds (and mutual funds in the US), in return for a fee
- Safeguard, check on and distribute dividend payments, capital gains and general information relating to the diverse range of assets
- Protection for investors against any illegal or fraudulent activities
- HM Revenue and Customs keeps a list of approved custodians.