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Retirement Policies, Annuities and Longevity Insurance in Australia

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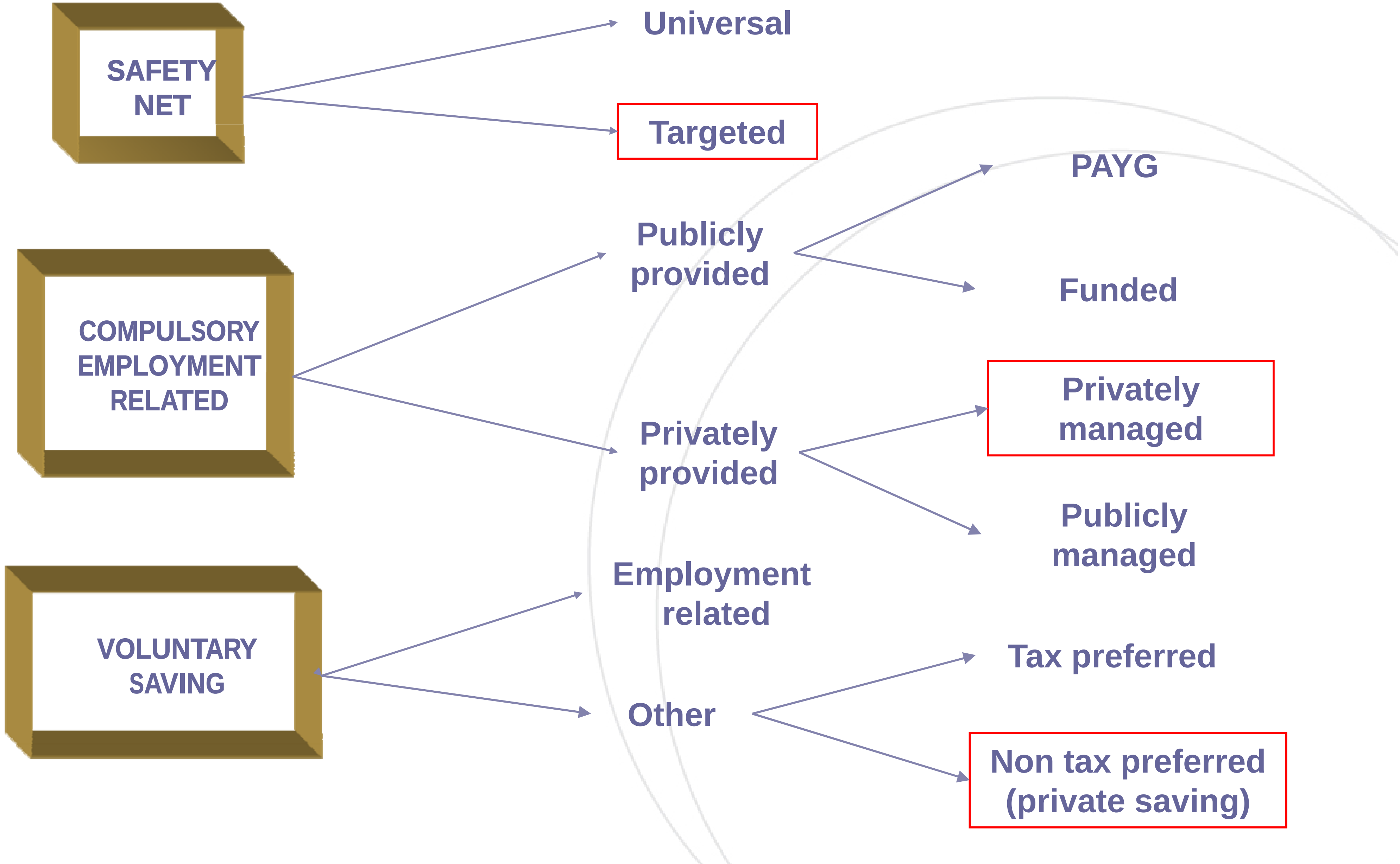
Outline of talk

- Introduction to Australian retirement policy
- Issues in Longevity
- Current retirement products in Australia
- Product innovation
- Policy evolution

Components of Retirement Provision



Components of Retirement Provision

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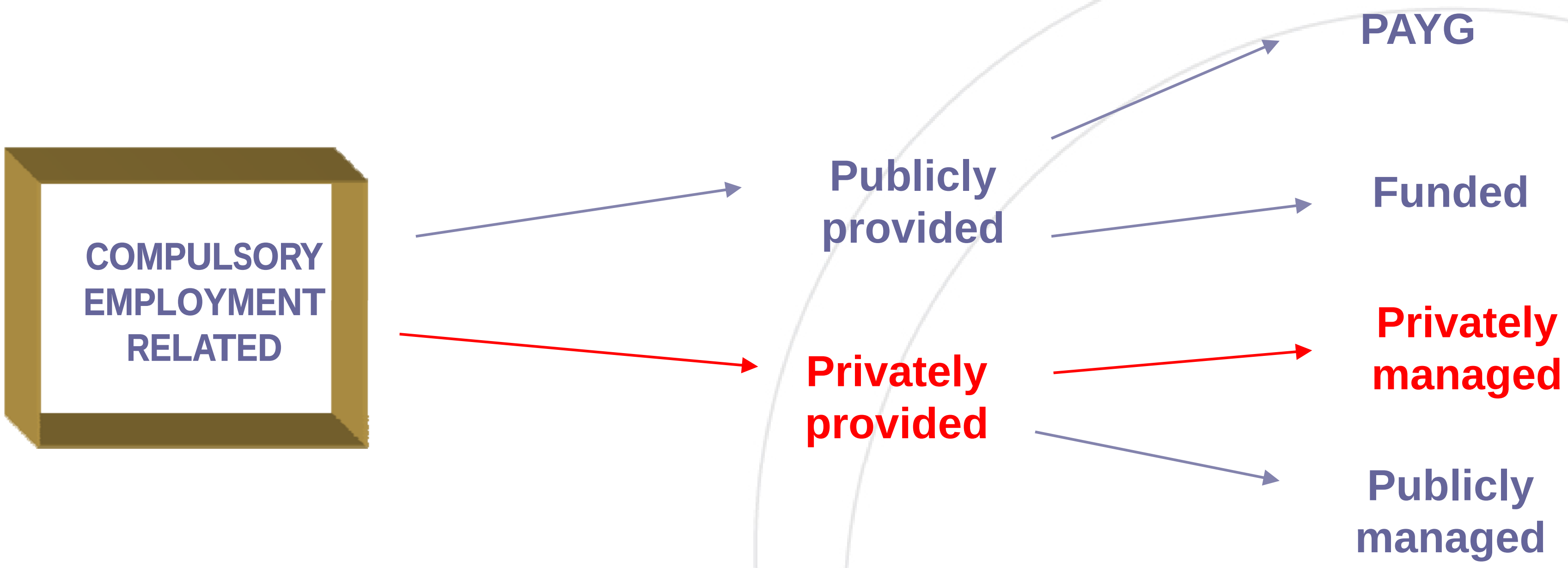

First Pillar:
Targeted Age Pension

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- Eligibility age of 65, for men, moving to 65 for women
- Available regardless of work history
- Flat rate, but means tested
- High take-up: 75 -80% get some pension, 50% get full pension
- Set at 25% of average male full-time earnings for singles, 40% for married couples

Second Pillar: the Superannuation Guarantee

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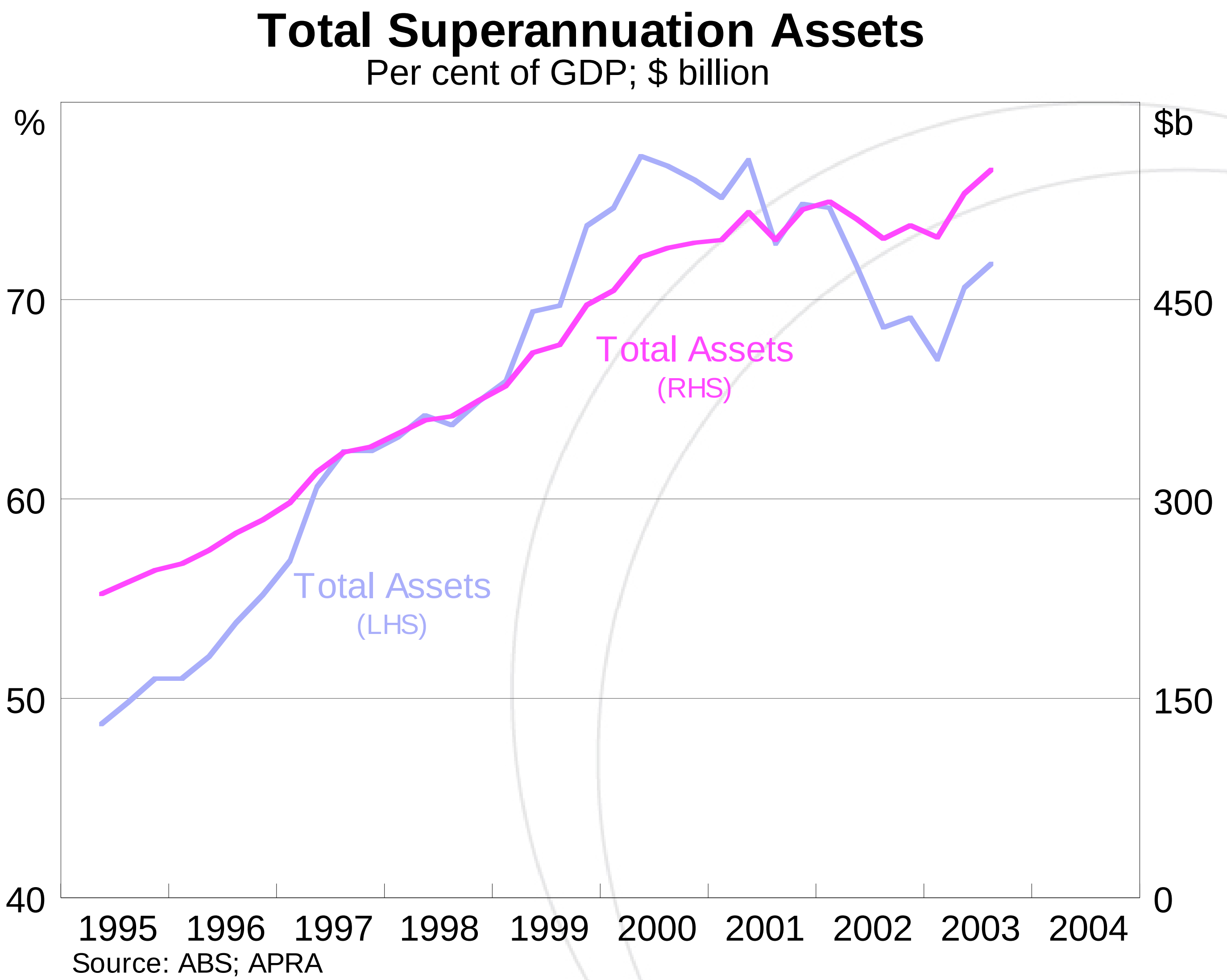
- **Funding**
  - Fully funded (9% of earnings)
  - Individual accounts
  - Few investment restrictions
- **Coverage**
  - High for employees
  - Self employed not covered

Features of the Superannuation Guarantee

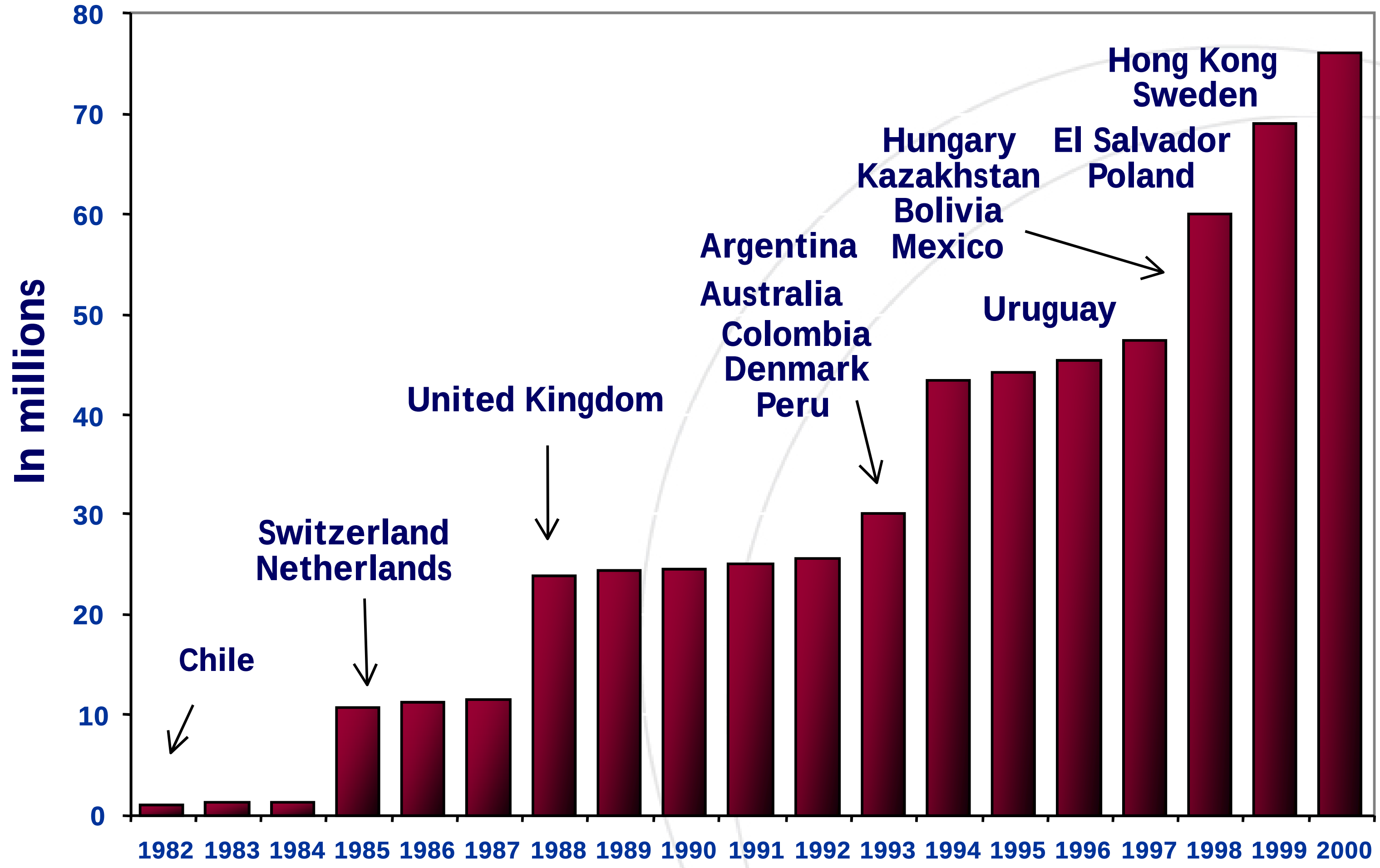
- **Accumulation regulations**
  - Defined contribution
  - Fully vested, preserved, portable
  - Preservation age 55, moving to 60.
  - No early withdrawals
- **Benefits**
  - No income stream requirement on payout

Assets



Total Superannuation Assets
Per cent of GDP; $ billion
%
$b
70
60
50
40
450
300
150
0
Total Assets
(RHS)
Total Assets
(LHS)
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
Source: ABS; APRA

Number of Contributors to National DC Systems (Millions)



Second Pillar: Major Milestones

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- 1986 Accord: compulsory saving arose a part of union wage deal
- Superannuation Guarantee Act 1992
- 9% of earnings, phased in to 2002: employer mandate
- Taxation changes: 2004 – 2007
- Means test changes: 1988 – 2008

Policy Development Status

	Accumulation	Decumulation
First pillar (unfunded)	General tax revenue	Age pension
Second pillar (funded)	Super Guarantee contributions	?

What is still missing?

- Most longevity insurance products under-produced
- Products which allow investment risk exposure combined with longevity insurance
- Opportunities for accessing home equity
- LTC insurance almost zero
- Evidence based regulation

Benefit Design

U.S. Health and Retirement Study 1992-2000, with over 12 000 respondents

69% of those who rely on DB pensions are happy with their retirement; only 54% without annuity income

After 10 years of retirement, those with annuity incomes are 45% more likely to be ‘very satisfied’

Retirees with annuity income streams are 30% more likely to have no depression symptoms

Source: Panis (2003)

What do we know of life expectancy?

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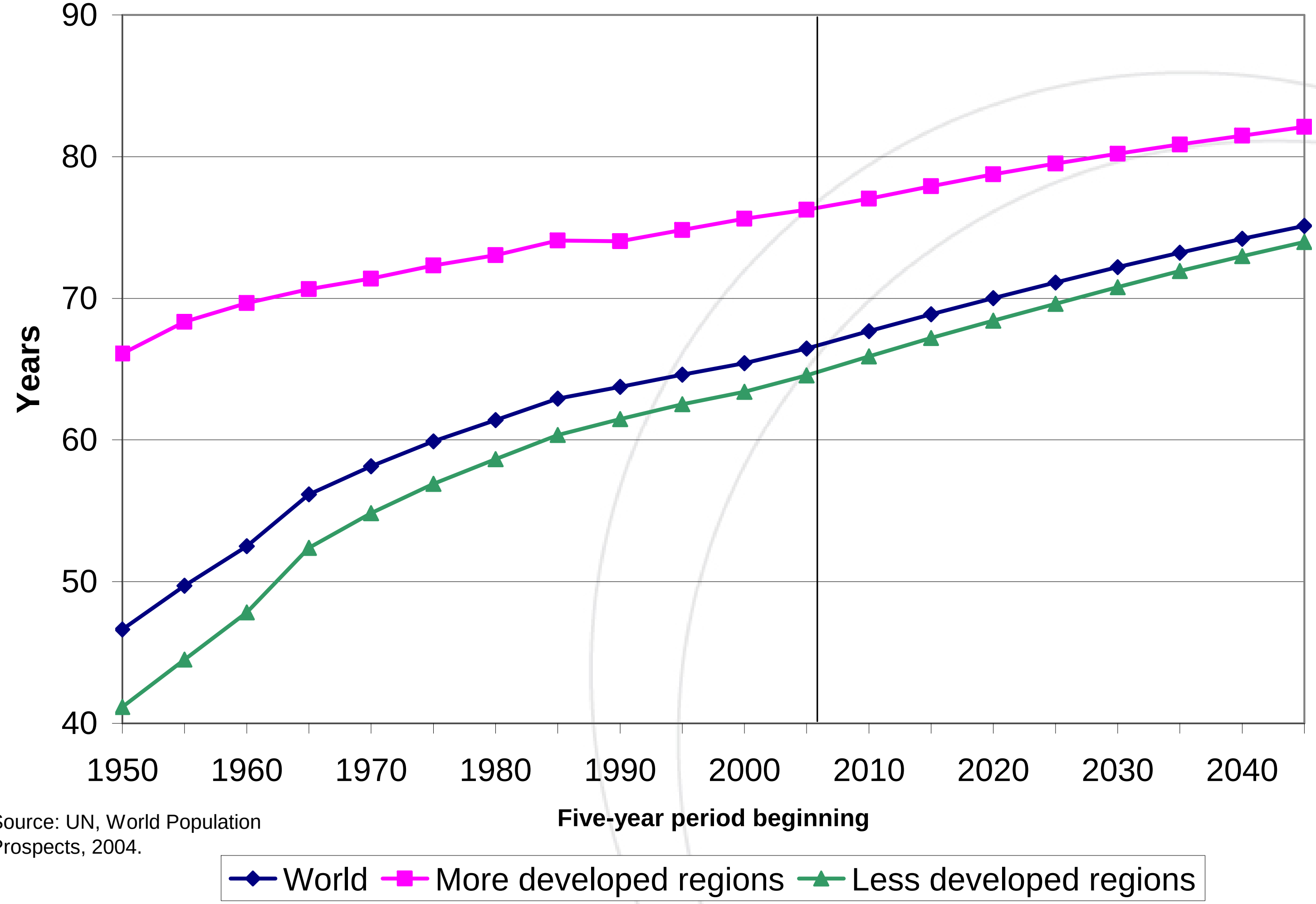
- Developed economies:
  - Male life expectancy over 75 in most OECD countries, an overall increase of 12% since 1960
  - Combined with a drop in fertility rates, aged dependency ratios set to increase from 23% today to 42% in 2030!
- Asia: Life Expectancy has moved from 41 (1950) to 61 (1980)
- China:
  - Male: 39 (1950) to 64 (1980)
  - Female: 42 (1950) to 67 (1980)

Increasing longevity



Source: UN, World Population Prospects, 2004.

Survival probability to age 90 for at least one member of couple: Australia, Male 65/Female 60

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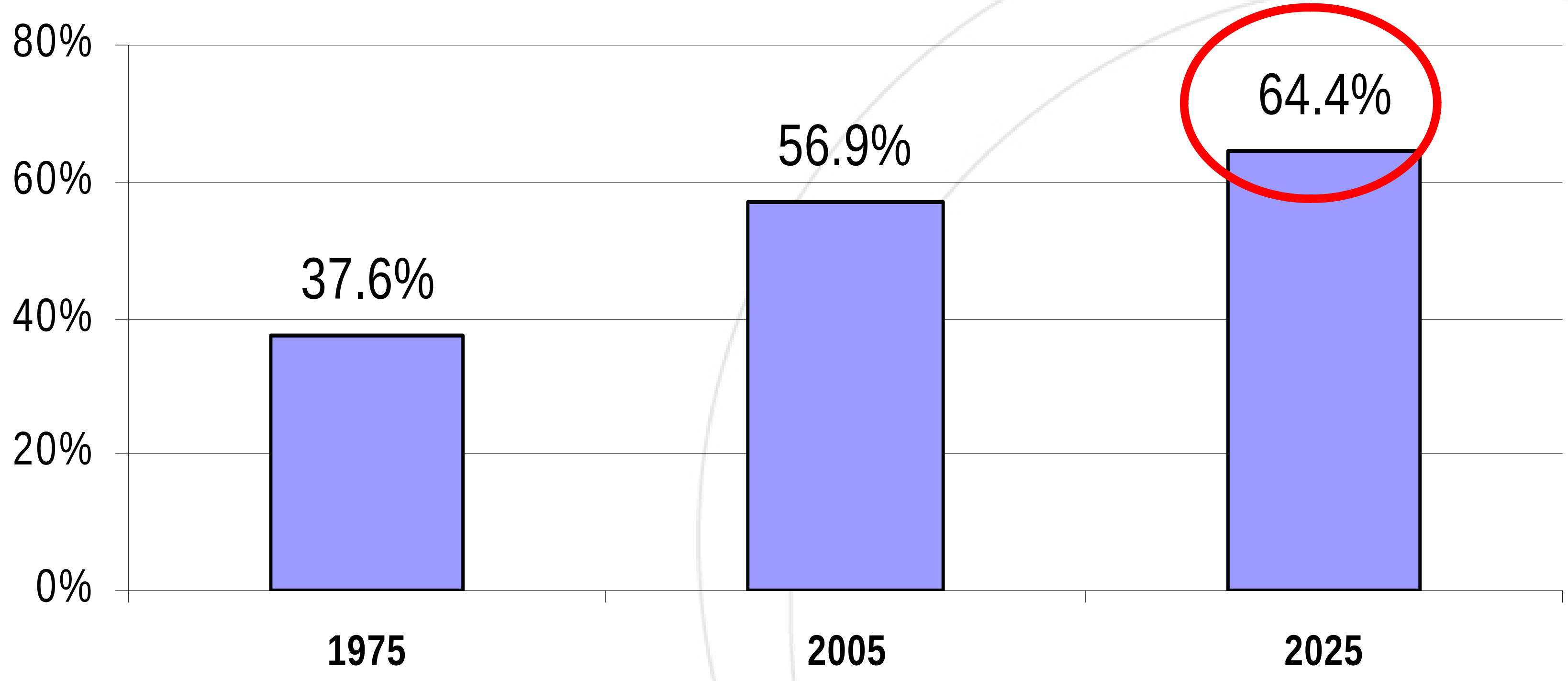
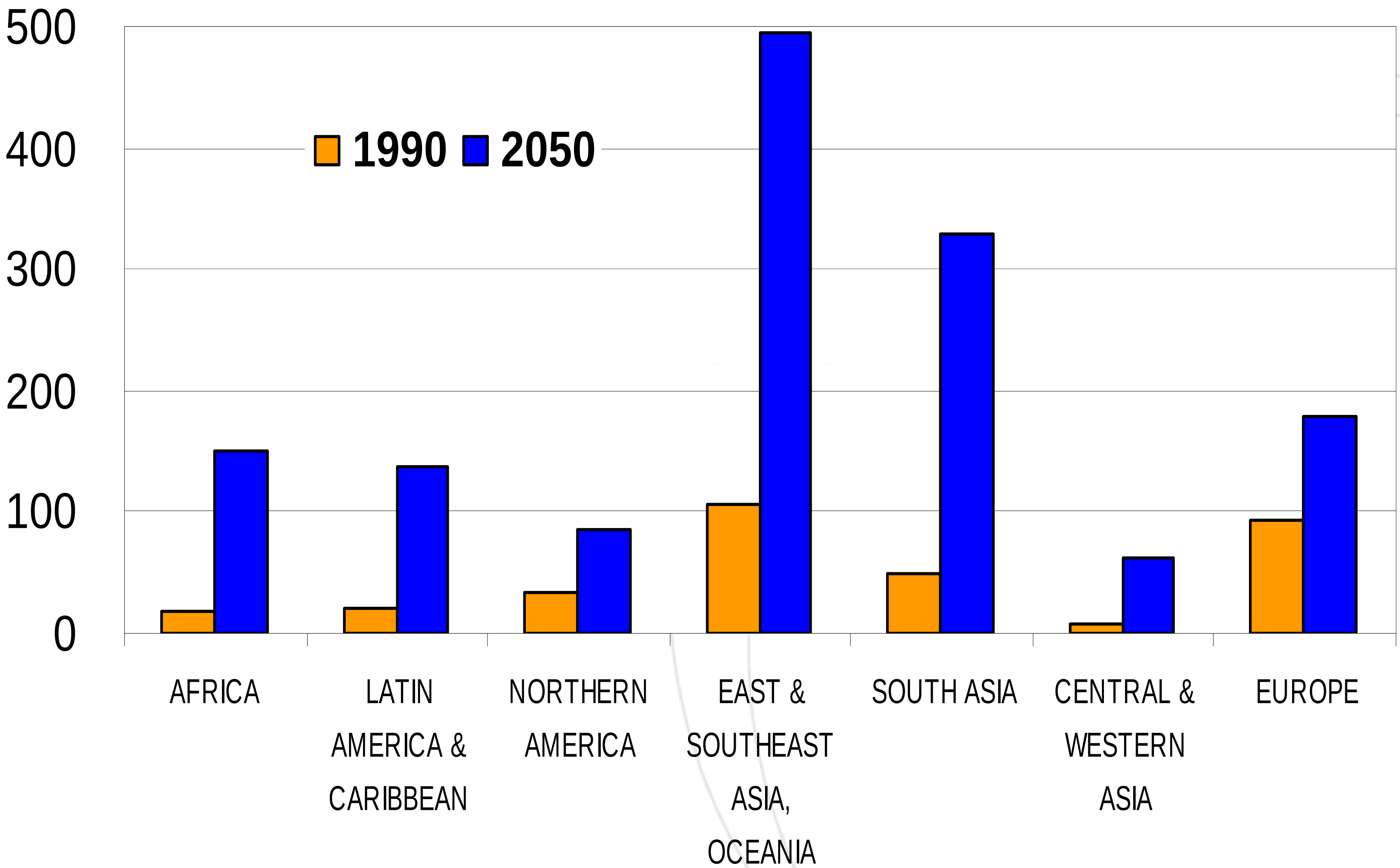


Source: Authors' calculation based on mortality rates and 100-year improvement factors reported in Australian Life Table 2000-02.

Population aged 65 and over, by region (millions)



Dealing with it: traditional response

- **Personal resources**: fail to save, early retirement, no insurance, most wealth locked in the family home.
- **Family resources:** the child as your pension.
- **Working longer:** a “natural” solution, but institutional and maybe health status constraints
- **Social security**: usually defined benefit schemes. Many are under-funded, implying fiscal stress.
- **Occupational pension plans**: Many DB plans are insolvent or under stress

Dealing with it: Product response

- Life annuities
- Phased withdrawals
  - Guaranteed minimum income annuities
- Other products:
  - Reverse mortgages
  - LTC insurance

Australia's pension coverage

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- About 1/3 of workers covered under public sector plans with pensions
- What about the rest?

Current coverage of the elderly (65+)

	Male	Female	Total
Population	1,213,000	1,480,000	2,693,000
Age pension	779,000	1,144,000	1,922,000
Annuity/ pension recipients	234,000	165.000	400,000

Available products

- Phased withdrawals
  - Account-based pensions have minimum drawdown only
- Life annuities
- Short term-certain annuities
- Long term (life expectancy) annuities

Other products on the radar:

TAPs

GMIAs

Average Superannuation Balance, 2003-04, Persons aged 55-64 years

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Superannuation Group			Low	Middle	High	Overall
Male						
	55-59		$16,034	$67,905	$324,755	$108,359
	60-64		$16,484	$67,541	$337,754	$108,377
Female						
	55-59		$14,318	$63,636	$239,275	$42,379
	60-64		$15,914	$73,015	$236,086	$36,614

Notes: Low balance is defined as less than $40,000, High balance is over $100,000 and (logically enough) Middle balance lies between High and Low. Source: Clare (2007), Table 2

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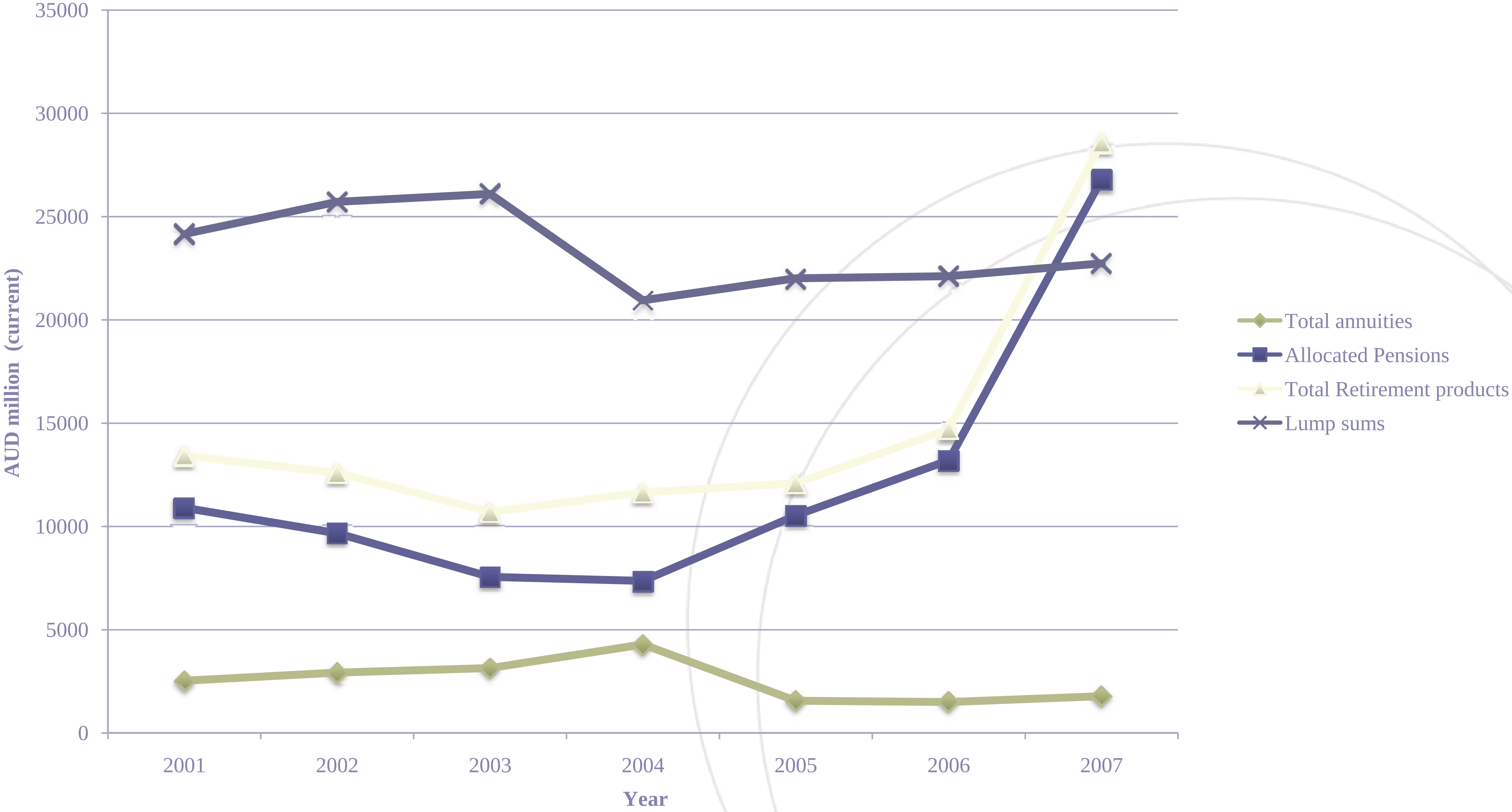
Trends in the Market

- **Policy:**
  - Withdrawal of PAYG
  - DB -> DC
  - “Life expectancy” products
- **Private insurance:**
  - Phased withdrawals,
  - Reverse mortgages, lump sum offers
- **Neither government nor industry interested in encouraging longevity insurance products**

Value of Benefits taken 2001 - 2007



Lump sums and policy

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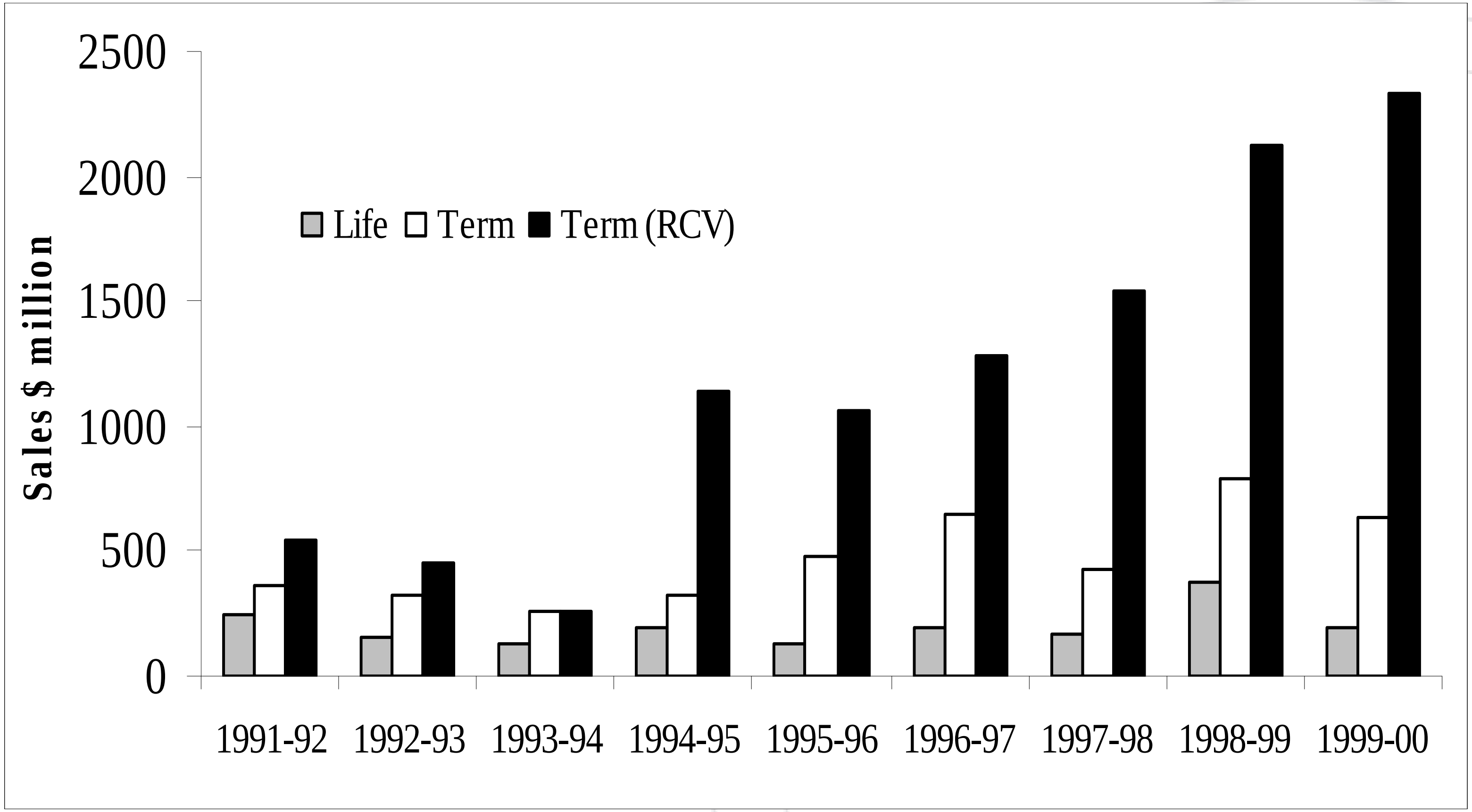
- Lump sums preferred until 2007
  - Tax-free threshold now >$100,000
- But since 2005:
  - Transition to retirement legislation → benefits taken as income accessed while still working and contributing
- 2007: Tax-free benefits for 60+ → better to leave your money behind the super veil

Annuity sales 1991-2000



Annuity sales 1999-2008

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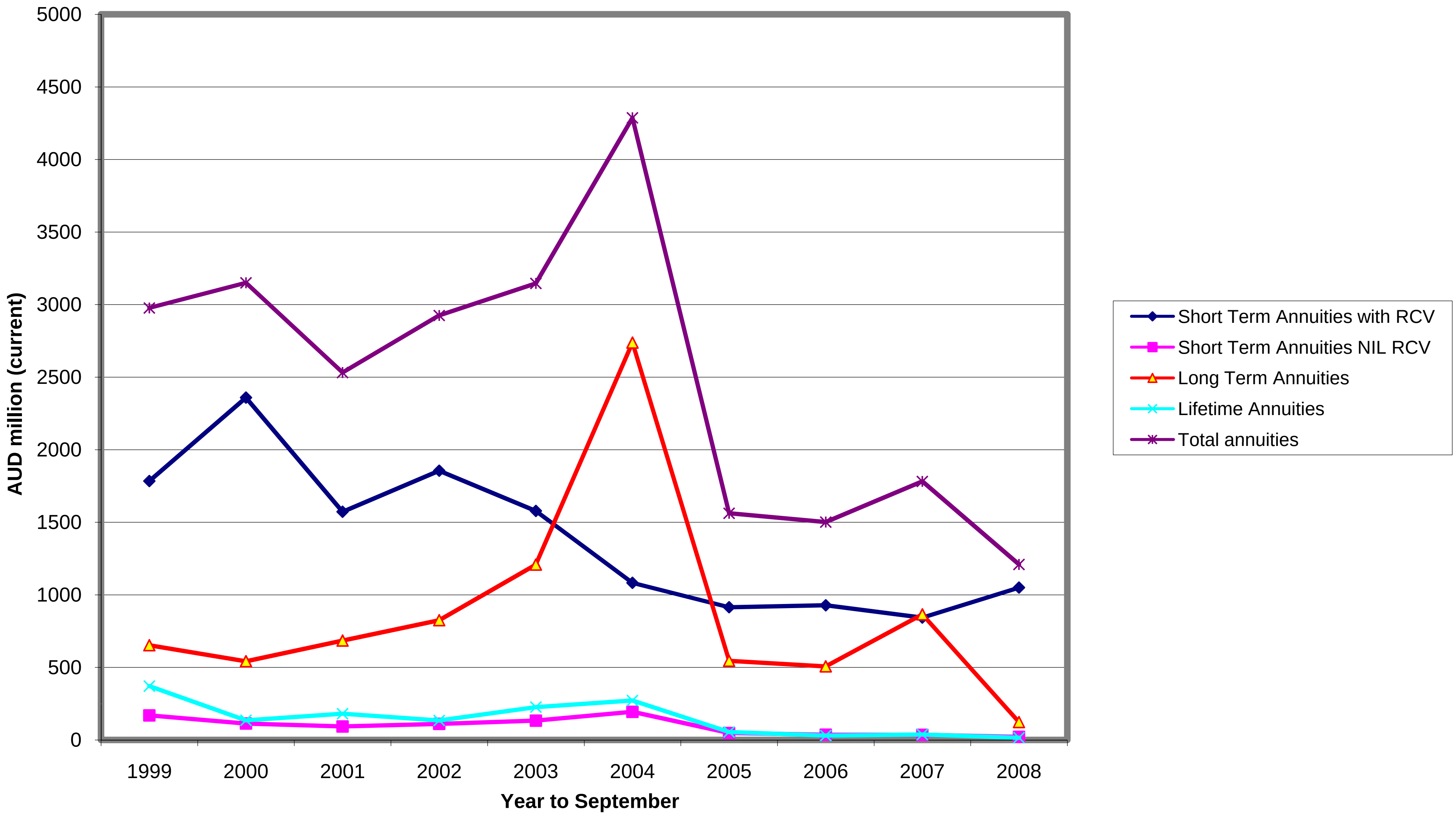

Life Annuities

	Total sales ($ million)	Number	Average price ($)
2004	280	2801	100,000 (app.)
2005	27	293	93,000 (app.)
2007	36	403	89,000 (app.)
2008	10	44	220,000 (app.)

source: Plan for Life

Life annuities and policy

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- Before 1988: No traded market
- 1988 – 1998: UPP rules: tax and means test preference very limited
- 1998 – 2004: Full asset test exemption
- 2004 – 2007: 50% asset test exemption
- 2007: No tax on superannuation benefits after age 60; elimination of asset means test exemptions

Why is annuity demand low?

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- Premiums very high in Australia (Doyle et al 2004, Ganegoda and Bateman 2008))
- But not much crowding out – age pension is low
- Bequest motive is unpersuasive as a reason (Hurd 1989)

Why is annuity demand low?

- Distribution?
  - Low commission products
- Choice of annuity type?
  - Points to greater flexibility

Annuity supply issues?

- Insurers nervous about a large annuity book and technical progress leading to unanticipated increases in longevity
- Insurers find it difficult to reinsure, or spread this risk
- Not profitable

Annuity Product Innovation

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- Variable Annuities
  - Allow adjustment of investment portfolio after retirement (TAPS)
- Phased Withdrawal plus Deferred Annuity
  - Many households find appealing;
  - Guaranteed Minimum Income Annuities fall into this category

Deductibles

- Annuities can be priced much more competitively with deductibles
  - Inflation: Indexation after loss of x% of real income
  - Mortality: Full coverage of systematic longevity risk after losing x% of income
- Much better than the more common practice of covering *up to* some limit

What about Hedging Longevity Risk?

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- Government Guarantee
  - Intergenerational risk sharing
  - Partnership with the private sector?
- Reinsurance
  - Cost of reinsurance has been high
  - Few seek exposure to longevity risk
- Immunization
  - Survivor bonds
- Securitization
  - Heavy information requirements

➔Need <u>Longevity Index</u>: benchmark to price longevity bond (like indexed bond and CPI); calculation and dissemination a public good.

Reverse Mortgages

- Housing wealth is estimated at:
  - 60% of Australia's private wealth
  - 70% of retirees' wealth
- Unlocking this equity will become a major mechanism for to financing retirement
  - Smaller families and higher house prices takes care of bequests

Reverse Mortgages

- Financial institutions see this as a growing market.
- In Australia:
  - About 36,000 contracts now, from almost zero in 2003
  - Mostly lump sums
  - Not regulated by APRA, although longevity risk is implicit

Comparing conventional and RM annuities: RM like a “family” annuity

	Conventional Annuity	*RM Annuity*
Premium	Premium due up front	Premium due on closure
Bequest	Once for all reduction	Gradual reduction
Payment	Higher	Lower

RMs need institutional support:

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- Real estate market not transparent
- High transaction costs
  - Commissions, closing fees
  - Transactions taxes
- Model uncertainty: mortality, turnover, equity growth, moral hazard
- Tax uncertainty: Income, capital gains, remaining estate tax treatment
- Legal Uncertainty:
  - Requires homeowner insurance, upkeep, etc
- Demand will grow!

Lifetime risk of requiring LTC by age, Australia, 2005

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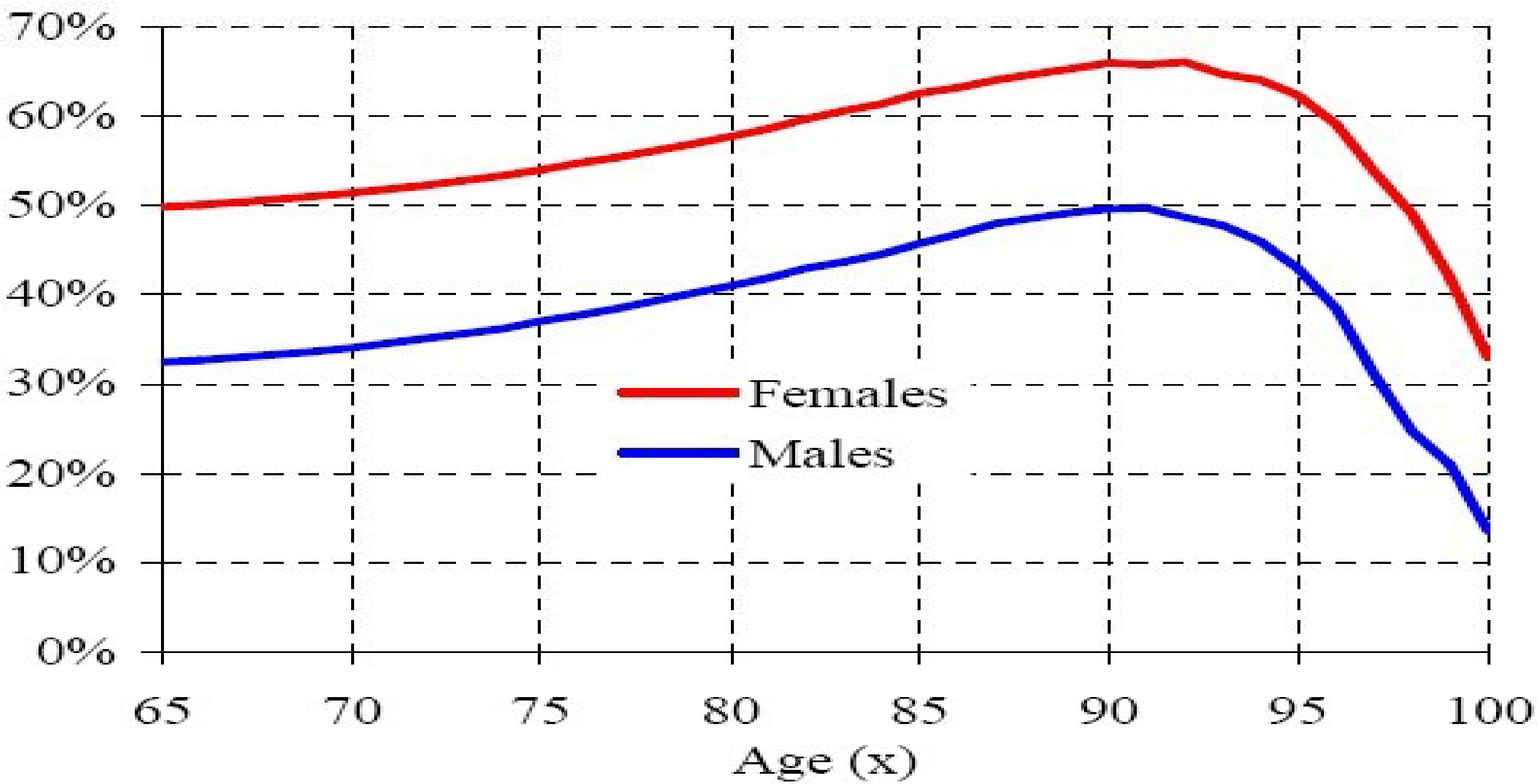

Source: Cullen (2006).

Normalized LTC expenditure over 19 OECD countries in 2000

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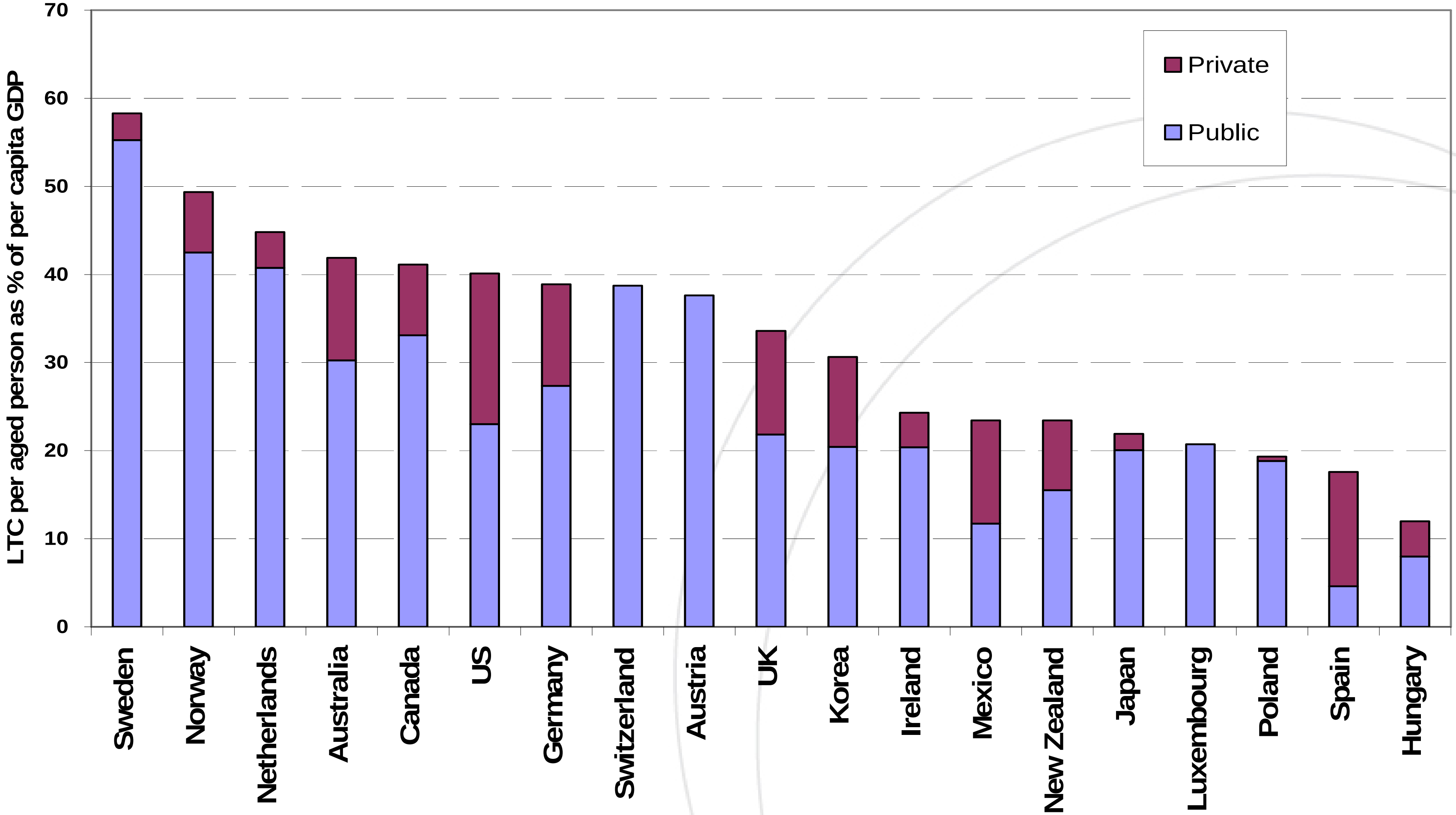

Source: Authors' calculations based on Table 1.2 of OECD (2005) and United Nations (2004). Normalized LTC = LTC

Population Ageing and Financial Integrity

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- Financial integrity challenged by increasing longevity in several markets
  - Annuity, life insurance, reverse mortgage, health insurance, aged care insurance, liability, auto
- Popn Aging means more longevity risk around:
  - which eventually markets and new products will move to insure, increasing risk management issues

Policy evolution

- First pillar:
  - Use means tests to encourage purcahase of longevity insurance
  - Not penalise late workers
- Second pillar:
  - Change contribution specification
    - Administrative cost implications
  - Longevity risk sharing with Government

More flexible approaches to retirement income products

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- More affordable rules around solvency requirements
- Management of super funds’ assets in the decumulation phase
- Reverse mortgages

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Policy co-ordination

- Three important entities:
  - Australian Taxation Office → Tax rules
  - FaHCSIA (Social Security) → Age pension
  - APRA (Prudential Reg'n) → Annuity regulation
- No co-ordination between these, so market faces huge problem working out the rules → Must be changed

The UNSW Population Aging Research Program

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- Working Longer
  - Demographic aspects:
    - Mortality and morbidity projections
  - Occupational Health:
    - Does “phased retirement”, with insecure employment, have negative health consequences?
  - Economic and Finance issues:
    - How will working longer help fiscal stress and enhance retirement incomes?

The UNSW Population Aging Research Program

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- Managing Longevity Risk
  - Develop unifying methodology to produce acceptable stochastic forecasts of longevity increases
  - Research possible new financial products that could be developed with good information about longevity change
  - Investigate acceptable solvency requirements for longevity based products

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Thank you

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