



somewhat  
different

# Enhanced Annuities in Asia

A Case Study

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*hannover* **re**<sup>®</sup>

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# Agenda

- ▶ Concept of Enhanced Annuities
  - Enhanced Annuity Product in UK
  - Market today
  - Success factors
- ▶ Asian Market: Singapore
  - Overview
  - Demographic structure
  - Pension System and Market
- ▶ Outlook

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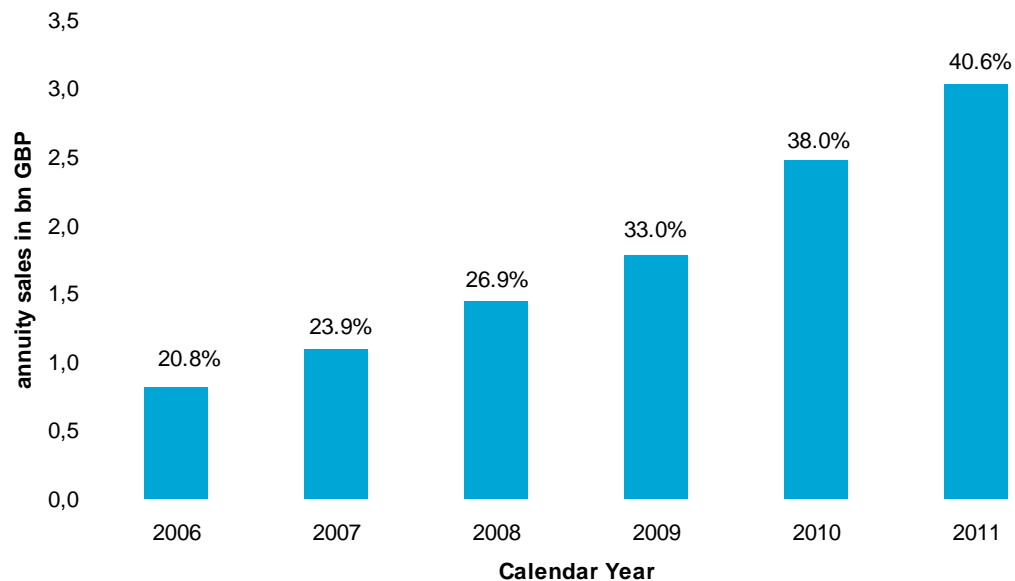
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# Private Pension Market in the UK

Enhanced Annuities play a major role

- ▶ Private Annuity sales are in excess of GBP 20 billion

**% share of all external annuities - sales** in bn. GBP



- Total UK annuity market can be split into internal (vesting) business and external business (open market option)
- Enhanced Annuities mainly offered for external business so far
- 2011: Enhanced Annuity share of advised market 40,6%

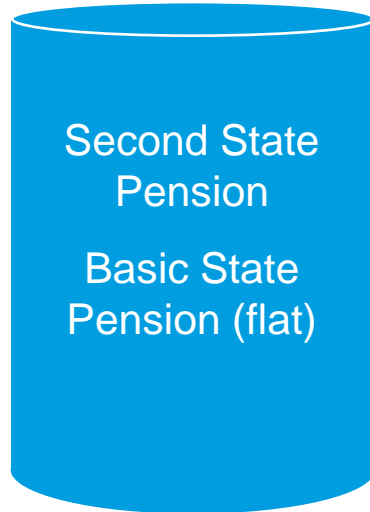
Source: Towers Watson

**Rapid growth over the past 6 years**

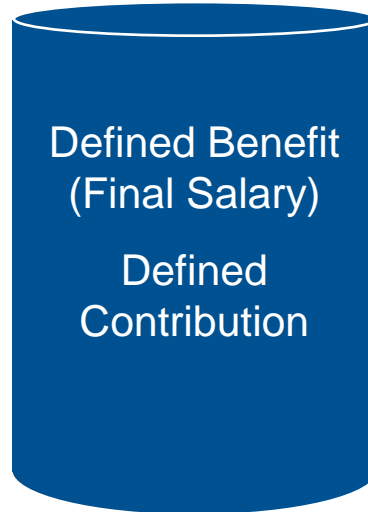
# Pension System

...built on three pillars

## State



## Occupational



## Private



### ► In UK:

- Occupational and private pensions are supported by tax advantages
- At retirement age purchase of an annuity of 75% of the fund was compulsory until April 2011 – still restricted drawdown

# Enhanced Annuities

## History of product development

- ▶ Before 1995: Compulsory Purchased Annuities/Lifetime Annuities
  - Standard annuity rates for everyone
- ▶ People with severe diseases were disadvantaged
- ▶ Complains to compulsory requirement in the early nineties
- ▶ A new product line was needed: Enhanced Annuities
  - Higher annuity payments for applicants with reduced Life Expectancy due to life style or diseases

**Several providers partnered with Hannover Re for product development**

# Product concept today

## Combine medical and actuarial expertise

- ▶ Doctors' experience and medical statistics
  - Estimated Life Expectancy (ELE)
  - Maximum Probable Life Expectancy (MPLE)
  - Reduction in Life Expectancy
- ▶ Actuarial
  - Provide reference ELE/MPLE (population, healthy, ...)
  - Transfer ELE/MPLE to different age group
  - Compare with statistical data

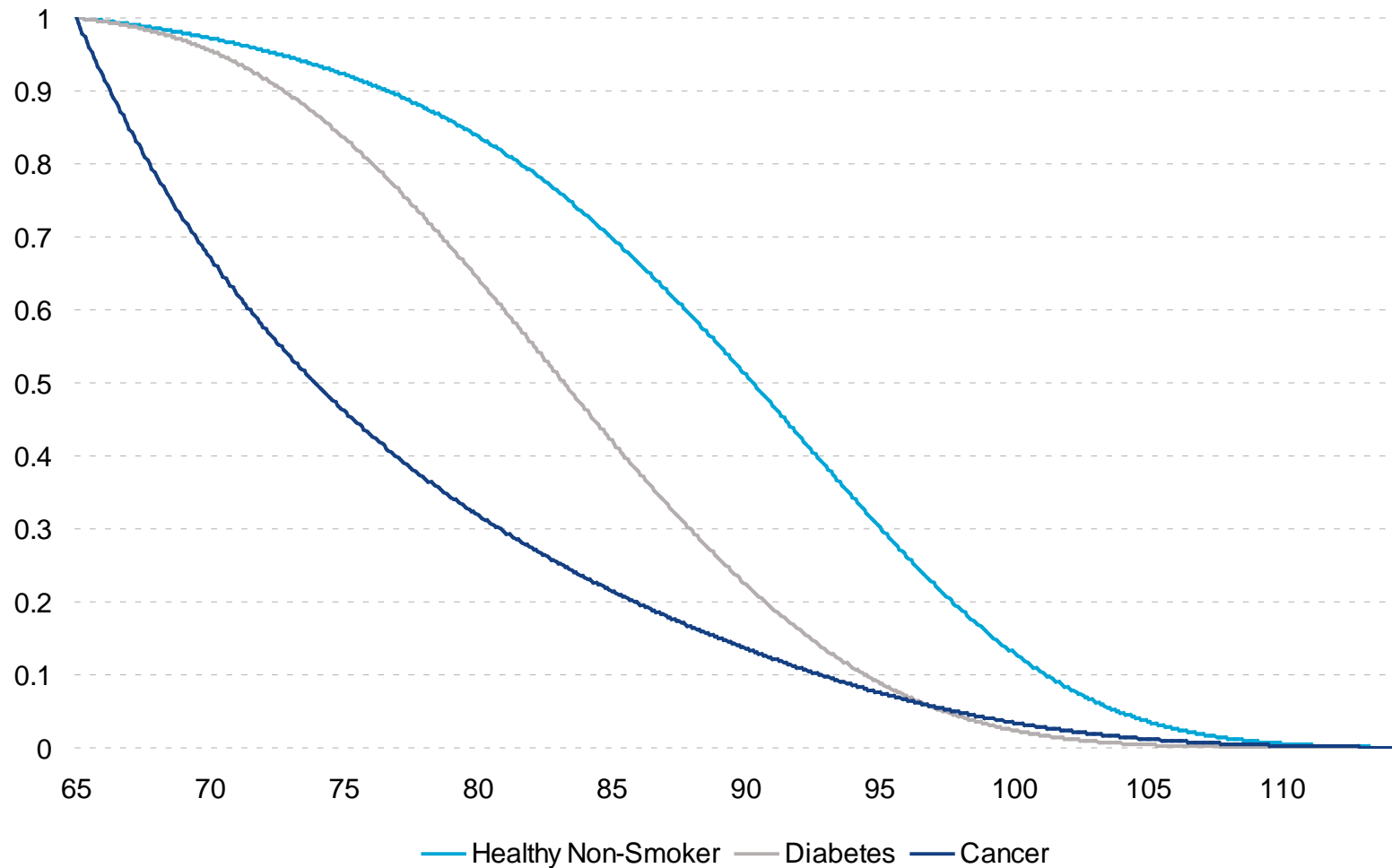
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**Automated Underwriting System to provide individual Survival Curve**

# Survival Curves

## Three examples

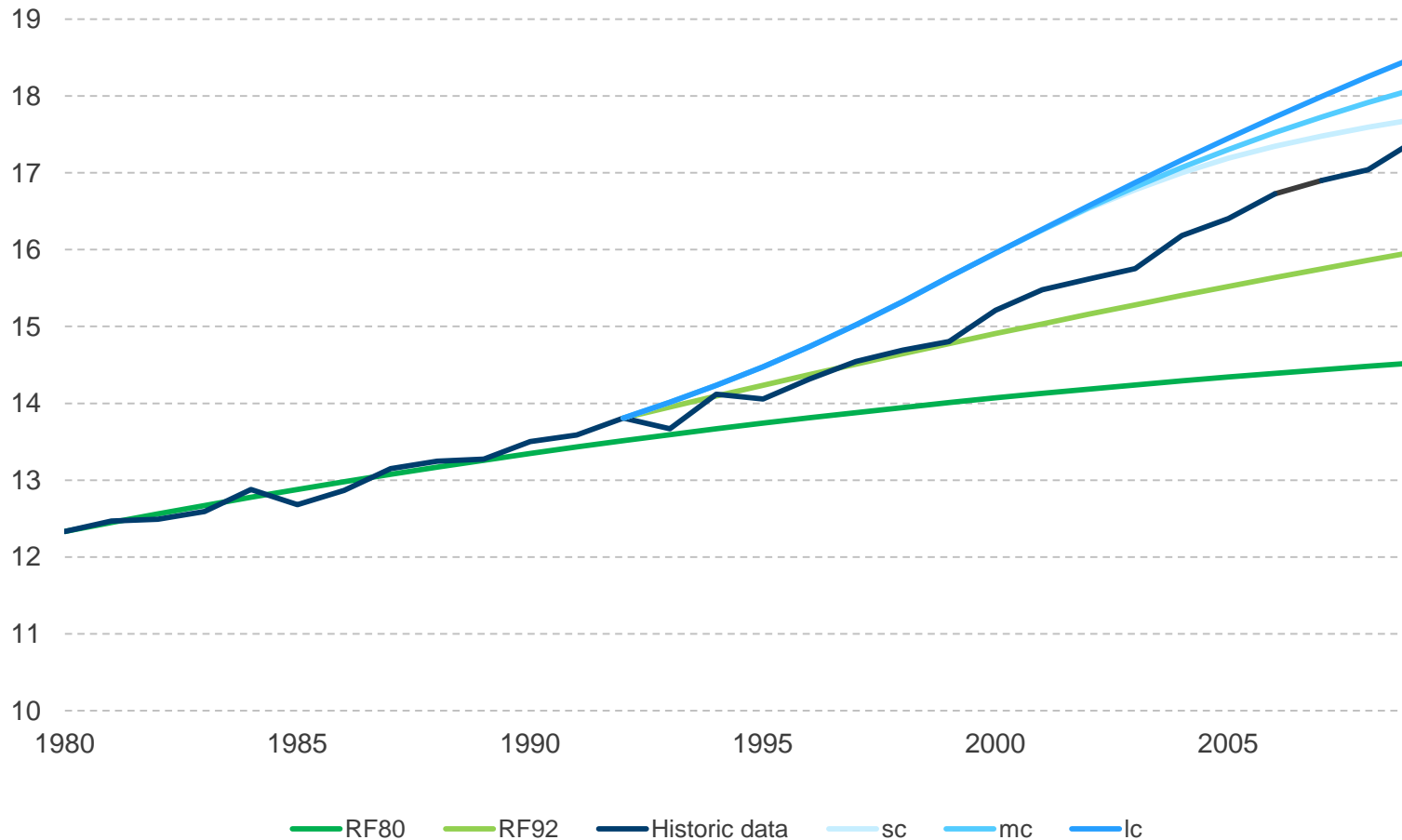
### Disease depending Survival Curves



# The crystal ball

## Mortality improvement assumptions

### Period Life Expectancy: Male – Age 65

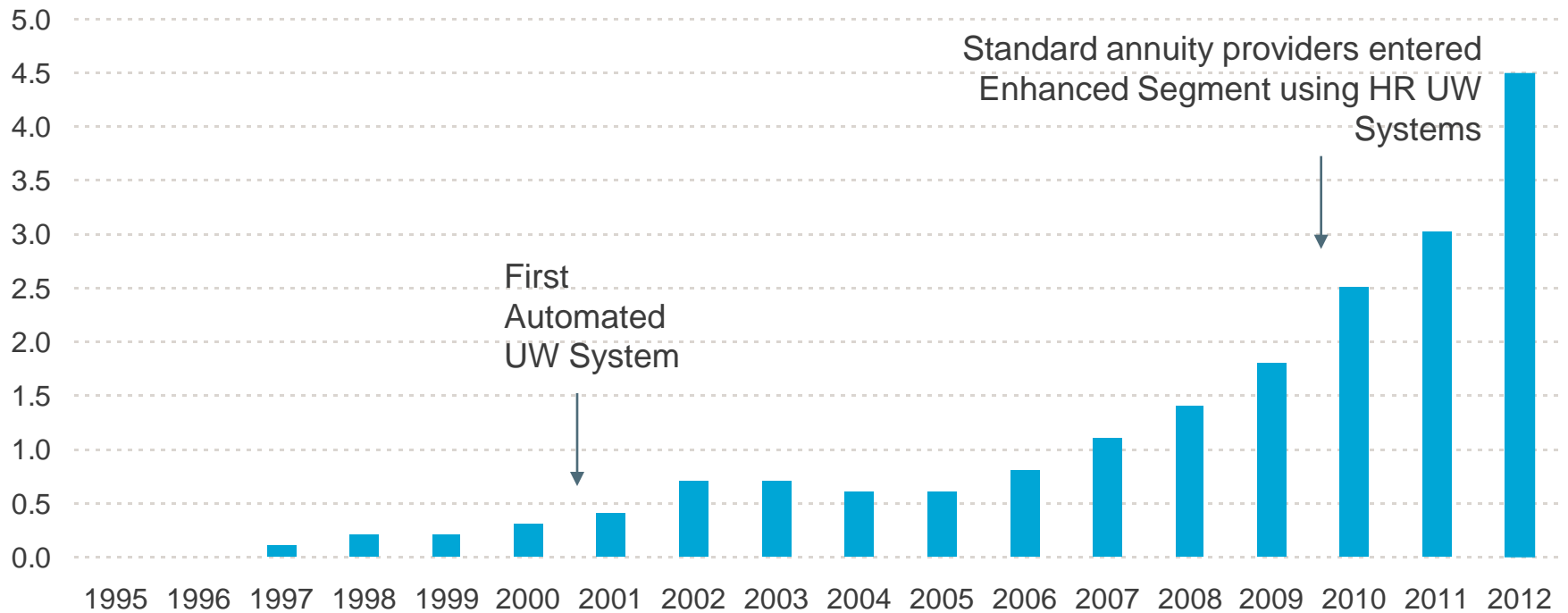


# Enhanced Annuities UK

Impressive growth of a niche market

## Development UK Enhanced Annuity Market

in bn. GBP



**2012: EA volume 4.48bn GBP representing 20% of total annuity market**

# Required market environment

- ▶ Regulatory environment
- ▶ Perception of longevity risk
- ▶ Tax rules lead to annuitization
- ▶ Substantial retirement savings
- ▶ Availability of mortality experience and other relevant data for annuitants

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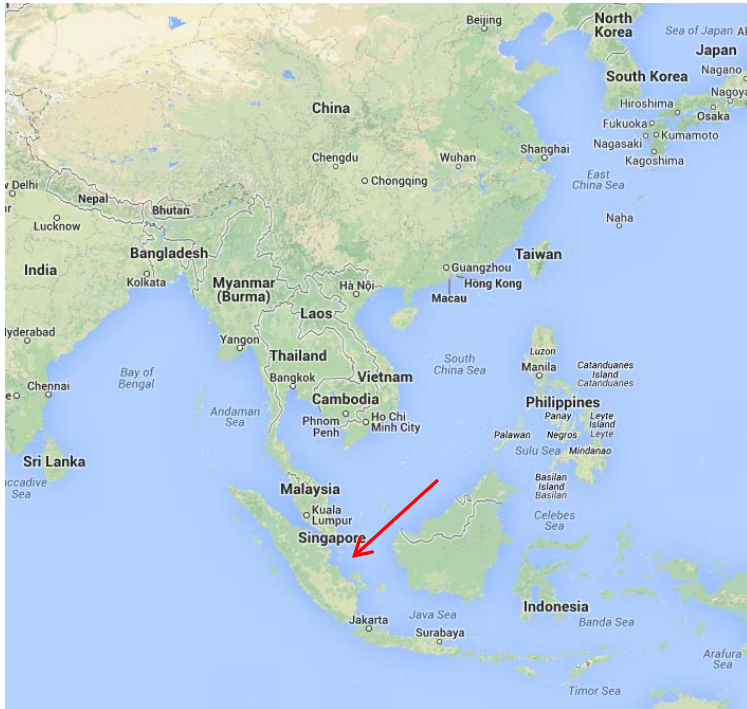
**Market education and government support needed**

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# Republic of Singapore

## Facts and figures



...and some economic data (2012 est.):

- ▶ GDP: \$331.9 billion
- ▶ Public debt 111.4% of GDP
- ▶ Premiums per capita (life business): \$2471
- ▶ Unemployment rate 1.9%
- ▶ Pension fund assets to GDP in 2012 were 59.96% (average in the rest of OECD: 60%)

note: data in US dollars

- ▶ Area: 697 km<sup>2</sup>
- ▶ Slightly more than 3.5 times the size of Washington, DC
- ▶ Population (2012 est.): 5.3 million



Source : The World Factbook; sigma No 3/2013: World Insurance in 2012

# Demographic challenge

Singapore is set to become one of the oldest countries in the world

## ► Past and future - from 1950 to 2050

	1950-1955	1975-1980	2000-2005	2025-2030	2045-2050
Life Expectancy (years)	60.4	70.8	78.1	81.3	82.9
Women	62.1	73.1	80.3	83.6	85.3
Men	58.8	68.6	75.9	78.9	80.5

## ► Life Expectancy at birth and total Fertility Rate per country (est. 2013)

	Singapore	Malaysia	China	Indonesia	Japan	UK	Germany	US
Fertility Rate (children born/woman)	0.79	2.61	1.55	2.2	1.39	1.9	1.42	2.06
Life Expectancy (years)	84.07	74.28	74.99	71.9	84.19	80.29	80.32	78.62

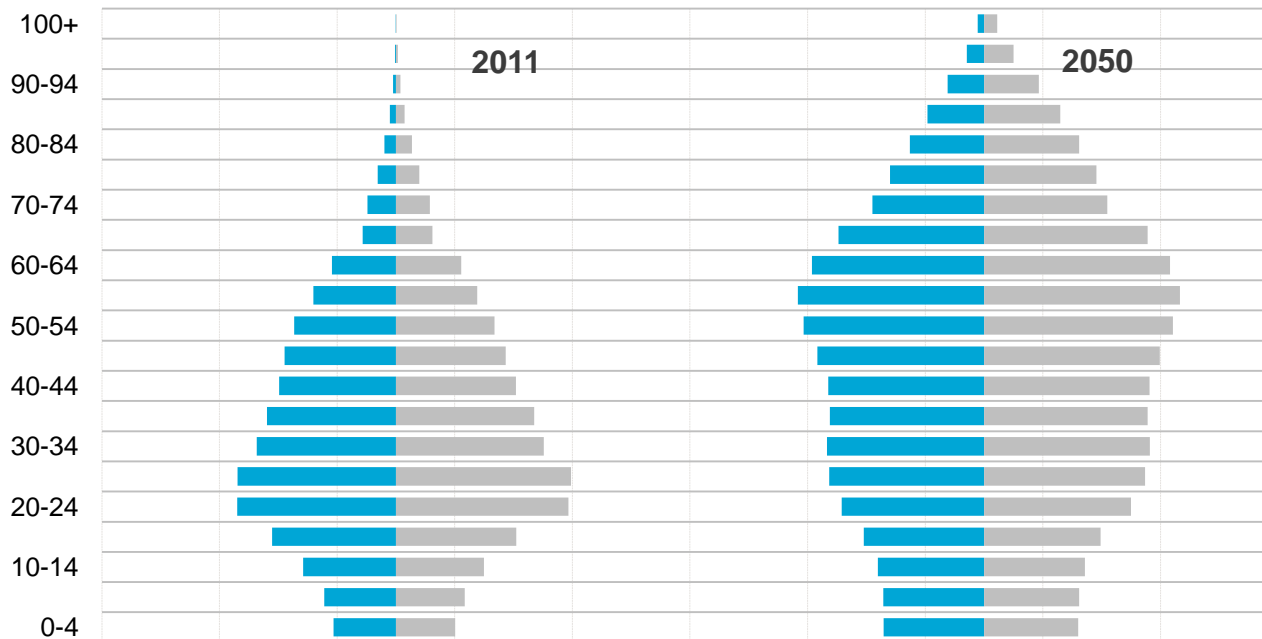
Source: [www.indexmundi.com](http://www.indexmundi.com), US Census, [www.cia.gov](http://www.cia.gov)

## ► The lowest Fertility Rate and one of the highest Life Expectancies

**One of Asia's countries being hit the hardest by demographic challenge**

# Population pyramids

Results of a declining birth rate and low mortality rate



## ► Prognosis for 2050: Expected increase in

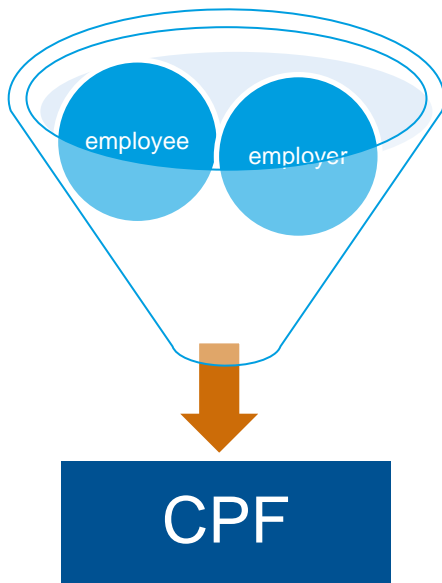
- total population is 64%
- generation 65+ is 423%
- generation 85+ is 761%

Source: US Census Bureau

# Pension System in Singapore

## Institutional Framework

- ▶ One pillar pension system: mandatory defined contribution scheme run by a Central Provident Fund (CPF) provides most social security functions
- ▶ Funded by employers' and employees' contributions



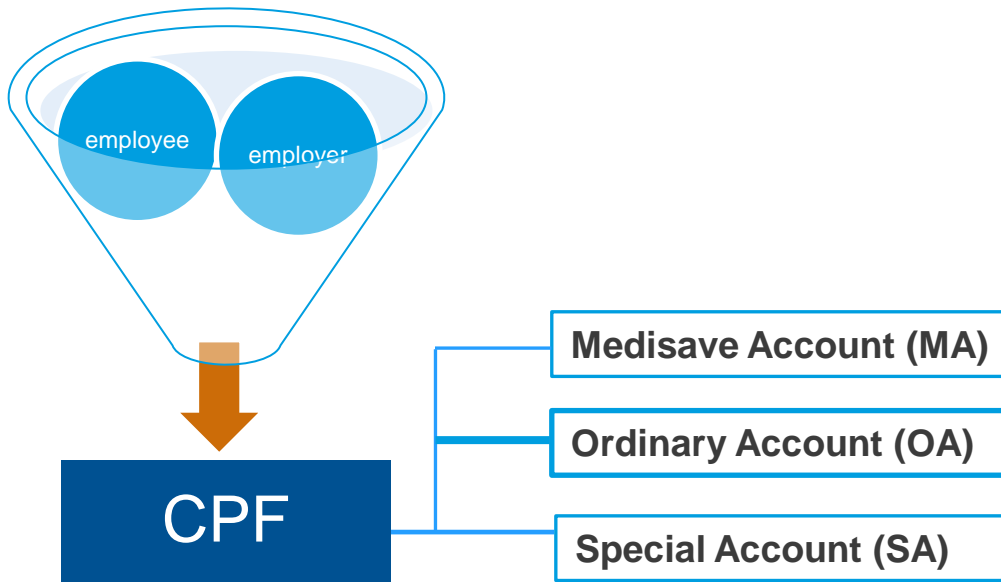
- age dependant
- subject to a cap of SGD 4,500 (per month)
- average of 34.5% of wage

- ▶ CPF savings earn a minimum risk-free interest rate of 2.5% guaranteed by the government

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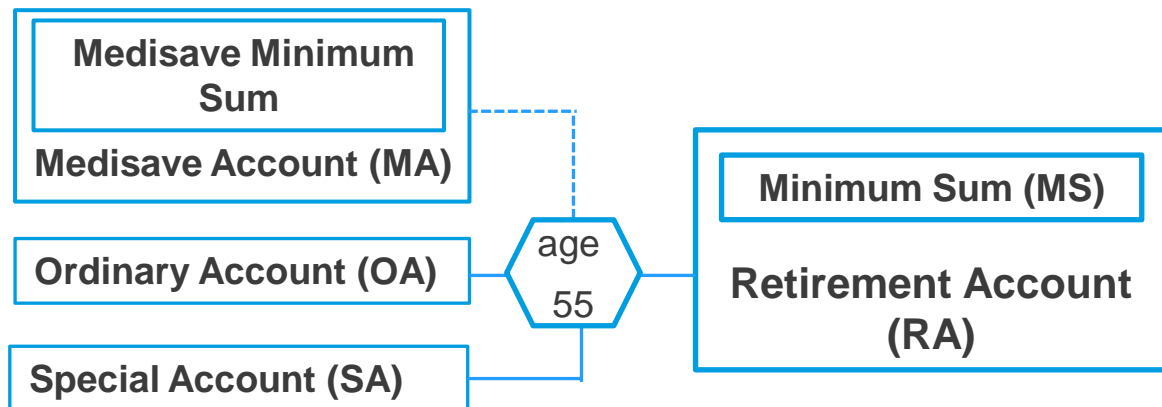


- ▶ Contributions are credited to three accounts; split depends on the employee's age, majority goes to the Ordinary Account

# Minimum Sum

...supports a basic standard of living during retirement

- ▶ Since 1987: Minimum Sum is the minimum amount that CPF members must set aside upon reaching 55
  - in 1987 MS was \$30,000
  - in 2013 MS is \$148,000
- ▶ Introduced to help CPF members to provide a modest standard of living, by fixed monthly pay-outs from Drawdown Age (DDA) **for about 20 years**

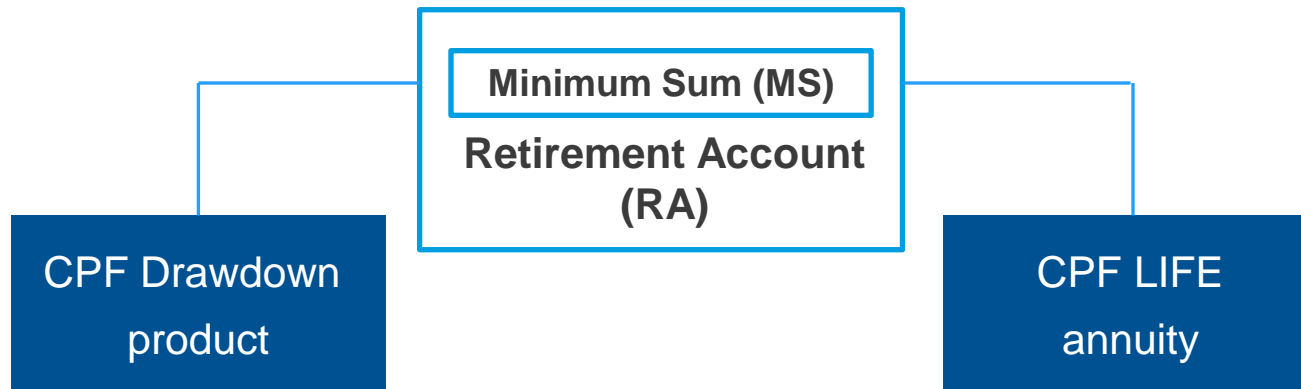


Source: "CPF LIFE – Retire with Peace of Mind"

# Minimum Sum

...supports a basic standard of living during retirement

- ▶ Options for using the Minimum Sum:



- Members born **before 1958** can choose between drawdown and annuity
- Members born **in 1958 and later** have to take lifelong CPF LIFE annuity
- Opt out only possible in very specific circumstances

Source: "CPF LIFE – Retire with Peace of Mind"

# Leaving CPF LIFE

## Withdrawal limitations and opting-out

- ▶ At age 55 members can **withdraw CPF savings** in excess CPF Minimum Sum (MS) requirements and Medisave Minimum Sum (MMS)
  - MS in 2013 is \$148,000
  - MMS in 2013 is \$40,500
- ▶ **Opt Out** only possible if
  - Permanently leaving Singapore/West Malaysia
  - Already receiving a pension or annuity of at least the same size
  - Medical conditions which are likely to **reduce life expectancy**

# CPF LIFE Plan

...responds to the rapid aging of the CPF membership base

- ▶ CPF LIFE is the Lifelong Income Scheme For the Elderly, which provides lifelong monthly payments
  - Retirement Account converted into a lifelong annuity
  - payments start at Draw Down Age
  - pay-out depends on life plan chosen, age, sex and Retirement Account balance
  - two plans under CPF LIFE: Basic Plan and Standard Plan, both provide lifelong annuity and bequest (higher bequest on Basic Plan)

## The little difference...

in case of a Male (born 1947) with \$50,000

Condition	Healthy	Several times in hospital due to heart attack, ECG, breathlessness climbing stairs	Lung Cancer, lymph node metastases, currently treated with chemotherapy	CPF LIFE Standard	CPF LIFE Basic
Monthly annuity	210	378	494	289-305 plus bequest	265 - 278 plus bequest

► Bequest under CPF LIFE plans under specific age:

Age	CPF LIFE Standard	CPF LIFE Basic
75	\$19,154 - \$20,774	\$36,553 - \$36,832
85	\$0	\$17,765 - \$17,806
95	\$0	\$0

# Central Provident Fund

...one of the world's largest defined contribution schemes

## ▶ CPF volumes in 2012 (in Singapore Dollar)

- overall

Period	CPF Life Gross Contribution Received (SGD)
Q1 2012	7.246 billion
Q2 2012	6.241 billion
Q3 2012	6.220 billion
Q4 2012	6.207 billion
Total 2012	25.915 billion

- for Ordinary, Special, Medisave and Retirement Account

<b>Total Member's Balance</b>	<b>214,127.9 million</b>
Ordinary Account	87,520.4 million
Special Account	49,100.8 million
Medisave Account	55,901.6 million
Retirement Account and others	21,605.0 million

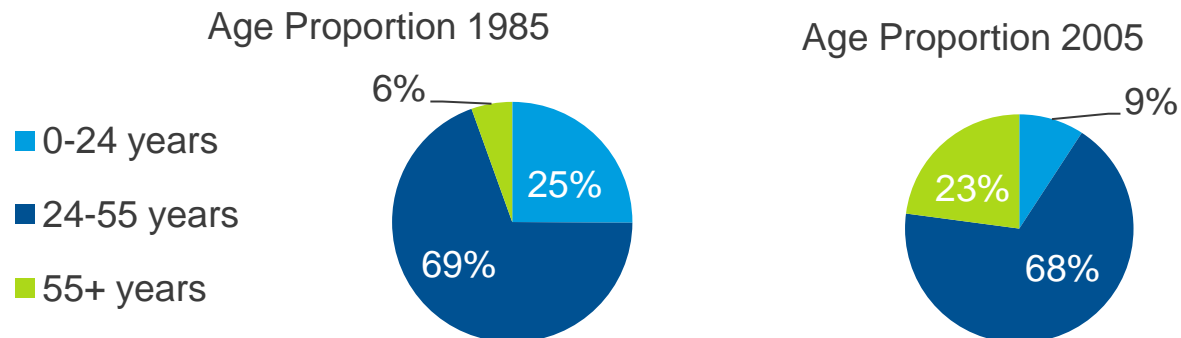
# Central Provident Fund

...one of the world's largest defined contribution schemes

## ► More and more CPF members

Year	Number of Members
1995	2.68 million
2005	3.05 million
2012	3.39 million

## ► Not only number of members but also average age is increasing



Source: Central Provident Fund Board (CPF), *CPF Trends: Changing Age Structure of CPF members: Membership in Brief*.

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# Outlook

## Concept of Enhanced Annuities transferable to Singapore?

Summary:

- + Substantial savings at retirement
- + Mandatory annuitization for minimum fund
- Exception rule for members with health issues
- ? Attractiveness of Enhanced Annuity quote

**Worthwhile exploring the opportunity**