

# **Long-Term Care Around the World**

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# **Long-Term Care: Public and Personal Challenges**

Sam Gutterman



**17th Annual Intercompany Long Term Care Insurance Conference**



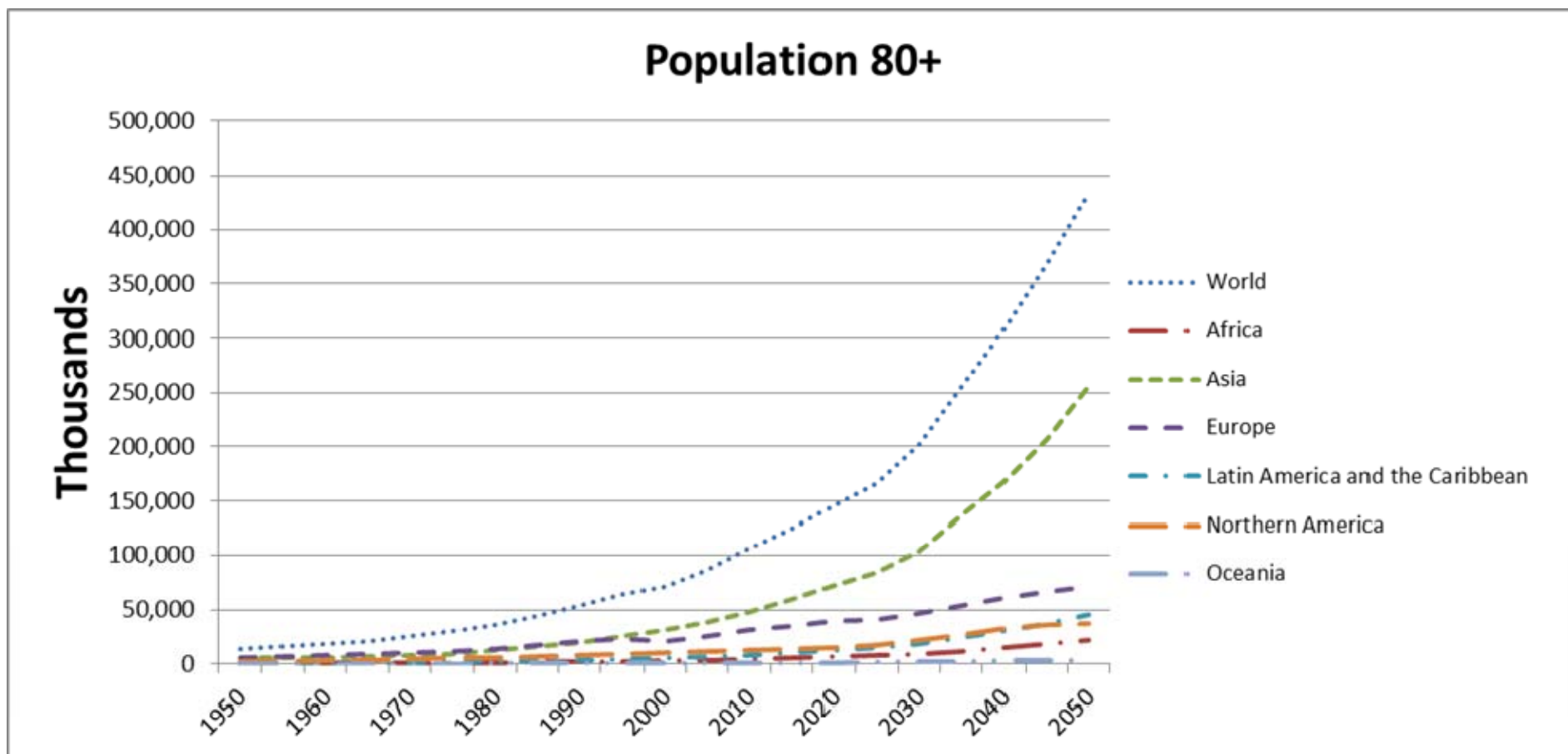
- Prepared by the Population Issues Working Group of the International Actuarial Association (IAA)
  - Published in March 2017
- Scope
  - Focuses on LTC needs of the elderly, although other population segments are also in need of these services

# Agenda



- The importance of the problem
- Underlying needs
- Satisfying the needs
- Financing the needs
- Challenges
- Approaches

# Demographic explosion



- Number of people age 80 and older is expected to increase from about 120,000 now to more than 400,000 in 2050
- Largest number will be in Asia

*Source: United Nations 2015 Revision of World Population Prospects*

# Percent of population age 80 and older



Gender	F	M	F	M	F	M	F	M
Country	Canada		China		France		Germany	
<b>1970</b>	1.8	1.3	0.4	0.2	3.2	1.4	2.4	1.4
<b>1990</b>	3.0	1.6	0.8	0.4	5.0	2.3	5.2	2.2
<b>2010</b>	4.9	2.9	1.6	1.1	6.9	3.8	6.8	3.4
<b>2015</b>	5.1	3.3	1.9	1.3	7.6	4.5	7.2	4.1
<b>2030</b>	7.4	5.6	3.4	2.4	9.2	6.4	9.4	6.6
<b>2050</b>	11.8	9.5	10.2	7.8	13.2	8.8	16.1	12.7
Country	Italy		Japan		South Africa		United States	
<b>1970</b>	2.2	1.4	1.2	0.6	0.6	0.3	2.3	1.5
<b>1990</b>	4.3	2.2	3.0	1.7	0.5	0.2	3.7	1.8
<b>2010</b>	7.4	4.2	8.1	4.4	1.2	0.7	4.5	2.7
<b>2015</b>	8.5	5.1	9.8	5.6	1.3	0.6	4.6	2.9
<b>2030</b>	11.5	7.8	15.4	9.8	1.7	0.4	6.3	4.5
<b>2050</b>	18.0	13.1	18.1	12.0	2.9	1.2	9.4	7.3

- Significant increase in most countries (other than South Africa)
- Caused by increased longevity and decreased fertility

Source: World Bank

# Importance of the problem



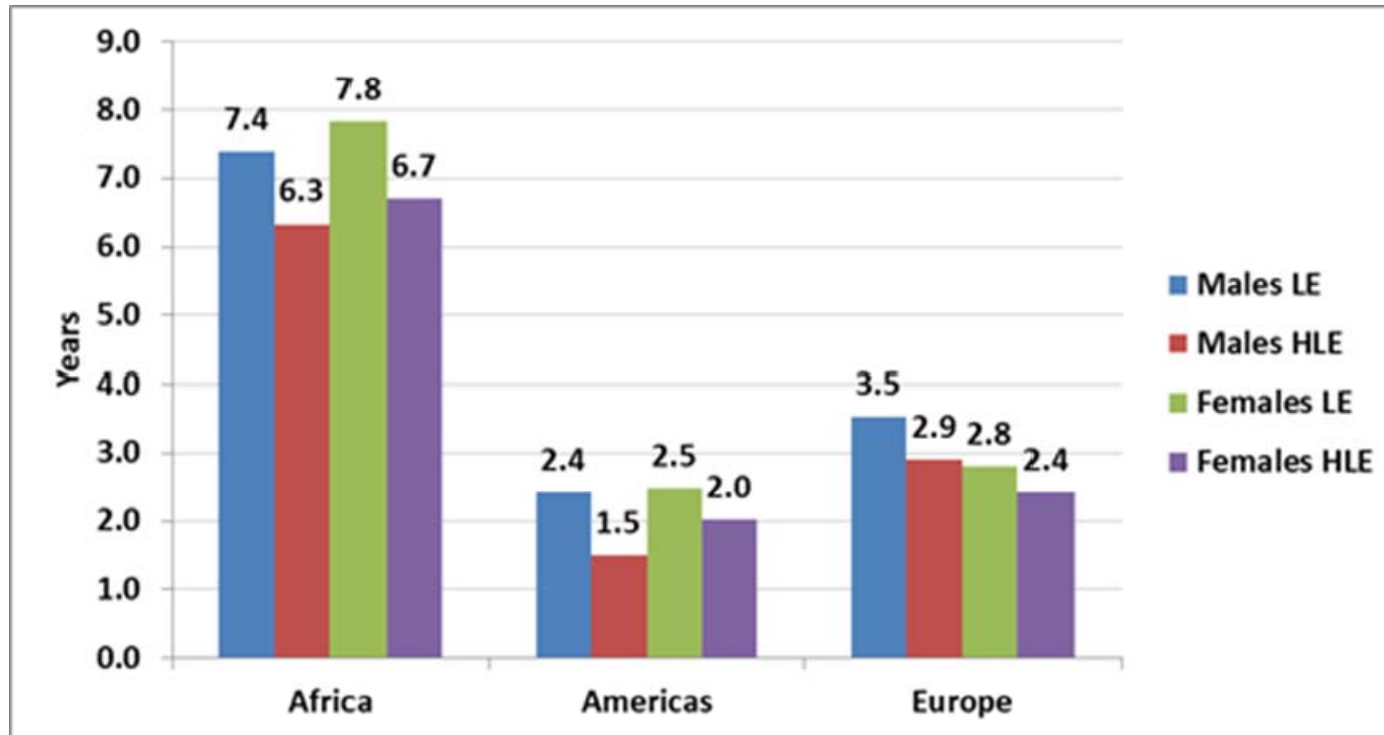
- The aging of society
  - The downside of improvement in mortality and low fertility
  - In countries with a post World War II baby boom
    - Explosion of LTC needs will emerge in the 2030s
- Demographic and lifestyle changes
  - Smaller and less close families
  - Increased mobility
  - In all countries
- Corresponding increase in demand for caregivers and other support



# Trends in morbidity compression / expansion



Life expectancy (LE) and Healthy life expectancy (HLE) – change between 2000 and 2010



- Apparent expansion of period of morbidity, although certain studies have shown a compression
- Significant differences by income, especially for healthy life expectancy

Source: World Health Organization

# Underlying needs



- Residence
- Assistance in performing activities of daily living
- Preserving independence and autonomy
- Medical / nursing
- Affordability



- Residence
  - Home / community
    - Psychologically and financially better if at home or in community
    - “Aging-in-place”
  - Facility
    - Assisted living facility
    - CCRCs
    - Nursing home
      - No one wants to use this option, but is often necessary
    - Hospice



- Assistance with activities of daily living
- Through caregivers
  - Informal
    - Family, friends and neighbors
      - Psychological and work-related burdens
    - Community
  - Formal
    - At home
    - Facility staff
  - Long-term concerns
    - Supply – will there be enough?
    - Training – caring for the elderly is different



- Medical / nursing
  - Relation with acute care
    - Hospital transitions can represent cost or appropriateness problem
  - Availability
    - At home or community
    - In-house in institutions
  - Purchase and taking medicine



## 1. Personal

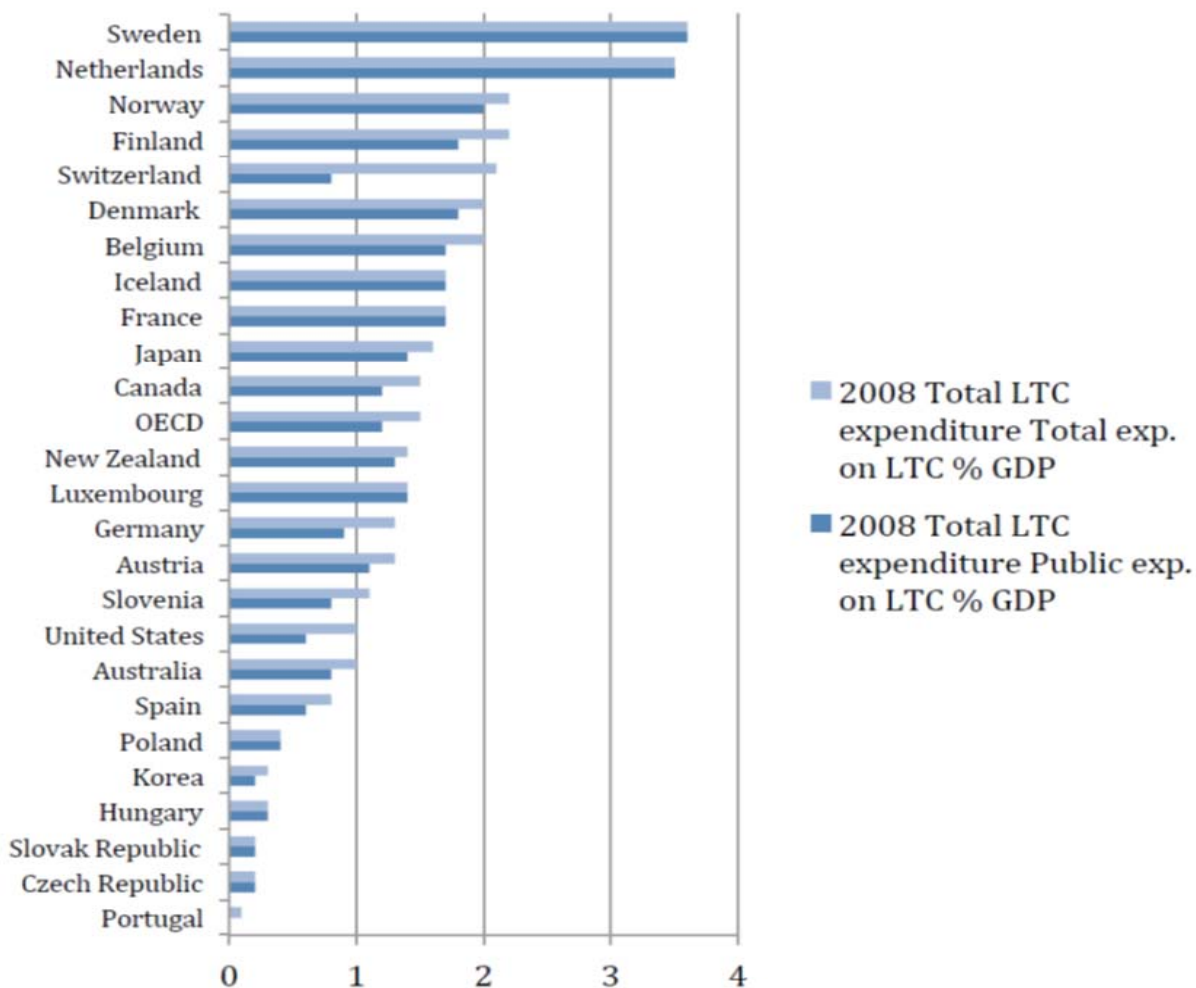
- Savings
  - Including residence
- Insurance
  - Standalone or in a combination product
  - Worldwide, most individual
- Family, friends or community human resources
- Part of or as a supplement to an employer-sponsored program



## 2. Public

- Social insurance
  - Limited use of wage-related contributions
- Social assistance
  - Wealth or other needs-tested
- Income or inheritance taxes
- Who pays
  - National or local authorities
- Component of healthcare or retirement program – rare, but has been used

# Recent expenditures on LTC



Source: OECD Health Data, 2011





- The cost
  - Sheer numbers that will need LTC
  - Insufficient savings to finance needs
- Caregiving – supply and quality of care
  - Availability of informal care
    - Low fertility rate, so fewer children
    - Mobility of children
    - Higher labor force participation, particularly females
  - Training
- Aging at home
  - Feasibility for those with mental conditions



- Around the world
  - Wide range of approaches
  - Typically piecemeal
    - Some better coordinated than others
  - Importance given to developing solutions
    - Primarily depends on degree of aging populations
    - Huge potential costs that are and will in the future present significant budgetary problem
  - In many countries, LTC has not been given sufficient policy attention
    - But will have to address in the next two decades



- Every country may end up with its own approach
  - Will likely emphasize aging-in-place or home LTC delivery
    - Often best for the individual
    - Better to control costs
    - But may not be practical
- Some type of means-testing or social insurance
- Personal responsibility – for middle class
  - Combination of personal savings and private insurance

# Program design and cost control



- Preventive actions
  - Nutrition, physical/mental activity, social interaction
  - Encourage aging-in-place
- Cost sharing
- Technology
- Caregiver support
- Community programs
- Situs
  - Intermediate care situs approaches, with abuse control
  - Less expensive geographic locations
- Fee negotiation/caps

# Raising awareness



- Priority of issue needs to be raised
- Effective education
  - Both personal and policy
  - Difficult because relevance is typically a long time away
  - Insurance approach complex and expensive
  - Saving enough challenging
- Develop and disseminate technology
- Enhance coordination with
  - Acute care approaches
  - Retirement programs

# The Long-Term Care Crisis



- Coming to your country in the future
  - Increasing population exposed and cost
  - Even if relatively small elderly population
- Need better coordination of programs to avoid gaps
  - Retirement programs
    - Taxwise – treat similar to retirement benefits
  - Acute health care
  - Enhance savings programs (not just for LTC)
- Especially of concern for the middle class
  - Rich can afford and poor will be means-tested
- Mandatory public-private coordination



- Quantitative analysis
  - Considering benefit design
  - As much relevant data/information needed as possible
  - Identify cost-saving approaches
- Benefit design
  - Minimize moral hazard and anti-selection
- A single solution may be optimal for all
- Potential to contribute to any policy discussion



- Coverage
- Benefit design
- Affordability
  - For individuals and society
- Appropriateness and quality of delivery
- Risk and cost management
- Sustainability of funding
- Avoiding unintended consequences



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# **Addressing Long Term Care Around the World**

Andrew H. Dalton



**17th Annual Intercompany Long Term Care Insurance Conference**

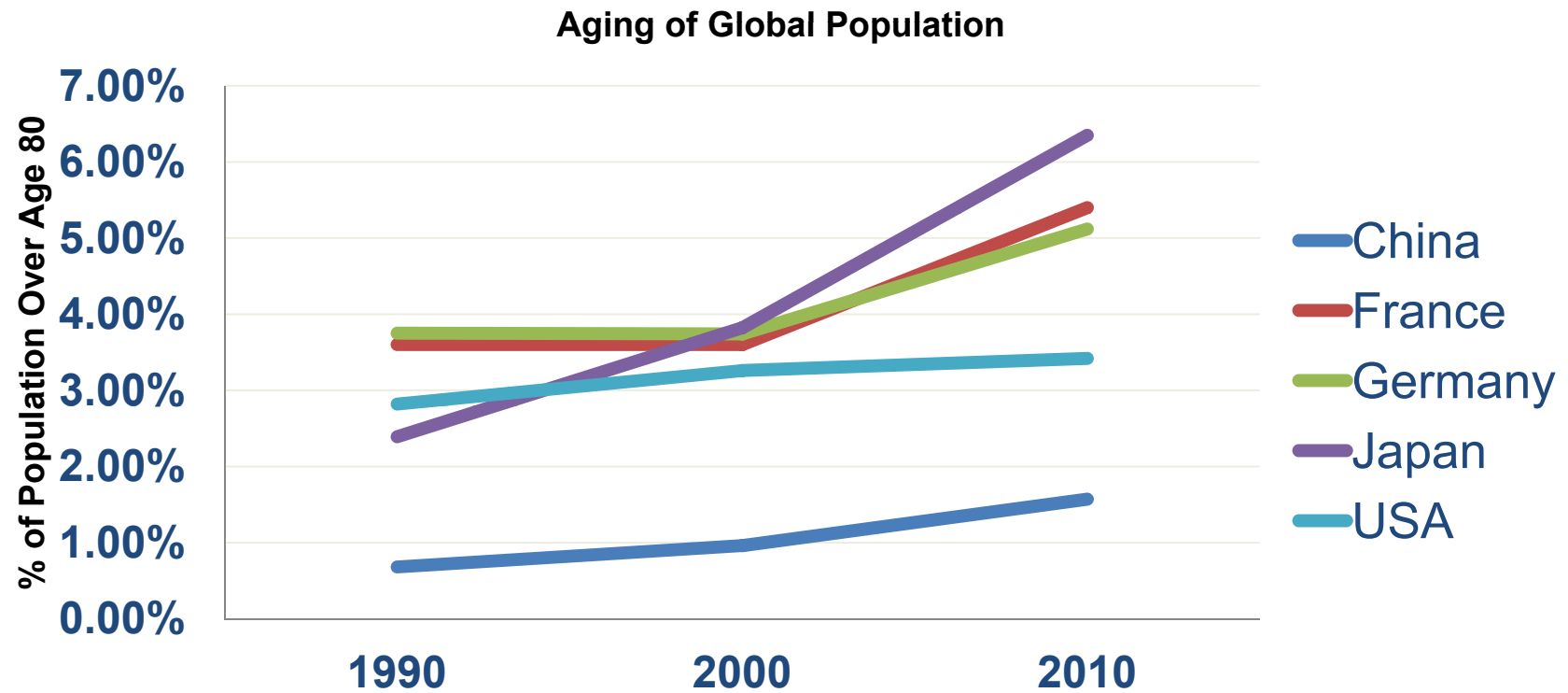


- Overview of Key Issues
- Around the World...
  - United States
  - Germany
  - France
  - China

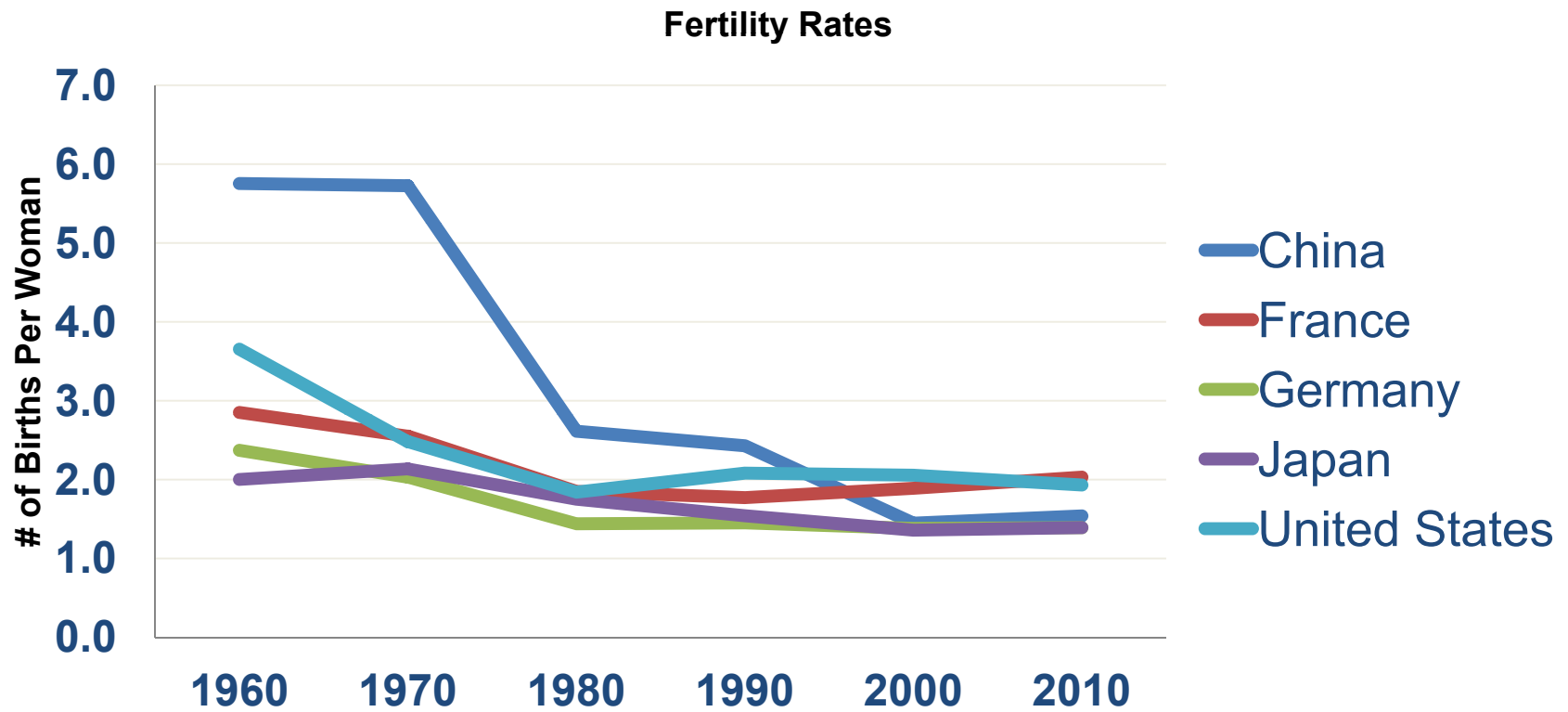


# Overview of Key Issues

# Aging of the Population

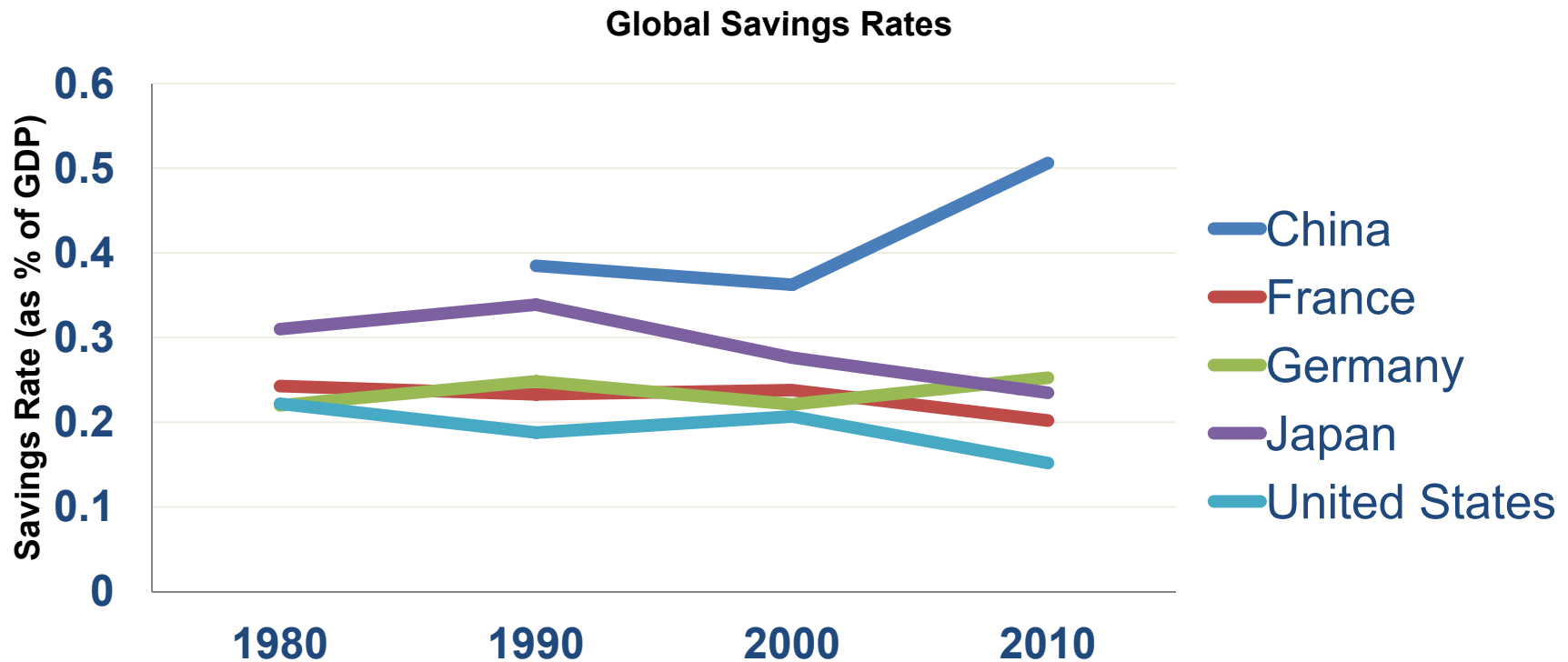


# Fertility Rates



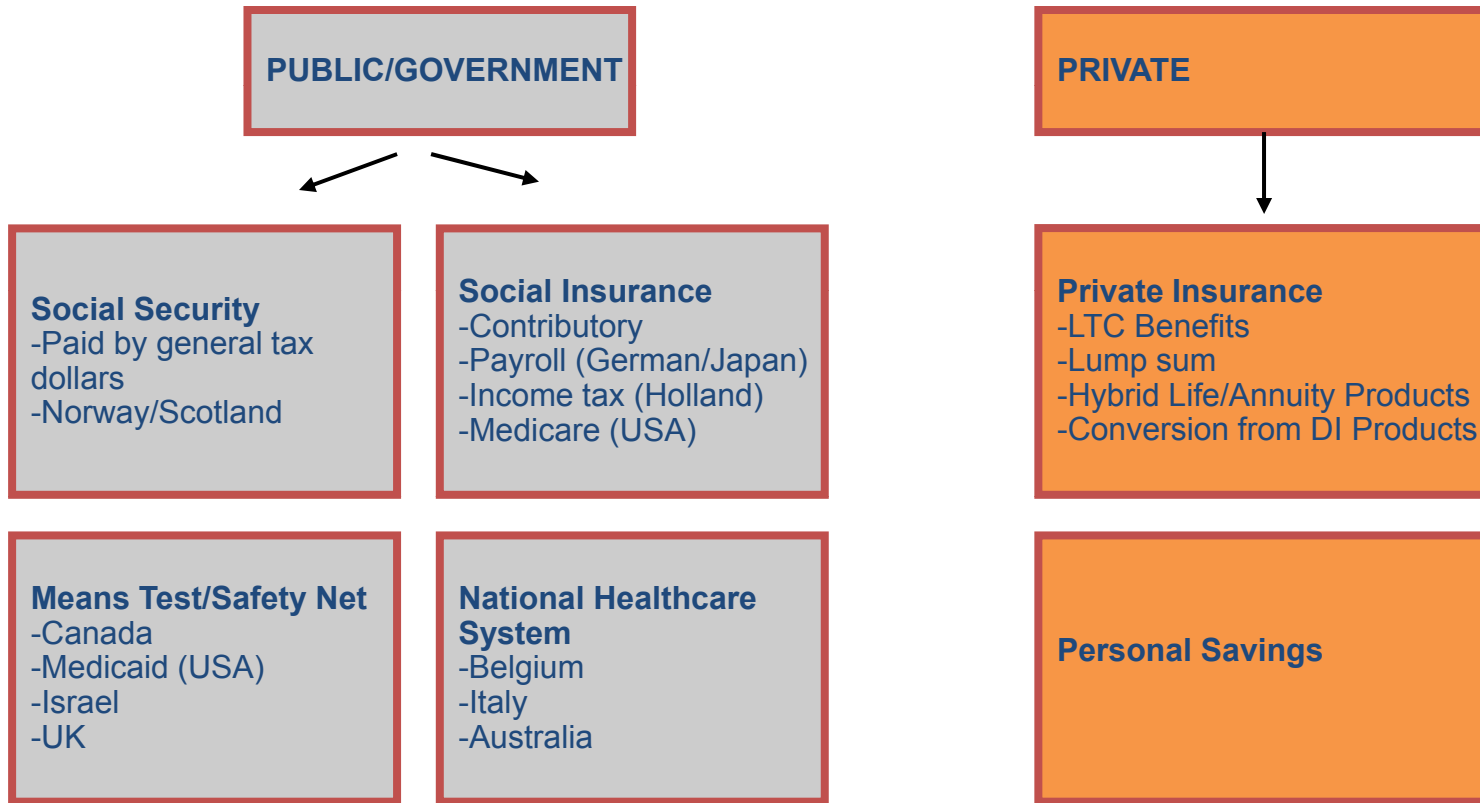
Source: <http://data.worldbank.org/indicator/SP.DYN.TFRT.IN/>

# Savings Rates



Source: <http://data.worldbank.org/indicator/NY.GNS.ICTR.ZS>

# Global Approaches for Funding LTC



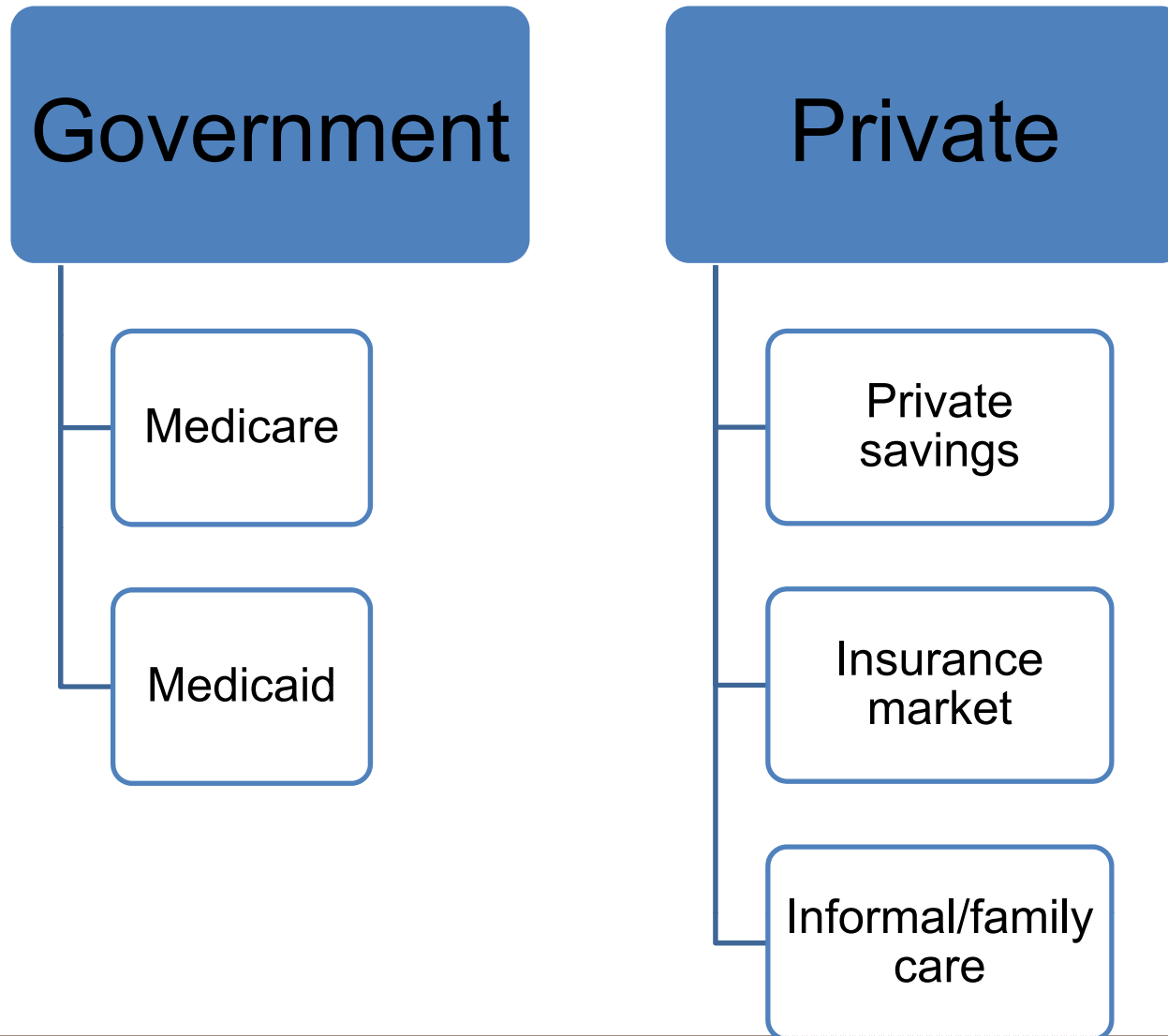
# Around the World...



United States



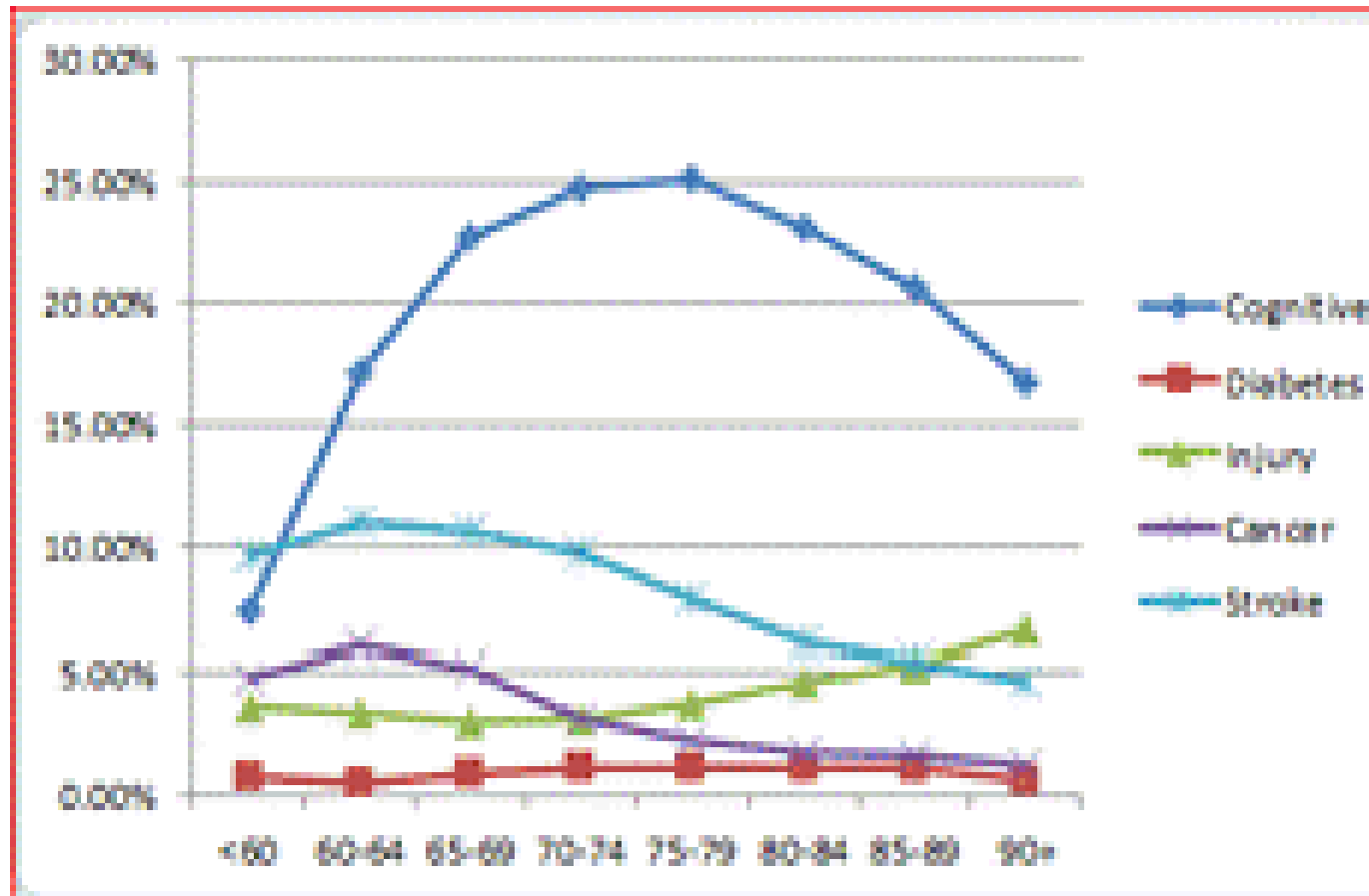
# United States – Financing LTC



# United States - Age Trends



## Analysis of LTC insurance claims (U.S.) by age at incurral and cause of claim

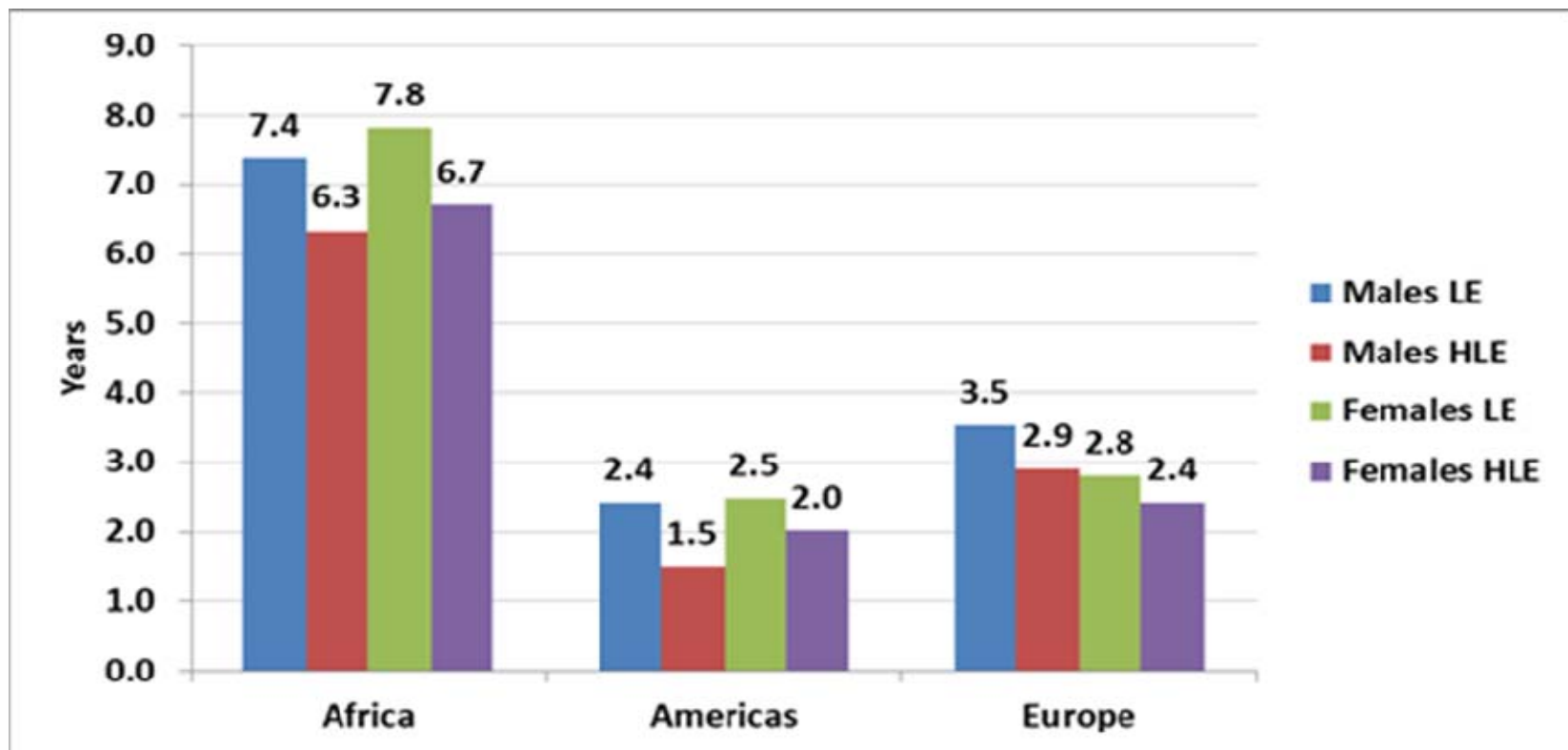


Source: „Long Term Care“ by the Population Issues Working Group of the International Actuarial Association, 2017.

# United States – Mortality Trends



Increases in life expectancy (LE) and healthy life expectancy (HLE) at birth between 2000 and 2013 for WHO member states in Africa, Americas and Europe

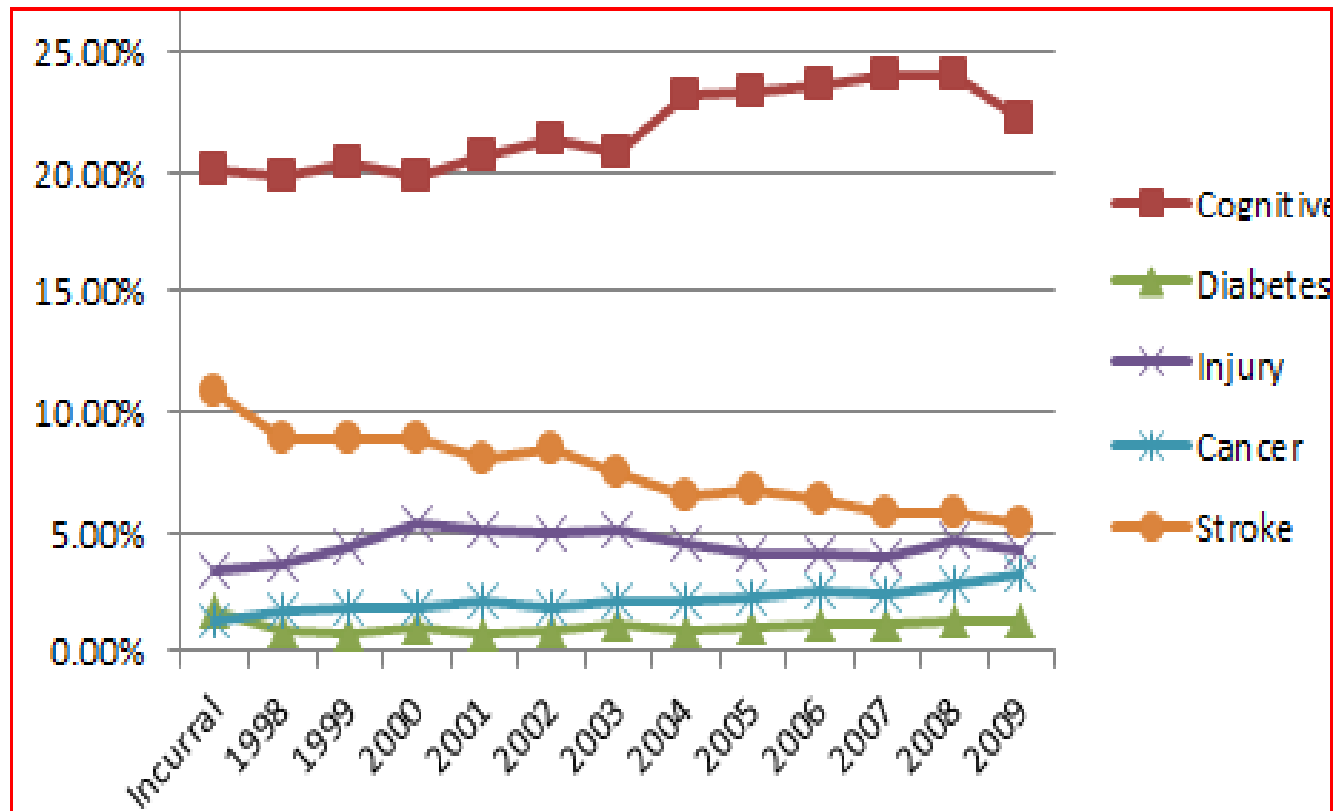


Source: „Long Term Care“ by the Population Issues Working Group of the International Actuarial Association, 2017. Based on WHO data.

# United States – Morbidity Trends

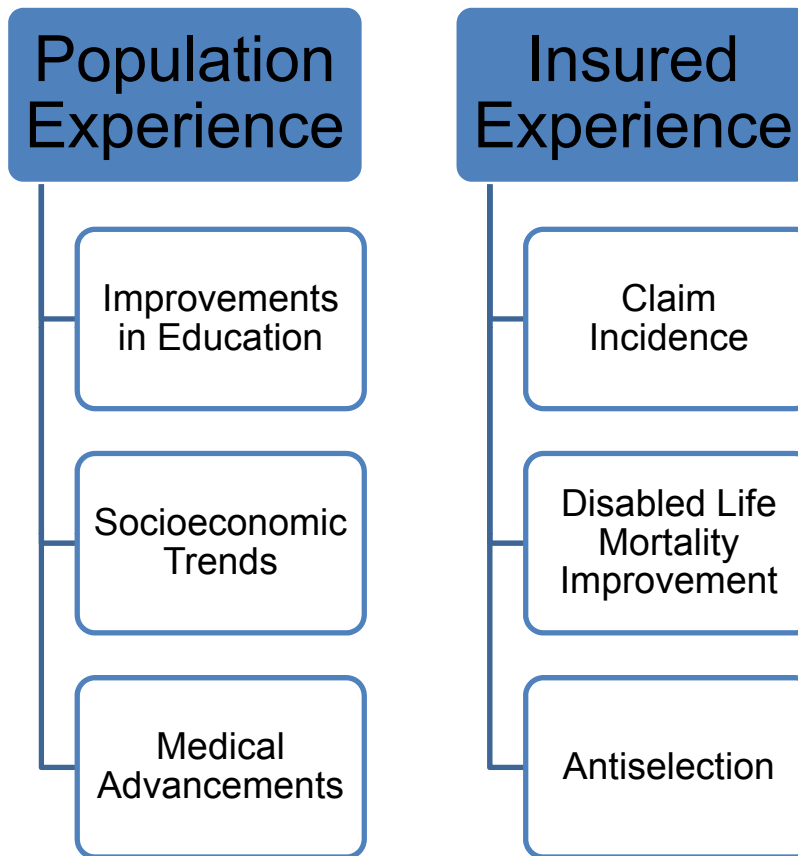


Analysis of outstanding LTC insurance claims (U.S.) by incurral year and cause of claim



Source: „Long Term Care“ by the Population Issues Working Group of the International Actuarial Association, 2017.

# United States – Morbidity Trends



# United States – Morbidity Trends



## Improvement in LTC insurance (U.S.) claim frequency

<b><u>Policy Duration</u></b>	<b><u>Average Annual Improvement in Claim Incidence</u></b>
<b>1-4</b>	3.9%
<b>5-8</b>	2.2
<b>9+</b>	0.1
<b>All</b>	2.3

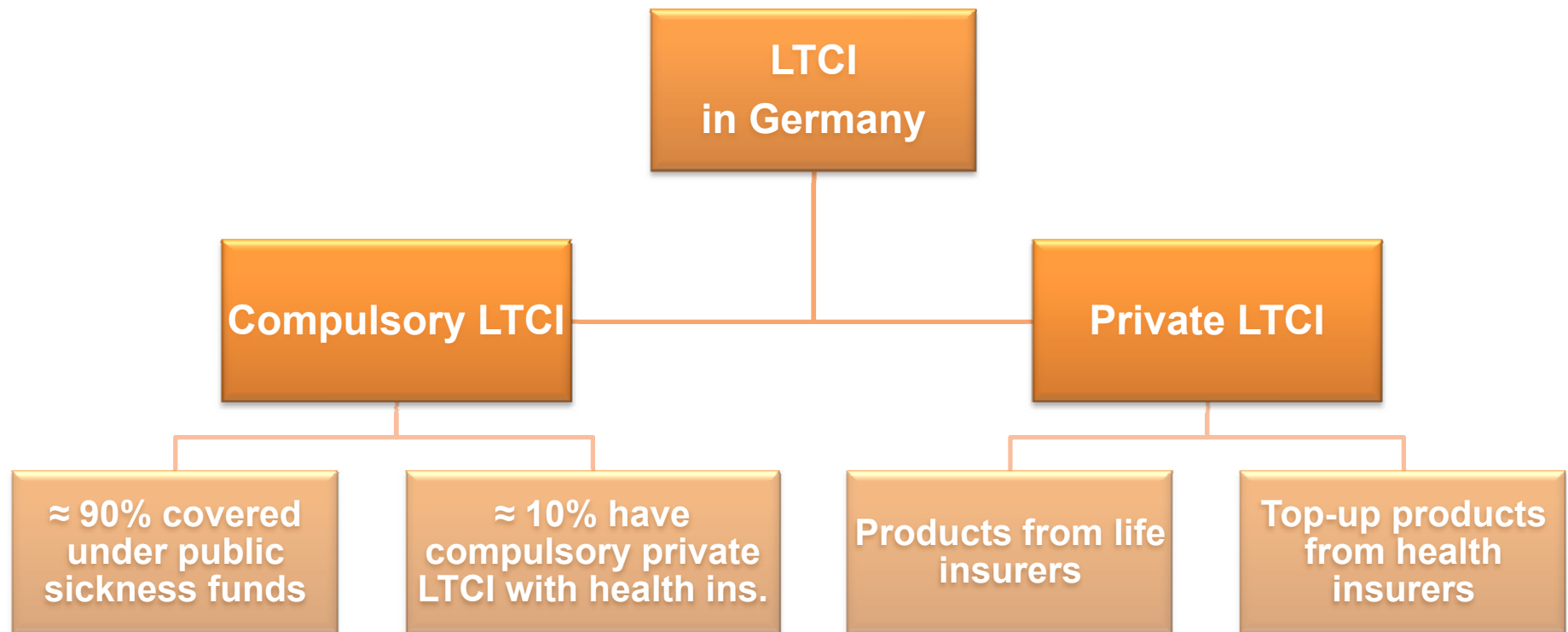
Source: „Long Term Care“ by the Population Issues Working Group of the International Actuarial Association, 2017. Based on Milliman Long Term Care Guidelines

# Around the World...



Germany

# Germany – Financing LTC



Special thanks to: Sabrina Link; GenRe

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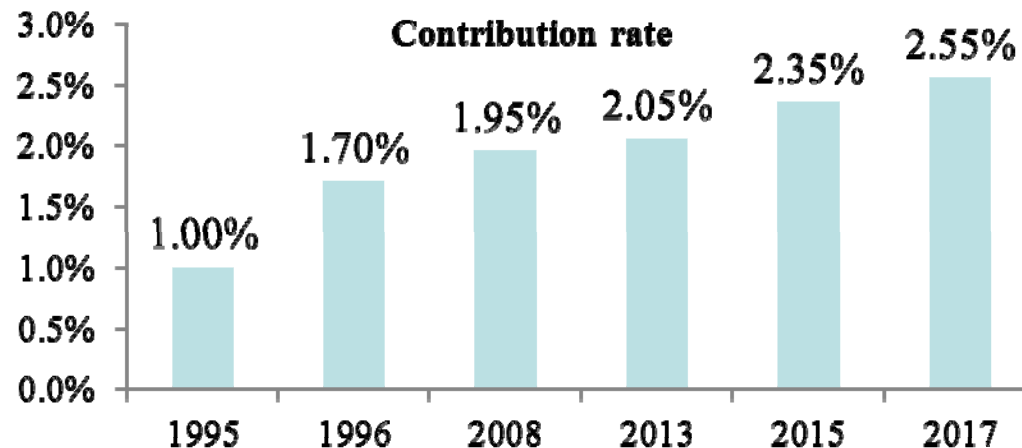


- Principles of the compulsory LTCI

“Home Health Care over Nursing Home“

Partial coverage insurance

- Financing



- Pay-as-you-go system
- Not means-tested
- Contribution is shared equally between employer and employee

Special thanks to: Sabrina Link; GenRe

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# Germany – Private Financing



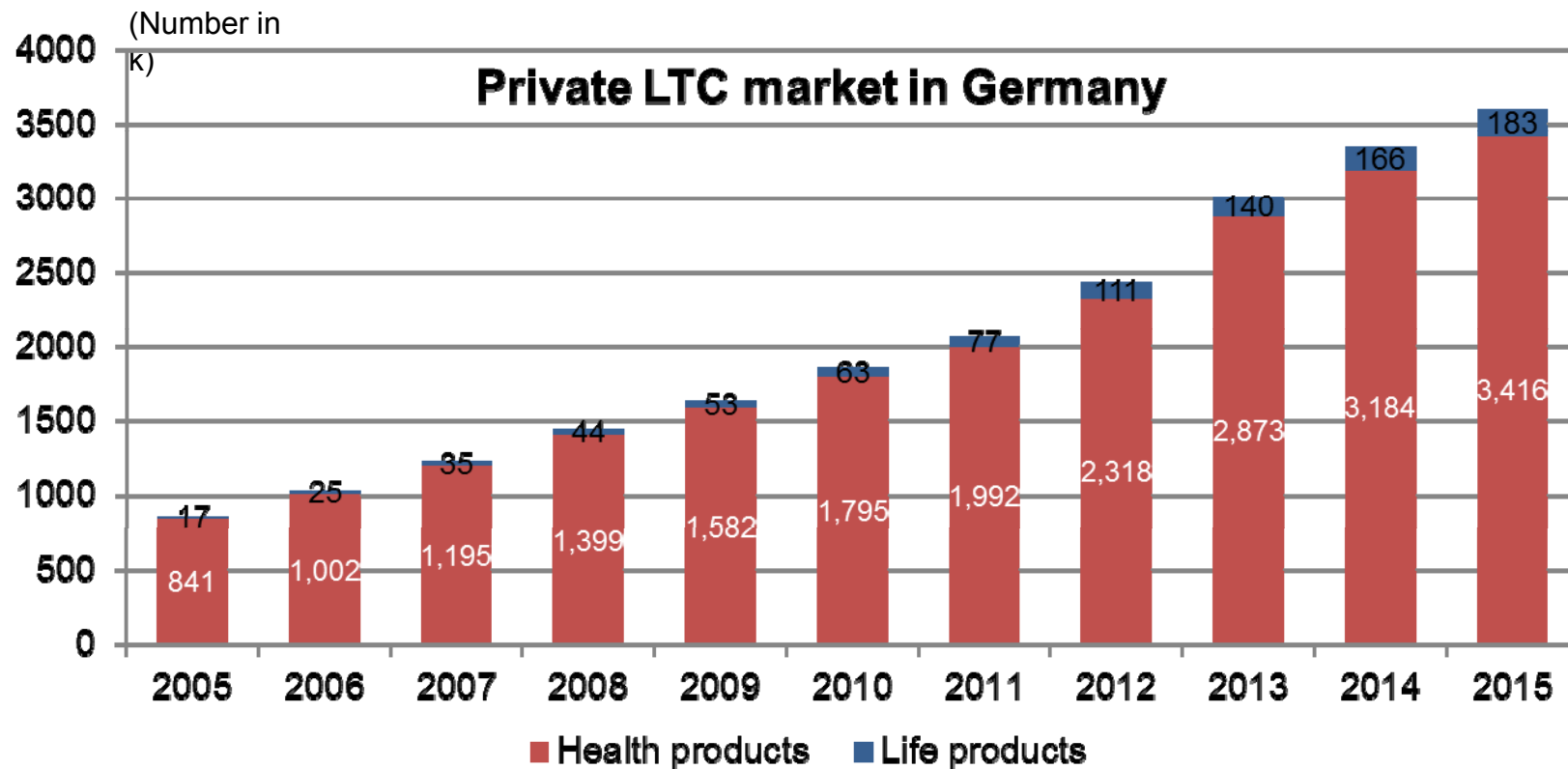
Life insurers	Health insurers
<ul style="list-style-type: none"><li>• annuity benefits</li><li>• lifetime guarantees</li><li>• profit participation</li><li>• surrender values payable</li><li>• lapses not considered in premium calculation</li><li>• waiver of premium in case of LTC</li><li>• additional benefit in case of LTC or death</li><li>• single premium</li><li>• often additional benefit trigger: failure of n/6 ADLs</li><li>• typically higher benefit for dementia</li></ul>	<ul style="list-style-type: none"><li>• annuity benefits or reimbursement</li><li>• reviewable premiums</li><li>• calculation and product design subject to detailed regulations</li><li>• higher interest rates accepted by regulator</li><li>• no surrender values</li><li>• no waiver of premium</li></ul>

**Much more expensive!**

Special thanks to: Sabrina Link; GenRe

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# Germany – a look at the private market



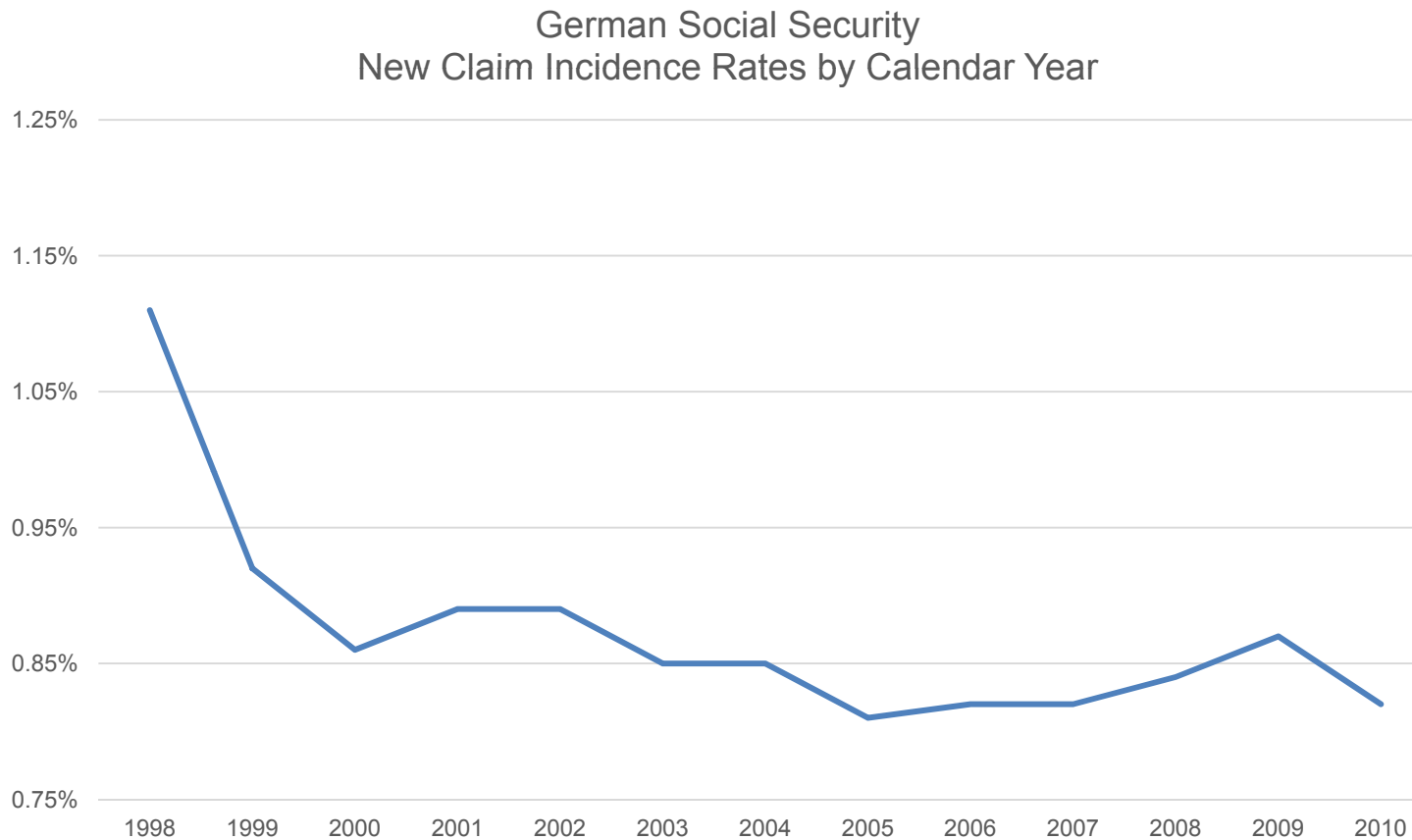
Special thanks to: Sabrina Link; GenRe

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# Germany – Morbidity Trends



## Trends in Claim Incidence Rates (Germany)



Source: BARMER GEK Pflegereport 2011, normalized to the German population. Referenced in "Long Term Care" by the IAA Population Issues Working Group

# Around the World...



France

# France - Benefit/Design Comparison



	USA	France
Eligibility & Triggers	2 of 6 ADL or cognitive impairment Frequent assessment of claim eligibility	ADL or cognitive Disability considered permanent
Benefit Design	Indemnity or reimbursement	Annuity or lump sum
Benefit Period	2-10 years or Lifetime	Lifetime only
Elimination Period	0-365 days (0-90 common)	90 days
Inflation	3% (compound); 5% (simple or compound) Only benefits increase (not premium)	Indexed or discretionary Both premium & benefits increase

# France - Reserving/Valuation Comparison



	USA	France
Active Life Reserve	Locked-in; Assumptions subject to GPV Testing	Subject to change if interest or morbidity experience changes OR regulatory request
Interest Rate	Statutory maximum	Pricing, but subject to change
Lapses	Discretionary; subject to statutory maximum	None
Mortality	Discretionary; subject to statutory maximum	Pricing, but subject to change
Morbidity	Set by insurer	Pricing, but subject to change

# Around the World...



China





- Late breaking news...
  - Recent announcement of mandatory LTC program
  - State system vs. private market

# Caveats and Limitations



- These slides provide general information on the LTC insurance market. We do not intend this information to benefit, or create a legal obligation to, any third party that is provided this information.
- The data provided in this presentations is for illustration only and should not be relied on in any way. Actual results will differ from the illustrations included in this presentation.
- Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Andrew Dalton is a member of the American Academy of Actuaries and meets the qualification standards for performing the analyses in this presentation.