

中国保险行业如何在应对长寿风险发挥更大作用

How China's insurance industries play a greater role in longevity risk transferring

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- **The insurance industry's role in longevity risk and problems**

- 解决长寿风险的建议
- **Recommendations to solve longevity risk**

中国长寿风险简单介绍 (Introduction of China's Longevity risk)

中国长寿风险的共性 (Chinese longevity risk in common)

- 出生期望寿命延长 (increase of life expectancy at birth)

China's Life expectancy at birth

	1990	2000	2010
Unisex	68.55	71.4	74.8
Male	66.84	69.63	72.4
Female	70.47	73.33	77.4
Growth Rate			
Unisex		0.285	0.34
Male		0.279	0.277
Female		0.286	0.407

Sources: CHINA POPULATION STATISTICS

Table 4.1.1. Longevity Trends, 1970–2050
(in years)

	Observed			Projected	
	1970–2010	Increase per year	Standard deviation	2010–50	Increase per year
Change in life expectancy at birth					
United States and Canada	8.2	0.20	0.14	4.3	0.11
Advanced Europe	8.6	0.21	0.13	4.7	0.12
Emerging Europe	1.1	0.03	0.36	6.8	0.17
Australia and New Zealand	10.8	0.27	0.27	4.9	0.12
Japan	10.8	0.27	0.23	4.6	0.11
Change in life expectancy at age 60					
United States and Canada	4.9	0.12	0.11	3.1	0.08
Advanced Europe	5.7	0.14	0.13	3.7	0.09
Emerging Europe	0.6	0.02	0.18	3.8	0.09
Australia and New Zealand	7.2	0.18	0.23	3.7	0.09
Japan	7.7	0.19	0.19	3.7	0.09

Sources: Human Mortality Database as of December 13, 2011; and IMF staff estimates.

中国长寿风险简单介绍(Introduction of China' s Longevity risk

	CL90-93		CL00-03	
	Male	Female	Male	Female
Life expectancy at birth	74.91	78.94	79.74	83.67
Life expectancy at 60	19.69	22.24	22.70	25.44
Change/year				
Life expectancy at birth			0.48	0.47
Life expectancy at 60			0.30	0.32

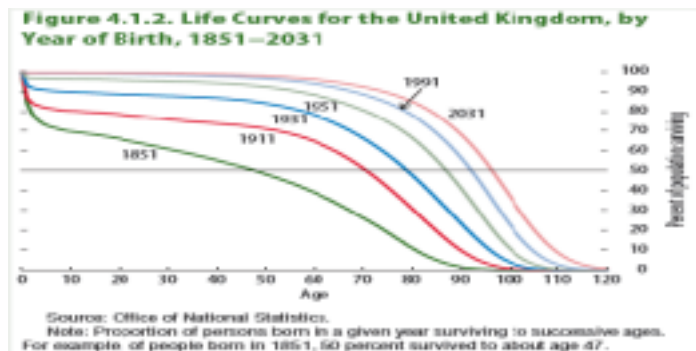
Sources: China's Life mortality table.

- **60岁居民的平均余命延长 (2010) (increase of life expectancy at age 60)**

	Male	Female	World Rank	
Age 60	78.9	81.2	70	86
Age 65	80	82.2	77	88
Age 70	81.7	83.5	83	88
Age 75	84	85.4	89	90
Age 80	86.7	87.7	100	92
Age 85	89.9	90.6	103	93
Age 90	93	93.4	148	124
Age 95	97.2	97.4	162	141
Age 100	101.5	101.7	181	177

中国长寿风险简单介绍(Introduction of China's Longevity risk)

- 生命曲线直角化 (Life curve is rectangularized)



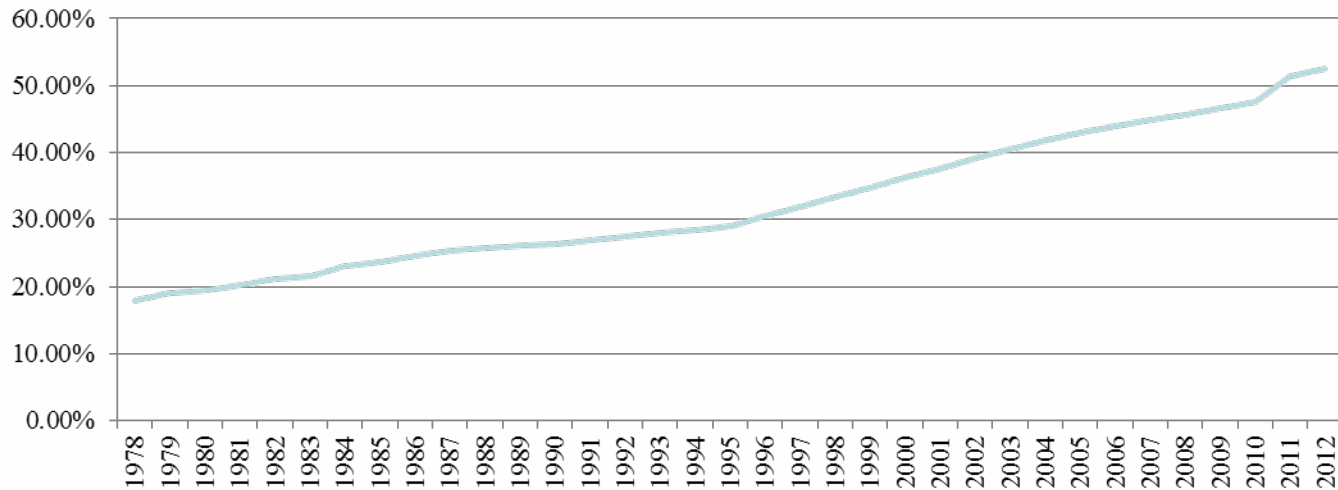
- 地区差异性 (Regional differences in life expectancy at birth)

	合 男女	1990		合 男女	2000	
		male	female		male	female
全国	68.55	66.84	70.47	71.4	69.63	73.33
shanghai	74.9	72.77	77.02	78.14	76.22	80.4
Tibet	59.64	57.64	61.57	64.37	62.52	66.15

中国长寿风险简单介绍(Introduction of China's Longevity risk

- 中国长寿风险的特性—中国社会仍处于变革中, 存在诸多的不确定性, 但总体而言人的寿命逐渐增加, 只是增加的模式和趋势可能存在差别。There are many uncertainties in longevity because Chinese society is still in transformation, and the longevity trend may be different from other countries.

中国城市化率



中国长寿风险简单介绍 (Introduction of China's Longevity risk)

Life expectancy at birth

	USA			China		
	Male	Female	All	Male	Female	All
1960	66.6	73.1	69.8	35.1	37.6	36.3
1970	67.1	74.7	70.8	61	62.5	61.7
1980	70	77.5	73.7	64.4	66.7	65.5
1990	71.8	78.8	75.2	66.9	69.7	68.3
2000	74.4	79.8	77	69.9	73	71.4
2011	76.1	80.9	78.6	74.1	77.2	75.6

Source: <http://www.worldlifeexpectancy.com/country-health-profile/china> or USA

Change of Life expectancy at birth

	USA			China		
	Male	Female	All	Male	Female	All
1960	N/A	N/A	N/A	N/A	N/A	N/A
1970	0.05	0.16	0.10	2.59	2.49	2.54
1980	0.29	0.28	0.29	0.34	0.42	0.38
1990	0.18	0.13	0.15	0.25	0.30	0.28
2000	0.26	0.10	0.18	0.30	0.33	0.31
2011	0.15	0.10	0.15	0.38	0.38	0.38

Source: calculate basing on data from <http://www.worldlifeexpectancy.com/country-health-profile/china> or USA

- 保险行业在长寿风险承担的角色 (The insurance industry's role in longevity risk)
 - 通过年金等商业保险提供长寿风险保障，是长寿风险的承担者 (Insurance companies provide longevity coverage through insurance products)
 - **Life insurance definition**
 - **Longevity risk can be hedged by mortality risk of life insurance companies.**
 - **Annuity products**
 - **Group product or individual product**
 - **Reinsurance take longevity risks through coinsurance.**
 - **The share of annuity product is small in market.**

保险行业在长寿风险承担的角色及面临的问题 The insurance industry's role in longevity risk and problems

- 保险公司是长寿风险向保险行业转移的推动者。(Insurance companies are the promoter of longevity risk transferring)
 - 未来中国的寿险业发展，主要依赖是健康险和年金保险。(Health and annuities is main business of China Life insurance company in the future.)

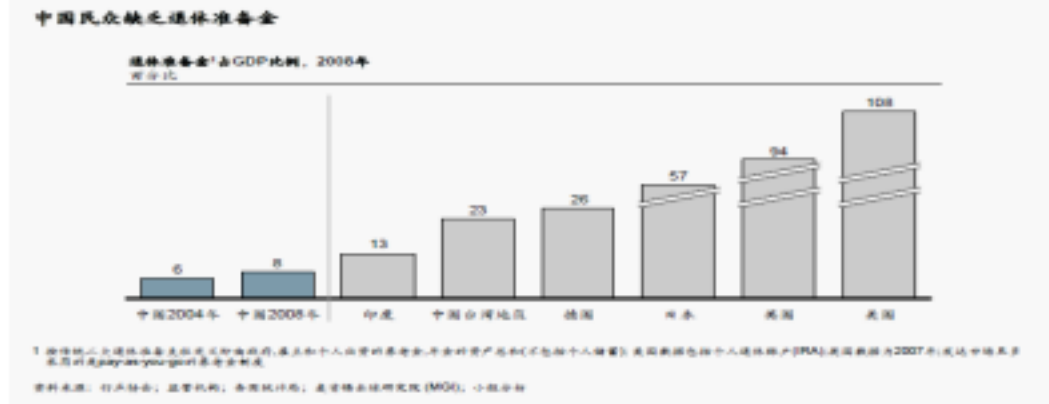
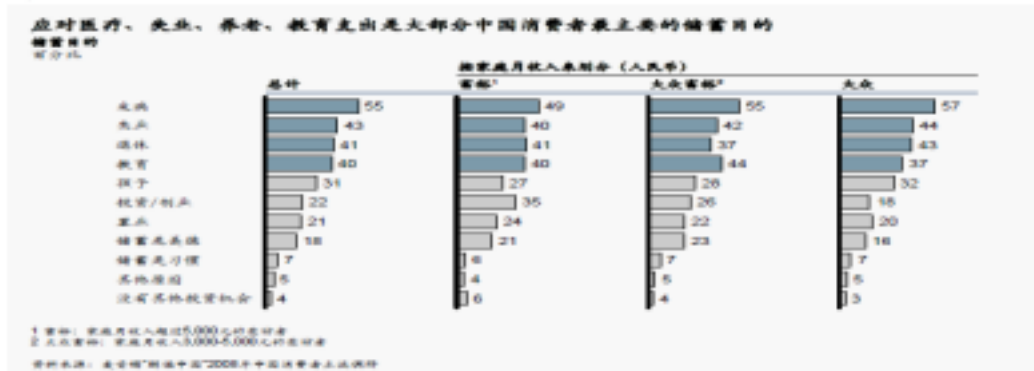


图4



保险行业在长寿风险承担的角色及面临的问题 **The insurance industry's role in longevity risk and problems**

- 从产品构成上看，健康险和年金保险发展程度低。(The share of **premium from Health and annuity is low.**)
- 为应对人口老龄化问题，各国纷纷推动养老、健康险发展。(In **response to an aging population, countries have to promote the pension, health insurance.**)
- 投资渠道放开，费率市场化（前端放开，管住后端），使商业保险，尤其年金保险能够纳入到大金融体系中。(Deregulation on **investment and pricing makes annuity more attractive.**)
- 监管机构鼓励发展年金保险。(Regulator encourages insurance **companies to develop annuity business.**)
- 税收递延政策推动，鼓励个人将长寿风险转移给保险公司。(Tax **deferral will be an incentive for individuals to transfer longevity risk to life insurance companies.**)

保险行业在长寿风险承担的角色及面临的问题 The insurance industry's role in longevity risk and problems

- **Continue**
- 保险公司是长寿风险研究的重要参与者 (Insurance companies are **important participants in the study of longevity risk**)
- 保险公司参与养老体系建设，主要是参与养老机构建设，比如泰康、太平洋、中国人寿等，提高长寿风险承担能力。 (Insurance companies **increase the capacity of longevity risk through involving in the nursing home construction and Apartments for the elderly construction.**)
- 养老金公司为养老计划提供企业年金受托人、账户管理人服务。 (Pension company provides **trustee and account management service for pension plan.**)
- 保险资产管理公司为养老计划提供投资管理人服务。 (Asset management Company provide **investment service for pension plan.**)

- 面临的问题(Problems)
 - 许多养老计划提供者没有意识到长寿风险，或者已经意识到，但没有应对计划。此外，由于资产市场的波动性掩盖了长寿风险，使长寿风险无法表现出来。或者许多养老计划提供者优先考虑的是养老计划的赤字问题，而不是长寿风险问题。相对应的是个人养老意识仍旧是依靠个人储蓄，不是转移风险，因而现实需求有限。(Only a few pension sponsors recognize the longevity risk and fewer still have plans to address it.)
 - 目前的企业补充养老计划不是强制计划，如果不是上市公司，养老计划不需要在财务报表体现，甚至不需要建立补充养老计划，同时只有获得相关机构批准才能建立。(劳动法75条) (Pension plan provided by enterprise isn't a compulsory plan.)
 - 目前的个人年金没有政策支持，没有税收优惠政策，购买动力不足。(Tax deferral isn't available and there is no incentive to clients.)
 - 对长寿发展趋势研究非常有限。(No enough longevity trend study is available in China's insurance industry.)

保险行业在长寿风险承担的角色及面临的问题 The insurance industry's role in longevity risk and problems

- 保险产品吸引力有限 (Product isn't attractive)
 - 管理成本 (Administrative cost)
 - 利润边际 (Profit margin)
 - 逆选择 (anti-selection 健康的人选择年金化, 不健康的人一次性领取)
 - 保险费率的监管限制 (Regulation on price)
 - 投资限制较严, 投资收益率低, 资本市场没有长期的资产配置, 无法提供较高的长期保证利率。 (Strict investment regulation)
 - 数据、模型研究有限。 (From CL90-93 to CL00-03 and projection)

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保险行业在长寿风险承担的角色及面临的问题The insurance industry's role in longevity risk and problems

- 保险产品很贵 (Broader coverage is provided in annuity make price **higher.**)
- 长寿风险的资本市场不发达，再保险公司无法提供很高的长寿风险承保能力，也是存在的另外一个问题。(Capital market isn' t mature and **longevity risk cannot be transferred effectively.**)

中国保险行业在解决长寿风险中的建议Recommendations to solve longevity risk

- 发挥数据优势，加深长寿风险研究。(Insurance companies should enhance longevity risk research using data advantages.)
- 提高保险产品吸引力，吸收更多的长寿风险。(Insurance companies should **make annuity products more attractive to get more longevity risk.**)
- 保险行业要推动税收优惠年金方案，使居民更有动力将长寿风险转移给保险公司。(Insurance companies should promote tax deferral act to make **residents have incentive to buy annuity.**)
- 保险行业要融入到的金融体系中，尤其是资产去化上，要能够获取中国快速发展带来的收益，为保单持有人创造效益，提高年金产品竞争力,同时降低长寿风险)。 (Insurance companies should increase asset return to **reduce longevity risk for annuity and make annuity more affordable.**)
- 在政策上鼓励保险公司进入养老机构建设、健康护理机构、医药行业，提高保险行业承担长寿风险的能力。(Insurance companies are encouraged to **involve in health care and apartments for the elderly project.**)
- 再保险公司一方面要发挥承担长寿风险作用。(Reinsurance companies **should provide more capacity for longevity risk.**)

- 再保险公司应该提供灵活的再保险方式，为保险公司提供灵活的长寿风险解决方案。（Reinsurance companies should provide various reinsurance methods to make tailored solutions for insurance companies.）
- 再保险应该发挥技术、数据等优势，设计长寿风险转移产品，同时宣传长寿风险产品，利用长寿风险本省的相对独立性，向对冲基金、主权财务基金、资产管理者进行销售，扩大长寿风险承保能力。（Reinsurance companies should design longevity product for asset managers, hedge fund and sovereign wealth fund.）
- 再保险公司应该充分发挥技术、数据和研究优势，为直接公司提供支持，同时发挥国际化优势，加强国际交流，吸收国际解决长寿风险经验，同时努力将长寿风险向国际进行分散，降低资本要求，提高资本收益率。
（Reinsurance companies should provide technique, data and modeling support for insurance companies. Also reinsurance companies need to help clients transfer longevity risk to international capital market.）

感谢您的关注!

Thanks for your Attention!