Developments in Global Longevity
November, 2017
Elements of Longevity Risk

Changes in Life Expectancy = Actuarial Valuation ± Change in Medical Technology ± Change in Lifestyle
Life Expectancy in U.S Drops for First Time in Decades

December, 2016

Source: www.npr.org

Americans are Dying Younger, Saving Corporations Billions

August, 2017

Source: www.Bloomberg.com

One of the fundamental ways scientists measure the well-being of a nation is tracking the rate at which its citizens die and how long they can be expected to live.
Americans are Retiring Later, Dying Sooner and Sicker In-Between

October, 2017

by Ben Sloverman
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The U.S. retirement age is rising, as the government pushes it higher and workers stay in careers longer.

But lifespans aren’t necessarily extending to offer equal time on the bench. Data released last week suggest Americans’ health is declining and millions of middle-age workers face the prospect of shorter, and less active, retirements than their parents enjoyed.

Here are the stats: The U.S. age-adjusted mortality rate—a measure of the number of deaths per year—rose 1.2 percent from 2014 to 2015, according to [https://www.soa.org/experience-studies/2017/mortality-improvement-scale-mpi-2017] the Society of Actuaries. That’s the first year-over-year increase since 2008, and only the second rise greater than 1 percent since 1990.

Society of Actuaries Mortality Improvement Scale 2017

Bloomberg

Source: www.bloomberg.com
US Mortality Rates Level Off

Death Rate Improvements Have Stalled
The U.S. mortality rate leveled out since 2011 and increased slightly in 2015

- Age-adjusted death rate per 100,000 population

Source: National Center for Health Statistics

Chart Source: www.Bloomberg.com
Longevity Gains Slow For Retirement-Age Americans

Improvements in life expectancy at age 65 have flattened out in recent years

Source: National Center for Health Statistics

Chart Source: www.Bloomberg.com
Infants born in 2015 are expected to live on average to age 78.8 – a decline of 0.1 year from 2014. A decline in nationwide life expectancy at birth hasn’t happened in the US since 1993.
Summary of Causes

1. Lifestyle

Global & Regional Per Capita Food Consumption
(kcal per capita per day)

Source: WHO

3. Alcohol Deaths Reach 35-Year High

Deaths from alcohol-induced causes (excluding homicides, drunken driving and other accidents indirectly related to alcohol), 1979-2014, per 100,000 people

Source: Washington Post

2. Drug Deaths Rising in all 50 States

Drug and opioid overdose deaths per 100,000 people (age-adjusted), 1999-2014

Source: CNN
Industry Implications

- Mortality deterioration impacting different segments of the population differently
- Lifestyle issues driving decrease are not impacting the top economic segments of the population
- Pension funds with a broad base of beneficiaries likely to become more solvent as the long-time increase in life expectancy slows down - this is a function of population
- Life insurers unlikely to become more solvent - US life insurers take more mortality than longevity risk; purchases weighted toward more affluent consumers less likely to be impacted by lifestyle issues
- Affluent consumers may see slowdown in mortality improvement as they approach “maximum lifespan.”
- Longevity creep has been a longstanding source of value erosion to life settlements – slowdown may stabilize life settlement assets (often involve larger policies from higher net worth policyholders), who are less impacted
- Long-term care value has a complex relationship to longevity and is generally a higher net worth product, less likely to be impacted by the slowdown

HSCM Bermuda Opportunities

- Runoff blocks of life insurance are generally becoming less valuable as mortality improvement decelerates or reverses - we will take account of that in valuation
- Life settlements may become more valuable, though other longstanding considerations for this asset segment must also be diligenced (sales practices, insurance interest)
- Life contingent structured settlements may also warrant revaluation
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