

Longevity Risk in Latin America

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Introduction

A daily question that actuaries across the world ask is: How long will a retiree be receiving a pension? In other words, how will the life expectancy of the human race grow in the future? The answer raises many questions. In one extreme, as confirmed by Dr. Aubrey de Grey of Cambridge University, if the way to repair damaged cells is discovered, life expectancy of humans could rise to 1000 years.

While the possibility of a situation like that commented by Dr. Aubrey exists, the chances of it occurring are not high. However, what is true, is that people's life expectancy has not ceased to grow, especially among the last 60 years, and the majority of cases the demographers have underestimated the growth in their projections. This gap could be amplified if the recent trends continue: dramatic medical breakthroughs, superior standards of living and improved public health, all of these are principle factors that have contributed to the increase in life expectancy.

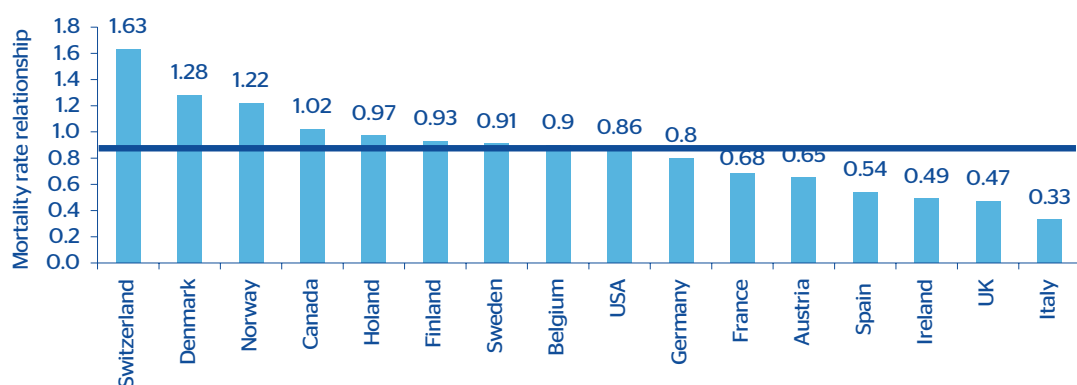
The implications of these changes differ by insurance sector. Life insurances would experience lower rates, because if people live longer, their compensation payments are delayed for many years, concurrently, the rates of pension products would increase, because they would have to be able to pay for a prolonged period of time.

According to the pension products point of view, we face a risk, the so-called longevity risk, ie the risk associated with the actuarial present value of benefits, in favour of a person needing to pay a lower current value for benefits under the terms and regulations of the Pension Plan. Depending on the retirement scheme (scheduled, life or mixed), these risks lie mainly in either the hands of the affiliate, the insurance company or both.

Longevity risk in the accumulation stage depends on if the contributions are adequate or not, and it ultimately comes down to whether the projected mortality tables are close to their real future values. Historical evidence shows that mortality tables have been quite conservative in many countries, as seen in graph 1.

Chart 1

Ratio of mortality rate considered by the industry in relation to that observed from the age of 65



Source: BBVA Research

The longevity risk observed by numerous developed countries that calculate with the best information on mortality, could be increased, as seen above, and within many Latin American countries with greater information problems, this risk is elevated.

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