## One World Actuarial Research Seminar 20/05/2020

## Moshe Milevsky “*Is Covid-19 a parallel shift of the term structure of mortality? Implications for annuity pricing*”

**Questions**

* From Jason Pereira to Everyone: 02:41 PM

To be best of our knowledge, has there ever been any other historical events that causes parallel shifts?

* From Mario Wuthrich to Everyone: 02:46 PM

I believe that all these thoughts are too much based on having an appropriate portfolio size (and a stable mix of infected people): why should I care about a shift, if I have survived the infection? Or the other way round shouldn't we start from individuals and then calculate an appropriate collective model?

* From Montserrat Guillen to Everyone: 02:47 PM

We've recently estimated the loss of life expectancy in Spain of roughly 1/2 year. That os a small shift. What do you think?

From Andrew Cairns to Everyone: 02:56 PM

Montse, in the UK ew estimated using a different metic that the loss of life expectancy was only 0.1% for the complete cohort aged 65. It depends a lot though on the years of life lost by those who die. Were they at deaths door anyway or were they just as healthy as the survivors.

From Philippe Maeder to Everyone: 03:08 PM

Monserrat, did you refer to life expectancy at birth, or at a retirement age?

From Montserrat Guillen to Everyone: 03:11 PM

we did both. 0.5 years is a rough approximation of Ex loss, up to 65. A tiny bit lower loss for women.

* From BilgiYilmaz to Everyone: 02:49 PM

Based on the bio age (or infected or not), may a company offer different insurance to individuals?

From Philippe Maeder to Everyone: 02:56 PM

to BilgiYilmaz: different annuity already exist and the product is "substandard annuitites"

From Tom Salisbury to Everyone: 02:57 PM

Or impaired annuities

From BilgiYilmaz to Everyone: 02:57 PM

thank you Prof. Maeder.

* From ozanevkaya to Everyone: 03:03 PM

As far as I know, there are some noises on recording of deaths based on covid19, changing by country, as WHO announced before. Is it possible to cover that impact under this work, just wondering is it beneficial or not ?

* From Chul Jang to Everyone: 03:04 PM

Thank you, it was very interesting. When you presented the economic and subjective benefit of annuity, your explanation well represented current COVID mortality shifting. But it would be temporal. If we reach (new) normal, that would be opposite shifting as healthier population survives this pandemic. What could your results change in terms of lifetime consumption and investment?

* From Roddy M. Caraballo , CAS® to Everyone: 03:10 PM

I do love annuities.