THERE WILL BE GREEN IN GREEN CONSULTING

Rade Musulin

There is an American expression that some activities offer a chance to "make some green", referring to profit potential and the color of US dollars. In coming decades actuaries have significant opportunities to turn skills in "green" environmental initiatives into "green" financial rewards.

Despite the best efforts of fossil fuel interests and "I'm not a scientist" political leaders, momentum is building in almost every major country for a profound economic transformation in the energy sector that will affect almost every facet of economic activity. Evidence of this abounds. By 2015 there were more jobs in solar power than coal in the United States, and solar jobs are growing quickly. China is forecast to become the world's largest electric vehicle market by 2020. Geothermal, wind, and wave power generation are growing.

This transformation will affect many aspects of actuarial work. Property insurers will have to adapt coverage for solar panels and batteries. Automobile insurers will have to rate electric vehicles. Insurer asset mix may be affected by green investment initiatives. Weather patterns may change, affecting property and/or agriculture insurance losses. Mortality and morbidity may change due to migration or increasing heat in some areas. Rising seas may pose significant challenges for coastal flood insurance.

One major challenge for coping with climate issues is to break the black and white mindset of people on both sides of the debate. Greens and skeptics alike often fall into the trap of taking extreme positions with an almost religious conviction that their view of the future is correct and certain. In reality, the earth's climate is an incredibly complex and unpredictable system in which future states should be described stochastically.

Risk and uncertainty are at the core of actuarial science. Climate change adaptation is an exercise in risk management in the face of uncertain future states. Actuaries can play a significant role in this process.

I recently wrote three articles illustrating some ways actuaries can contribute, "Demographics, Development, and Disasters", "Rising Tides", and "Rising Tides Downunder". The basic premise of this work is that actuaries can adapt tools we use in our traditional work (such as catastrophe and economic capital models) to tackle problems like the optimal investment societies should make in climate change adaptation.

Actuarial organizations are increasing activity in various climate related work. The International Actuarial Association (IAA) has formed the "Resource and Environment Working Group" (REWG) to "serve as a working group within the IAA devoted to environment issues that can affect the work of actuaries in their various areas of practice". A number of actuarial organizations, including the CIA, CAS, SOA, and the American Academy of Actuaries, are developing an Actuaries Climate Index (ACI). The Institute and Faculty of Actuaries (UK) formed a cross practice working party on climate issues in 2014 (link). The Actuaries Institute (Australia) has issued a policy statement entitled "Economic Implications of Climate Change: Public Policy Statement" and has formed a climate change working group.

Efforts such as these will place the actuarial profession in a position to influence the process of climate change adaptation. Individual actuaries, and especially consulting actuaries, have many opportunities to work on projects in this very exciting field in coming years. In order to successfully do so, actuaries need to broaden their continuing education to include climate topics and get involved in multidisciplinary groups working on climate related issues.

HYPER-INFLATION IN ZIMBABWE – NOT FUN AND GAMES

Tawanda Chituku

I lived through hyper-inflation, and survived. If my credentials for survival could be displayed on a wall, I would be declared an international hero.

Over many years of study, I know that that hyper-inflation is defined as "when the month-on-month inflation exceeds 50%." Is it as simple as that? That sounds to me as if hyperinflation is when some technical goon in glasses rich with age stands up to announce that monthly inflation is now 50%. In my imagination of the technical definition, perhaps then there would be a discussion about it like what happens when Liverpool gets whooped by Manchester United. Far from this, hyper-inflation is a life style, war, and chaos.

I am not going to bore you with the history of how it happened in Zimbabwe as Wikipedia has that part covered. I want to talk about the experience for me in my day to day life, and beyond. You see, when we are born, we are sold a very straightforward story: 'It starts with birth then school where you should get good grades and then varsity and then get a job, get married, have children, save money for a rainy day, start a business, create a legacy for your kids, and then die.' Sweet and straightforward for as long as we omit actuarial exams in the flow. I like this story because with this kind of system I can make financial sense of the future!

Let us just put things into perspective for a little bit. As actuaries understand figures (by the way there are no official figures but different sources have tried to estimate): Inflation was 230 million percent and 1 USD bought sextillions of currency by the close of 2008. My personal account balance had 30 zeroes in after a few numbers, who cared, it was not enough for me to commute to town. I believe ours was not hyper-inflation, it was a total currency collapse.