



“The actuarial skill set has a broad range of applications, as financial risk management permeates all sectors and fields. The further you explore wider fields, the more you’ll realise this fact to be true.”

A view from a member: **Barry Maher**



Barry Maher is an actuary at the World Bank, based in Washington DC. He is a Fellow of the Institute and Faculty of Actuaries.

Actuaries working in new areas

What do you do?

Currently I work at the World Bank, in a team that are helping to improve the financial protection of low and middle income countries to disaster events. My role involves helping increase the capacity of sovereign, sub-sovereign and state owned enterprises to better plan, prepare for, and manage the financial impacts of natural disasters. In particular, I work on building the financial resilience of chronically poor households to disaster events, through supporting governments to develop safety net mechanisms that can rapidly scale up assistance to affected households in the event of a disaster.

How did you get to where you are today?

I remember during my professionalism course when I qualified, my fellow Fellows and I were asked: “Are you hopeful for the future of the actuarial profession”. Being my young, maybe overly idealistic self at the time I responded with (perhaps too much) vim - “Yes! I am infinitely hopeful”. I knew the skill set I had invested in and honed as an actuary would serve me well and knew I ultimately wanted to work in development, but at the time I didn’t know how I was going to get there. Thus began my exploration of where the skill set could take me.

After starting my actuarial career as a non-life actuary working for a Lloyds reinsurance syndicate I then worked in the carbon and renewable energy markets, designing insurance products to de-risk investments and encourage capital flows. My next step required a leap of faith. Via a connection in Actuaries Without Borders, I was offered a Fellowship position with the United Nations in Suva, Fiji (with the **Pacific Financial Inclusion Programme**), to work on developing microinsurance markets in the Pacific, helping low income families gain access to much needed insurance protection. This required moving across the world and taking a 90% pay cut, but in the end it was catalytic as it led to my role today as a Senior Disaster Risk Financing specialist in the World Bank.

What is the unique perspective that you bring as an actuary?

The actuarial skill set has a broad range of applications, as financial risk management



*“You have
the skills as a
qualified actuary:
how far they
can take you
depends on how
far you explore.”*

permeates all sectors and fields. The further you explore wider fields, the more you'll realise this fact to be true.

From my experience working in the World Bank, our client governments are demanding more sophisticated financial risk analysis to support them in making informed policy decisions - decisions that can affect millions of people.

As an example of how I've applied my actuarial skills, a growing area of interest for development and humanitarian actors is using social welfare programs to deliver disaster assistance to vulnerable households when a disaster occurs. By 'scaling up' the social welfare program, the vulnerable household is in effect provided with 'free' insurance against disasters. The pricing skill set of calculating pure risk premiums can be applied in this context to estimate what the expected cost of these scalability mechanisms could be. Our calculations add significant value to discussions on the design of such programs as they enable decision makers to understand the financial implications of key decisions, and compare the financial trade-offs between different sets of assumptions (for example, the calculations quantify the cost difference between protecting twice the number of households, to triggering a payout twice as frequently). It can also act as a platform to have a concrete discussion, with tangible financial values, on who should be responsible to pay for disaster responses going forward.

What advice would you give to other actuaries wanting to work in non-traditional areas?

The actuarial skillset is incredibly useful across a broad range of sectors. Personally I've applied it in the carbon and renewable energy markets, on the financial inclusion agenda and now on the financial protection agenda (for governments in addition to vulnerable households). The trouble with actuaries is they add so much value in traditional fields, and thus have very well paid, comfortable jobs. This can make it challenging to lure actuaries out of their comfort zone to try something different.

The first step to get into wider fields is to be inquisitive. Reach out to actuaries who have taken the road less travelled, attend events where financial risk management could be useful, develop your network through Actuaries Without Borders, and further afield. The connections will bring opportunities, and then it is up to you to seize them.

You have the skills as a qualified actuary: how far they can take you depends on how far you explore.

Further information

For more information on Barry's work on quantifying scalability mechanisms, please see [his blog](#) he wrote on the subject.