



CREDIT UNIONS AND CLIMATE CHANGE

The tragedy of the horizon

Introduction

“People are bad at predicting systemic risks because of various biases including disaster myopia, hyperbolic discounting and recency bias”. If ever a quote were to stop you dead in your tracks, this is it. First, a little bit about the author. The world is full of small but significant facts. It is not likely to be widely known in the regulated financial services system in Ireland, that the Governor of the Bank of England, Mark Carney, hung a map of Mayo in his office in London during his term from 2013 to 2020. But hang it he did. Mark Carney, a Canadian, did this as three of his four grandparents hailed from Mayo, and he liked to be kept grounded. Mark Carney was the first non-Briton to hold the office of Governor of the Bank of England in its rich 300 year history, and the BBC referred to him as a “rock star” central banker. The George Clooney of the regulatory world (who incidentally, ran the London Marathon in 3 hours and 31 minutes in 2015). The quote itself comes from his recent book, “Value(s)”, and is worthy of some serious reflection. What Mark Carney is saying is that we, as human beings, are bad at predicting risk due to inbuilt cognitive biases which include the following:

- We suffer from **disaster myopia**. This means our ability to see disaster is limited. We underestimate the probability of bad things happening. We expected a soft landing back in 2008, but soft it was not.
- We suffer from **hyperbolic discounting**. Given the choice of two rewards, we choose the one that comes first. We discount the one that comes later. We function best in the near term. Take the example of a dubious rescheduled loan. We take immediate gratification.
- We suffer from **recency bias**. We favour recent events over historic ones. Everyone expects the next crisis to be like the last. But instead of a second credit bubble induced financial crisis, we got a pandemic. We assumed the (most recent) 2008 financial crisis would re-occur. We forgot about the (less recent) 1918 Influenza.

Given the extraordinary events since early 2020 precipitated by COVID-19, the concepts of disaster myopia, hyperbolic discounting and recency bias are now likely to resonate more loudly in the human psyche. COVID-19 showcased the fragility of our understanding of risks. To use (and slightly adapt) the words of Limerick born Irish poet Michael Hartnett, “we clenched our brittle hands around a world we did not understand”. It is in this context that we need to approach the concept of climate change. As the climate change challenge is of such a scale, it will test all our cognitive biases. It is immense and it requires long term thinking. Disaster myopia, hyperbolic discounting and recency bias are not allowed. And on the subject matter of climate change, Mark Carney, is a powerful voice².

Climate change

Climate change, in its generality, refers to the long term change in the earth’s climate. Since the industrial revolution, global temperatures have risen at 0.07°C per decade. Today, the planet’s average temperature is 1°C warmer than the late nineteenth century. The climatic impact of this is as manifest as it is manifold. Oceans are more acidic, sea levels are rising, glacial ice is melting, and extreme climatic events (hurricanes, wildfires, flooding and extreme heatwaves) are growing exponentially. This is climate change. The UN’s Intergovernmental Panel on Climate Change (“IPCC”) concluded that the current warming trend is caused by human activity. Rapid industrialisation and global growth have increased the level of greenhouse gases,

¹ Value(s)- Building a Better World for All, Mark Carney (William Collins. 2021)

² General facts on climate change presented in the following section are extracted from “Value(s)- Building a Better World for all”

of which carbon dioxide (CO₂) is the most problematic. The IPCC concluded that limiting temperature increases to 1.5°C from pre-industrial levels keeps the earth's climatic and natural systems from tipping into a dangerous feedback loop³. The focal point of climate change strategy therefore centres on CO₂ emissions. As CO₂ emissions cause global warming, to stabilise temperatures, the world must reach a “net-zero” point. This is the point when carbon emitted, and, taken out of the atmosphere, is equal. As Mark Carney explains, “it isn't a slogan, it's an imperative of climate physics”. And this effectively, is at the heart of the global response to climate change, as contained in the **Paris Agreement**. The Paris Agreement, a legally binding international treaty on climate change, signed by 196 countries in 2015, committed to limit global warming to “well below 2, preferably to 1.5°C compared to pre-industrial levels” and “achieve a climate neutral world by mid-century” (i.e. 2050). In this regard, reaching **net-zero by 2050** could best capture the climate change task at hand. To add some meat to the ambiguous bones of “net-zero”, the main contributors to emissions are industrial processes (manufacturing, chemicals, etc.), buildings (which use energy for electricity and heat generation), transport, energy creation and food and agriculture. To reduce emissions, we need to change how we generate energy (shifting from fossil fuels to renewables) and how we use energy (changing from petrol to electric transport, increasing energy efficiency for buildings, decarbonising industrial processes). Fundamental and wholesale rewiring of energy systems is needed. You could reduce it down to this – we need to convert energy use to electricity, and convert electricity generation to renewables. The technology is present for some, but not all of this reform. We now have electric cars that do not burn fossil fuels. But we do not have planes or ships that do the same (although science is advancing the use of hydrogen in this space). In this regard, there are solutions to parts of the challenge, and we lack solutions to other parts. That said, the scale of what has to pass (in the next 29 years) to reach a net zero position by 2050, cannot be underestimated. Emissions need to fall by 8% year on year over the coming decades. In 2020, even with COVID-19 crisis related industrial shut-downs, and massive reductions in transportation, CO₂ emissions fell by only 5%-7%. But, the sad reality is that there is only one show in town. To add a more sober reminder, President Emmanuel Macron said⁴ “make no mistake: on climate there is no plan B, because there is no planet B”.

The Irish position

Net Zero is about to become very real in Ireland. In March 2021, the Irish government published the Climate Action and Low Carbon Development (Amendment) Bill 2021. The Bill provides for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a climate resilient, biodiversity rich and climate neutral economy by no later than the end of the year 2050 and to thereby promote “climate justice”. Climate justice is defined as the requirement that decisions and actions taken to reduce greenhouse gas emissions and to adapt to the effects of climate change shall, in so far as it is practicable to do so, safeguard the rights of the most vulnerable persons and endeavour to share the burdens and benefits arising from climate change. Commenting on the Bill, the Irish Times noted that “...this framework has the potential to transform every section of the economy, ultimately impacting on the lifestyle of every citizen as the State accelerates decarbonisation efforts and weans off fossil fuels”. On a more practical level, many in the press have endeavoured to sketch what Ireland in 2050 might actually look like, with climate change policies kicking in. It is likely that we will travel less, we will all drive electric vehicles, we will not sit around fires in the winter, we will eat less meat and more grain, we will be leaner and we will be used to less noise⁵. While such predictions may have appeared overly dystopian before COVID-19, having lived through COVID-19, we have a better appreciation of how public policies, when absolutely required, can transform our lives. And climate change will, without doubt, require change.

How do credit unions fit in?

A first approach may be for an Irish credit union to consider **risk**. Under Section 76B of the Credit Union Act 1997 (as amended), credit unions must develop, implement, document and maintain a risk management system with such governance arrangements and systems and controls to allow it to identify, assess,

³ To illustrate with one example of a feedback loop. Polar ice sheets reflect light and reduce warming. As they melt, this effect is lost, and the melting ice is both a consequence and cause of climate change.

⁴ Following the withdrawal of the USA from the Paris Agreement in 2017

⁵ See Irish Times, Brian Hutton 10 October 2020

measure, monitor, report and manage the risks which it is, or might reasonably be, exposed to. In this regard, the financial services system is exposed to two broad types of risk from climate change:

- **Physical risks** - risks associated with extreme weather events, or, more gradual physical impacts from climate change, such as rising sea levels. Since the 1980s, the number of registered weather related loss events has tripled, and, the insurance industry is at the forefront of pricing these physical risks. In a credit union context, physical risks could range from office damage/disruption due to weather events, to borrowers being unable to repay loans due to financial loss due to long term weather events.
- **Transition risks** – risks associated with the transitioning of the economy to a net-zero position. This will result in a re-assessment of asset values, and cost and income opportunities. In a credit union context, an example would be an abrupt change in the value of the security of a home loan due to carbon inefficiency in the underlying asset. Another example might be the permanent reduction of a particular loan portfolio segment in a market that is vulnerable to more severe climate change policies (such as the agricultural sector).

It is difficult to see how credit union risk management systems cannot factor in climate risks. The data is there. The new Bill will bring major changes. This area is becoming increasingly prominent in regulatory messaging. The Financial Stability Review 2021:¹ from the Central Bank of Ireland commented that “...The Central Bank of Ireland is working to integrate climate risk considerations into its supervisory and financial stability assessments...In early-2021 the Central Bank established a new Climate Change Unit to take a strategic overview of the work on climate change across the organisation and to work across the Bank to develop a cohesive climate risk assessment framework”. Fleshing out climate change physical risks and transition risks in risk registers, may be a useful first step for credit unions. These risks are now real, and need to be measured, and reported on. Good data informs good decisions.

Beyond this risk assessment, there is an equally important **leadership** role for credit unions to contemplate. By definition, credit unions are geared to help their members attain their social and economic goals. These goals will undoubtedly be impacted by climate change. This is the starting point for assessing the strategic impact of climate change on credit unions. Look at climate change as being about Irish credit unions supporting Irish people on a journey to a net zero position by 2050, and all that this entails. Credit unions should see their role as **enablers**. A striking feature of the COVID-19 crisis was that the financial system was part of the national response to the crisis. Contrast this to 2008 when the financial system was the cause of the crisis. In a similar vein, the financial system has a key role in climate change policy response. To use the words of the Central Bank of Ireland, “the financial system itself has a key role to play in facilitating a smooth transition to a low-carbon economy”. Under Section 76A of the Credit Union Act 1997 (as amended), credit unions shall adopt a plan which documents the strategy and objectives of the credit union. Peter Drucker said “...strategic planning is the continuous process of making present entrepreneurial (risk-taking) decisions systematically and with the greatest knowledge of their futurity”. We now have an ability to at least glimpse into the future and visualise what a net zero economy will look like in 2050. Along the way, people will need to borrow to buy energy efficient cars, to retro-fit houses, to repurpose businesses, to re-think the way their businesses operate and create novel ways of doing things. Climate change will require innovation and creativity. And the financial system will need to support this new economy. Strategies for credit unions will need to consider the future world which they will operate in and create innovative and relevant financial services to play their part in smoothing the transition. Climate change is a time for leadership.

The Tragedy of the Horizon

In 2015, Mark Carney, then Governor of the Bank of England, made a landmark speech on Climate Change and Financial Stability at Lloyds of London⁶ (see link to Bank of England Website to watch the speech [here](#)). In his speech, Mark Carney referred to climate change as a “Tragedy of the Horizon”. This is a twist on the established economic concept of the Tragedy of the Commons⁷. The Tragedy of the Horizon describes a

⁶ Bank of England, 29 September 2015

⁷ An economic theory that in an unregulated market, individual participants will overconsume and lead to undue resource depletion, contrary to the common good. The theory originates in the early 19th century.

situation where actions taken today impose adverse outcomes on future generations that today's generation have no incentive to mitigate. This is the central difficulty with climate change. It is intergenerational. And re-enter our cognitive bias of hyperbolic discounting. But, it is important to reflect that credit unions are themselves intergenerational. Credit unions, by nature, are community focused and altruistic and have been part of the financial system in Ireland since the 1950s. The philosophy of the credit union movement is grounded in the co-operative values of equality, mutual self-help and equity. Climate change is built on a new value - **climate justice**. While this was not in the vernacular in the 1950s when the Irish credit union movement was established, credit unions are built on the principle of equity. And climate justice is about equity - intergenerational equity. Climate change is now very much mainstream, and has come at a time when COVID-19 has both reminded us of our fragility, but also showcased our capacity for altruism and solidarity. The wheels of climate change policies are about to turn in Ireland. Credit unions, as value based organisations, can play their part in breaking the tragedy of the horizon.

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INTERNAL AUDIT – JOINING THE DOTS.....

At Moore, wearing our internal audit hat, we are busy working on an internal audit work programme on Climate Change for Credit Unions in time for the 2022 planning cycle. The **Chartered Institute of Internal Auditors** has been active in positioning the profession to provide assurances and insight on climate change risk management. For an example, click [here](#) on a recent research report.