

# Climate Change: Financial implications for households

Climate change, whether it be rising sea levels or apocalyptic weather events, needs to be priced into the world's financial system to protect it from failure -- and the sooner the better



This, in a nutshell, was the alarming message for households given by academic and financial experts at a September 9 webinar hosted by the Centre for Economic Policy Research (CEPR) and ING's Think Forward Initiative (TFI).

The impact of global warming, they said, is currently not incorporated properly into mortgages, insurance policies or even the stock market in terms of the cost and impact of greenhouse gas emissions. In particular, households without balance sheets are very much exposed to climate change risks -- and not only in developing countries.

It is not, however, beyond the world's scope to change.

"The pandemic has shown how societal norms can suddenly shift given the right circumstances," Mark Cliffe, global head of ING's New Horizons Hub, said.

Pointedly, two of the speakers -- Bob Litterman, founding partner of hedge fund Kepos Capital, and

Nancy Wallace, a professor at Berkeley Haas business school -- gave their presentations as smoke from yet more Pacific coast wildfires were turning the skies orange over their California homes and offices.

"Lenders have no idea how to price the risk (of climate change)," Wallace, a real estate specialist said, underlining just one of the problems facing both households and the financial system in general.

The US securitised residential mortgage markets, for example, have some \$1.5 trillion in exposure to California, where more than 1.42 million hectares of land has burnt in the past fortnight alone, she said. Such fires are blamed on rising temperatures and diminished rainfall.

"This is not about long-term horizons," Wallace said. "The social costs of climate change are being felt (in households) right now."

## The costs of climate change

The speakers pulled no punches about the risks of not doing anything.

"There are massive economic damages to the US economy and the economy more broadly from unchecked climate changes," Nat Keohane, senior vice president of the Environmental Defense Fund said. "(These damages) will filter down to households."

But he argued that the economic costs of combatting climate change -- through, say, emissions pricing -- were manageable.

Seeking to put the costs in context, Keohane noted that American households currently spend about 35 cents of every dollar of their income on protections such as medical insurance, social security, fire and police services. One study, however, suggests the costs of protecting against climate change would come to less than 0.5 cents per dollar.

Litterman, who is also chairman of the US Commodity Futures Trading Commission's (CFTC) Climate-Related Market Risk Subcommittee, said introducing carbon pricing -- capturing the cost to the environment of greenhouse gas emissions and essentially charging it to the emitter -- was inevitable.

"Right now we are not pricing emissions appropriately," he said. "It is a complicated trade-off between consumption today and potential impacts on future well-being."

But he said the costs of doing something about it now are much smaller than the social, natural and monetary costs we would have to bear soon from inaction. As one example, he noted that coral reefs -- the modern-day canaries-in-the-coal-mines -- have declined anything from 70% to 90% and will be all but wiped out by 2030 if nothing is done.

## Convincing the right people

Litterman, however, said he had been trying to sell targeted exchange-traded funds to his clients as a hedge against climate change, but there were not enough buyers.

A new report from the CFTC's subcommittee called on the US Congress to establish a price on carbon immediately and issued a stark warning: "A world racked by frequent and devastating

shocks from climate change cannot sustain our financial system."

Getting politicians to move is also hard, as noted by Keohane, a former special assistant on energy and the environment to President Barack Obama.

"It is difficult politically to address a problem where most of the benefits ... will be out in the future," he said.

That does not mean, however, that the risks are being ignored or unfelt by households.

Stefano Giglio, a professor of finance at Yale School of Management, outlined areas in real estate and the stock market where there was some pricing in of the potential damage from climate change.

He cited a listing for a property located on the water with a pier and dock that indicated how climate change risks were being addressed house by house. It contains the line: "Owner holds letter of exemption from (government), stating high elevation, flood insurance may not be required."

Including the line as a purported sales factor was an implicit sign that prices are being effected already by climate change.

When it comes to the stock market, meanwhile, there is evidence that investors are aware of risks. Giglio is a co-author in a 2020 study that looked at traded companies and their stock market movements vis-a-vis their exposure to climate risks (e-scores) and negative news in the Wall Street Journal about climate change.

The conclusion: "Firms with high environmental scores do better in periods where there's bad news about climate change compared to those with low e-scores."

The webinar focused primarily on the United States, but there was agreement that the issues go well beyond that and that the difficulties in developing countries -- both at national and household level -- will be greater. What is needed is a worldwide approach.

"The urgent next step is globally harmonised incentives to reduce emissions, Litterman concluded.