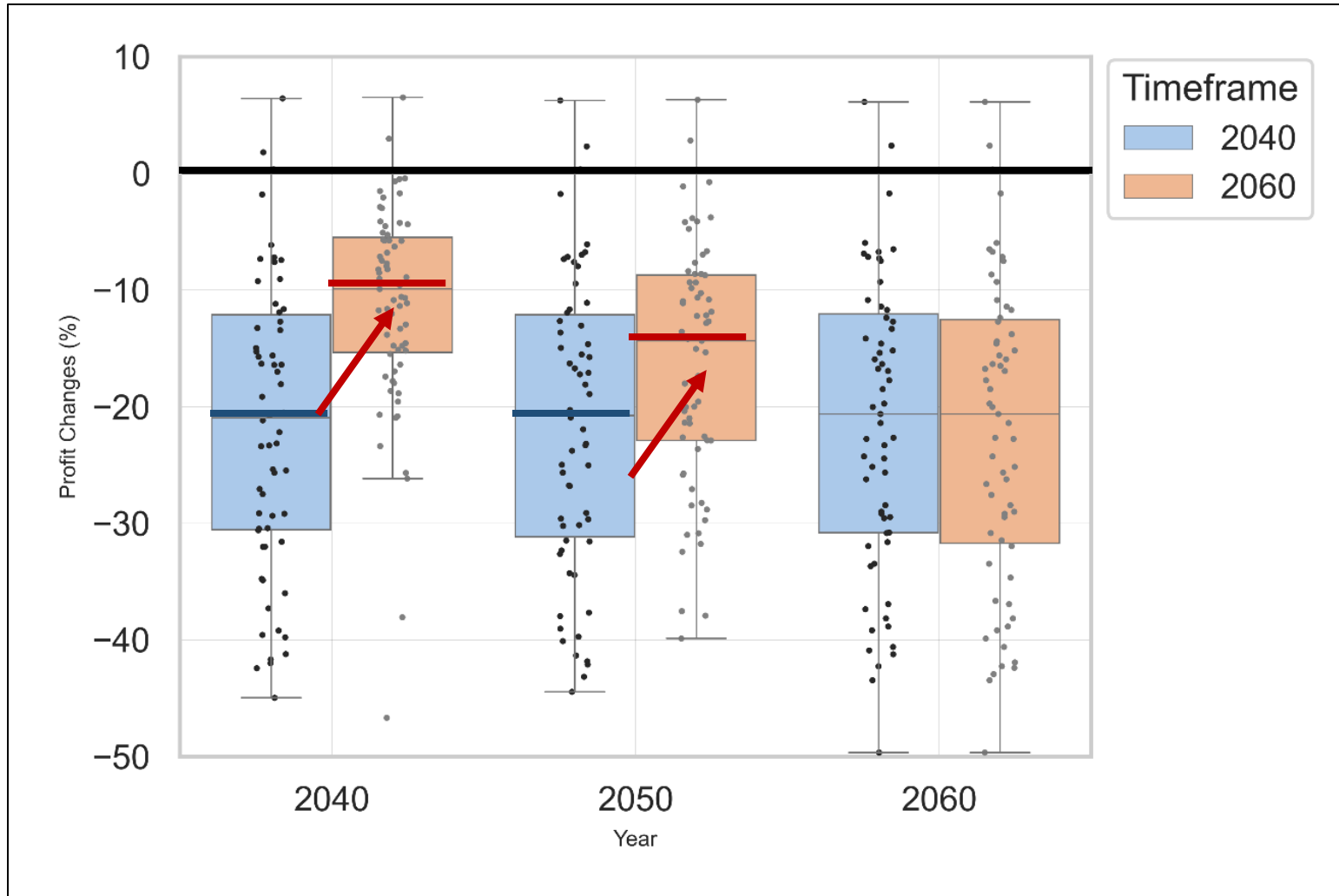


**BRIEF OF EVIDENCE OF MARIO ANDRES FERNANDEZ CADENA**

## Profit changes for a 50% Reduction in N leaching and multiple years of compliance: a) 2040, b) 2060



**Value of longer time horizons:**  
Lower profit losses  
Farmers prorate decisions

Mitigation practices may be  
cost-effective only in a small  
group of farms

## Shrinkage of the industry in 2040 due to the reduction levels

	Timeframe	Percentage of N leaching reductions		
		10%	30%	50%
Number of farms shutting down	2040	17	19	24
	2060	16	18	19
Share of farms shutting down (%)	2040	25.4	28.4	35.8
	2060	23.9	26.9	28.4

- Timeframes show economic value by reducing profit losses, but farms are still at great risk of non-viability.
- Farmers are already under stress due to the EFW package and the ETS

## Costs (in millions) to the aggregate dairy sector and the Otago region

	Year for compliance or timeframe	
	2040	2060
Sector costs		
Base practices	7.3	3.3
Plantain pasture	6.8	3.4
Pivot irrigation	14.3	13.5
Regional costs		
Base practices	14.6	6.5
Plantain pasture	13.6	6.8
Pivot irrigation	28.6	27.0
Total change		
Base practices	21.9	9.8
Plantain pasture	20.5	10.2
Pivot irrigation	42.9	40.5