Energy Poverty

Conference 2024

DATE
6th November 2024
VENUE
ESRI, Whitaker Square, Sir John Rogerson's
Quay,
Dublin 2



Demand for Energy Credits among Older People

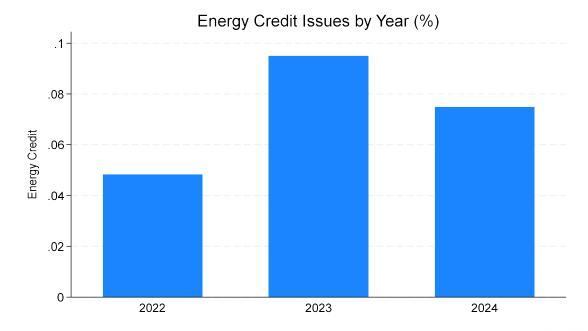
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Data for 15,000 Alone assessments from 2022-2024

Our main outcome variable

Energy credit assistance





Examine the relationship between energy credits and

- Areal level deprivation
- Weather (temperature)
- Gender
- Homeownership
- Living alone
- Age
- Condition of the home



Areal level deprivation

We link the Alone data to HP Deprivation Index at CHN area

• 97 CHN areas across Ireland

• High disadvantage: area where more than 40% are categorised as

disadvantaged _____

| | Deprivation | | Area 2022 | |
|--------------------------|-------------------|---------------------------|-----------|------|
| | National % Area % | | # | % |
| | De | privation level - HP inde | ex | |
| Extremely affluent | | | 100 | 0.3 |
| Very affluent | | | 699 | 2.0 |
| Affluent | | | 2,537 | 7.1 |
| Marginally above average | | | 5,295 | 14.9 |
| Marginally below average | | | 7,753 | 21.8 |
| Disadvantaged | | | 8,511 | 24.0 |
| Very disadvantaged | | | 6,445 | 18.1 |
| Extremely disadvantaged | = | | 4,197 | 11.8 |



Areal level deprivation

Approximately five percent of callers are from an area of high deprivation

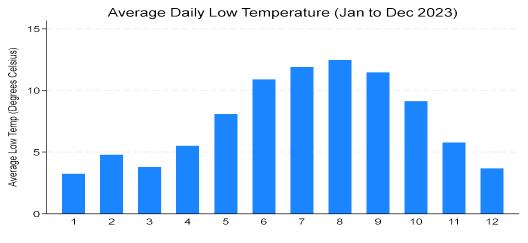
| CHN Area | % Disadvantaged | |
|-----------------------------|-----------------|--|
| Coolock Area Network | 53.9 | |
| Clondalkin | 45.6 | |
| Donegal East | 45.3 | |
| Ballyfermot and Palmerstown | 45 | |
| South Limerick City | 42.1 | |
| Finglas Area Network | 40.1 | |
| | | |



Weather

We link the data to daily temperature data from Met Éireann

- Daily minimum temperature
- Linked at CHO level (9 CHOs)
- We calculate the average daily low temperature over the two weeks prior to the assessment date





Methodology

We implement the following probit model

$$Pr(CreditIssue_i = 1|X) = \Phi(\alpha + X_i'\beta + \sum_{\tau=2}^{202} \theta_{\tau}C_i^{\tau})$$

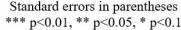
Results (next slide) are marginal effects



Preliminary results

- Being from a highly deprived area
 3.5p.p. increase in energy credit
 need
- Homeowners 2.4p.p. less likely to need energy credit
- Cold weather greater need
- People aged 60-70 appear most at risk
- Those needing home repairs are
 2.6p.p. more likely to need energy
 credit

| VARIABLES | creditissue | |
|-----------------------------------|-------------|--|
| Deprivation | 0.035** | |
| | (0.017) | |
| Female | -0.004 | |
| | (0.006) | |
| Homeowner | -0.024*** | |
| | (0.008) | |
| Lives alone | 0.004 | |
| | (0.007) | |
| Temperature | -0.005*** | |
| | (0.001) | |
| Age (ref: over 90) | | |
| Under 50 | -0.036 | |
| | (0.043) | |
| Age 51-60 | 0.079** | |
| | (0.039) | |
| Age 61-70 | 0.089*** | |
| | (0.024) | |
| Age 71-80 | 0.048*** | |
| 1990 2 1. 100000 1000491 | (0.017) | |
| Age 81-90 | 0.026 | |
| 8 | (0.017) | |
| Home repairs | 0.026** | |
| • | (0.012) | |
| Y1 | 0.024 | |
| | (0.018) | |
| Y2 | 0.058*** | |
| | (0.009) | |
| Observations Standard errors in a | 7,996 | |





Thank you paul.redmond@esri.ie





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