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# CONSUMERS STRUGGLE TO CHOOSE NEW TYPES OF ELECTRICITY TARIFFS, BUT COMPARISON TOOLS CAN HELP

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## Consumers struggle to choose new types of electricity tariffs, but comparison tools can help <sup>1</sup>

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ESRI Research Bulletins provide short summaries of work published by ESRI researchers and overviews of thematic areas covered by ESRI programmes of research. Bulletins are designed to be easily accessible to a wide readership.

### **INTRODUCTION**

The introduction of smart meters in Ireland will soon allow consumers to choose new types of electricity tariffs. Time-of-use tariffs charge different prices for electricity at different times of the day. While these tariffs can help consumers save money on their energy bills, their introduction will make energy tariff choices in Ireland more complicated. In collaboration with the Commission for Regulation of Utilities (CRU), the ESRI's Behavioural Research Unit undertook a controlled behavioural experiment with a sample of the Irish consumers, to explore their tariff choices. It tested how likely consumers will be to choose new tariffs over existing and simpler tariffs, as well as testing their ability to choose the best tariff for their own electricity usage. The study also pre-tested online tools designed to help consumers make better energy choices.

### **M**ETHOD

A representative sample of 145 Irish consumers took part in a controlled laboratory experiment with multiple stages. Participants first read a letter about smart meters and their benefits, and were asked whether they would be willing to have one installed in their home. They were then shown four different electricity tariffs and asked to choose which one they would prefer. These options included tariffs already available as well as new, more complex, time-of-use tariffs. This stage tested how likely consumers would be to choose the most complex time-of-use tariff (with four different price periods) when simpler, and more conventional, options were available.

Participants were next asked when they used electricity at different times of the day. This enabled us to calculate whether or not consumers were making good tariff choices, based on their beliefs about when they use electricity. They were then shown a virtual price comparison site and asked to choose the cheapest time-

<sup>&</sup>lt;sup>1</sup> This Bulletin summarises the findings from: Belton, C. A. & Lunn, P. D. (2020). Smart choices? An experimental study of smart meters and time-of-use tariffs in Ireland. *Energy Policy*. https://doi.org/10.1016/j.enpol.2020.111243

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of-use tariff, based on their own usage. For half of the participants, the price comparison site showed the estimated costs of each tariff based on when the average person uses electricity. For the other half, a personalised calculator tool allowed them to adjust these estimates to match their own electricity usage. Participants completed six of these choice tasks.

Throughout the study, tariffs were presented in one of two ways. For half of the participants, tariff times and prices were presented in plain text. For the other half, tariff times and prices were shown on a 24-hour timeline with colour coding for the different prices. This was designed to make it easier for participants to remember and understand the features of the tariff.

### **RESULTS**

Over 75% of the sample said they would be willing to have a smart meter installed in their home, after reading a letter about their benefits. However, consumers were reluctant to choose complex time-of-use tariffs. The most complex time-of-use tariff was, in fact, the cheapest option for over three-quarters of the participants, but fewer than half actually chose it. These consumers chose simpler tariffs instead, which were on average 13.1% more expensive than the most complex tariff.

The personalised online calculator tool significantly improved consumer's ability to choose the cheapest tariff. However, this tool only improved decisions when used correctly. One third of the time, participants either did not use the tool or failed to use it optimally.

Against expectations, participants who saw tariffs presented on the colour-coded timeline performed worse in a series of multiple-choice questions asking them to recall key information about time-of-use tariffs, although this did not affect which tariffs they chose.

## **CONCLUSION AND IMPLICATIONS**

Broadly speaking, the results imply that Irish consumers are open to the introduction of smart meters, but face challenges in getting the most out of them. They are unlikely to opt for time-of-use tariffs that might save them money over simpler and more familiar tariff options, without additional and substantial information as to why it may be in their interest to do so.

However, when trying to choose the cheapest tariff, online tools that personalise estimated costs make it easier. Some Irish price comparison sites offer this function for existing tariffs, and these findings suggest that they would help consumers make better choices for time-of-use tariffs too. This research also shows that it is important to make these tools user-friendly, as they lead to mistakes if not used correctly.

Finally, this research highlights the importance of pre-testing regulatory decisions, such as how energy tariff presentations are to be displayed. Intuitive predictions can be wrong, with the potential for well-intentioned interventions to misfire.

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