

[THE IMPACT OF THE ENERGY PRICE CRISIS ON GB CONSUMERS; A DIFFERENCE-IN-DIFFERENCE EXPERIMENT]

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Overview

[In April 2022, consumers in Great Britain (GB) witnessed a 54% increase in the energy price cap, as a result of Russia's invasion of Ukraine on February 24th, which sent wholesale gas prices spiralling across Europe. We leverage high-frequency data collected by the Smart Energy Research Lab, a representative panel containing daily gas and electricity data for around 13,000 households in Great Britain between January 2021 and December 2023 to investigate the implications. Format: single space, 10 point font, Times New Roman]

Methods

[We exploit several datasets linked to the panel data which include time-varying and cross-sectional information. We rely on two price shocks: 1) in October 2021 a wave of energy retail suppliers leaving the industry. At this time over two million consumers on fixed contracts were forced to join a new supplier and pay a variable tariff, and 2) these consumers were exposed to a second price shock caused by the Ukraine-Russia conflict which fed through April 2022's energy price cap. Exploiting this pseudo-natural experiment, we use a difference-in-difference framework]

Results

[We use a difference-in-difference framework to estimate average treatment effects on this group of consumers and find that they would have consumed an additional 10 percentage points more electricity and 16 percentage points more gas had their prices remained fixed. These estimates are robust to a battery of robustness checks and point towards a significant loss in welfare for consumers on variable tariffs in the early stages of the energy price crisis.]

Conclusions

[Our analysis reveals significant reduction in gas and electricity consumption as a result of the steep and unexpected price increases from 2022, particularly for those consumers who were moved to a variable tariff. However, despite being protected by a fixed tariff, even households on fixed contracts reduced their consumption during the energy crisis period.]

References

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