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Competition in the Dutch Retail Market for Electricity and Natural Gas

Arjen Veenstra, Machiel Mulder
University of Groningen, Groningen, Netherlands

Extended Abstract

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Abstract Summary

This study examines the evolution of competition in the Dutch retail markets for electricity and natural gas for households between 2022 and 2026. Retail competition was expected to increase efficiency, lower consumer prices, and improve service quality. However, competition may be constrained by factors such as market concentration, switching costs, consumer inertia, and information frictions. The paper evaluates how competitive the Dutch retail energy market actually is.

The analysis uses a detailed dataset collected from an energy comparison website, containing more than 8,000 retail contracts offered by 27 suppliers over more than 200 weeks. Each contract includes information on contract type (fixed, variable, dynamic, or model), duration, electricity and gas prices, energy type, and fixed fees.

Three empirical approaches are used to assess market competition. First, the study analyzes the pass-through of wholesale energy costs to retail prices using an Error Correction Model (ECM), allowing both short-run and long-run relationships to be estimated and testing for asymmetric price adjustments ("rockets and feathers"). Second, the paper estimates price premiums for green energy contracts by comparing otherwise similar contracts that differ only in environmental attributes. Third, it investigates price dispersion across retailers to assess whether retail prices converge, as predicted by the law of one price.

Preliminary results suggest that wholesale cost changes are largely passed through to retail prices, with no systematic evidence of asymmetric price adjustments or the exercise of market power. Green energy price premia are generally consistent with the underlying costs of renewable energy certificates, although some unusually high premia are observed. However, prices for similar contracts do not converge over time; instead, price dispersion has increased during the study period. This may reflect market frictions or differing pricing strategies between established suppliers and new entrants. Further analysis will explore the drivers of this dispersion.

Presenting Author Biography

Arjen Veenstra is a full-time PhD candidate in Energy Economics at the University of Groningen. His research focuses on the economic aspects of electricity markets, with a particular emphasis on the transition toward zero-carbon energy systems.

He has contributed to the field through projects published in Energy Economics and Applied Energy, and has been involved in applied research through collaborations with the HEAVENN project and the Centre for Energy Business and Economics Research (CEnBER).