Peer effects in green technology adoption: Evidence from electric vehicles

Elisabeth Isaksen* Bjørn Johansen† Oddbjørn Raaum* June 6, 2024

Preliminary and incomplete. Please do not cite or quote.

Abstract

We study peer effects in the market for battery electric vehicles. Our analysis builds on linked employer-employee data combined with detailed information on car ownership, household characteristics, and the location of the residence and work-place of individuals. We examine peer effects within two different social networks: colleagues and family members (siblings and parents). To identify peer effects, we use variation in colleagues' and family members' electric vehicle (EV) ownership induced by exposure to local EV incentives on the work commute. Combined with neighborhood fixed effects and household-level controls, we mitigate concerns of omitted variable bias and reverse causality. Our results suggest that higher electric vehicle ownership among colleagues and family members have a substantial and positive effect on the probability of a household owning an electric vehicle. We find that colleagues have a larger impact on a household's EV ownership than family members. We discuss the implications of our findings for the effectiveness of policies promoting electric vehicle adoption.

Keywords: peer effects, electric vehicles, green technology

JEL codes: Q55, Q58, R48

^{*}Ragnar Frisch Centre for Economic Research, Oslo, Norway

[†]Institute of Transport Economics, Oslo, Norway