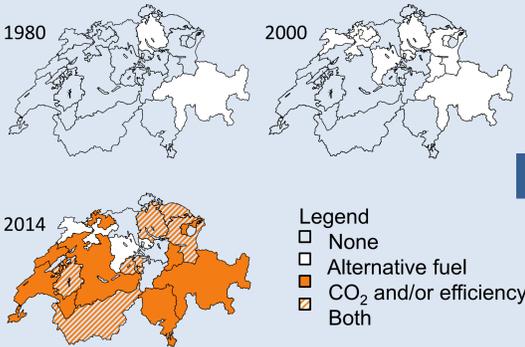


Tax Incentives for Reducing Energy Consumption: An Empirical Evaluation of Tax Reforms in Swiss Cantons

Overview

General Idea	Research Question	Research Design
<p>The cantonal laboratory</p> <p>What can we learn from cantonal policies for energy conserving measures at a federal level?</p> <ul style="list-style-type: none"> Differences in regulations across cantons and time Two different policy measures <ol style="list-style-type: none"> Cantonal motor vehicle tax incentives Basel's electricity levy Identify intended and unintended effects <p>Figure: Evolution of cantonal incentives for fuel efficient cars</p> 	<p>Motor vehicle tax incentives</p> <ul style="list-style-type: none"> What is the effect of fiscal incentives on vehicle choice? How do people adjust their driving behavior after buying a "green" car (rebound effect)? <p>Basel's electricity levy</p> <ul style="list-style-type: none"> What is the effect of the fiscal incentive on electricity consumption? Do people buy more energy-efficient home appliances? Is the electricity levy a regressive tax? 	<p>Effect on vehicle choice</p> <ul style="list-style-type: none"> Combine difference-in-difference approach with structural estimation Estimate policy effects, price and tax elasticities Data: Vehicle registration data (FEDRO), car characteristics (Eurotaxglass's Int.) <p>Effect on driving behavior</p> <ul style="list-style-type: none"> Panel regression of mileage on tax incentives to identify unintended consequences Combine with effect of vehicle choice to recover rebound effect Data: Mobility and Transport Microcensus (FOS) <p>Effect on electricity consumption</p> <ul style="list-style-type: none"> Synthetic control method: Data from other cantons are used to construct a "synthetic" Basel-Stadt, which serves as a counterfactual control unit. Data: Electricity consumption and prices in Swiss cantons (various sources) <p>Regressive taxation?</p> <ul style="list-style-type: none"> Estimate the tax burden for different income deciles. Data: Household Budget Survey (FOS)

Partners and Collaboration

The following associations, administrations and their representatives have expressed interest in our project:

- Association of cantonal energy ministers (EnDK)
- Association of cantonal road traffic licensing offices (asa)
- Road traffic licensing office of the canton of Zürich
- Building, traffic and environment office of the canton of Aargau
- Environment and energy office of the canton of Basel
- Association for the promotion of efficient road vehicles (EcoCar)

Energy Turnaround

Provide decision makers with knowledge about

- Effectiveness of fiscal incentives for reducing energy consumption
- Estimates of price and tax elasticities
- Unintended consequences: rebound effect and adverse distributional effects

Vital for assessing the potential contributions of incentive-based measures in meeting the goals of the "Energy Strategy 2050".

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