

Valentin Lorenz Stumpe
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Education

<i>Ph.D.</i> Economic Research, University of Bonn Expected completion: September 2022	06/2017 – Present
<i>M.Sc.</i> Economics, spec. Economic Research, University of Bonn	06/2017 – 09/2019
<i>Visiting Ph.D Student</i> Economics, University of California, Berkeley	07/2017 - 05/2018
<i>B.Sc.</i> , Economics, University of Bonn	09/2014 - 07/2017

Scholarships and Memberships

IZA, Research Affiliate	03/2020 - Present
Collaborative Research Center TR 224, Research Fellow	09/2020 - Present
briq, student fellow	09/2018 - Present
Scholarship of the Bonn Graduate School of Economics	08/2018 - Present
Scholarship for Graduates by the German Academic Exchange Service	07/2017 - 05/2018

Teaching

<i>Econometrics</i> , Bachelor level Teaching Fellow to <i>Michael Boehm</i>	since 10/2021
<i>Labor Market Institutions and Policy</i> , Graduate level Teaching Fellow to <i>Amelie Schiprowski</i>	09/2020 - 03/2021
<i>Econometrics</i> , Bachelor level Teaching Fellow to <i>Lorenz Goette</i>	09/2019 - 03/2020

Software Preferences

Python (NumPy, pandas, SciPy, scikit-learn, GeoPandas, using GoogleMapsAPI, etc.)	10/2017 - Present
STATA For very large datasets and fixed effects	04/2018 - Present
R Occasionally for ML methods (Clustering, Random Forests) on large datasets	04/2018 - Present
SQL	02/2021 - Present

Languages

German (*native*), English (*fluent*), Spanish (*fluent*), French (*basic*)

Volunteering

Member of the selection committee, German Academic Exchange Service	11/2018
Volunteer in the Berkeley Energy & Resources Collaborative (BERC)	09/2017 - 05/2018
Volunteer for AFS – Intercultural Programs	05/2014 - 01/2017
Volunteer Service “weltwaerts”, German Ministry of Economic Cooperation and Development (BMZ) Liberia, Costa Rica	01/2013 - 12/2013

Research Focus

Behavioral Economics, Applied Econometrics, Energy Economics, Labor Economics

Working Papers and Work in Progress

“Estimating the Price Elasticity of Residential Electricity Consumption”

Abstract: The transition towards renewable energies in the electricity market crucially depends on the stability of such energy sources. Wind and solar energy are not available at all times, and energy storage options are limited. To offset fluctuations in electricity supply and demand, expensive and inefficient oil and gas plants are used at the moment. Time-varying energy prices have often been proposed to induce consumers to adapt energy demand to energy supply by reflecting the marginal costs of energy provision in the energy price. We base our analysis on hourly household consumption data from 899 households provided by a utility that passes hourly changing wholesale electricity prices on to the consumers. Using hourly wind energy production in Germany as an instrument for the hourly electricity price, we find that households indeed react strongly to real-time pricing. Price reactions are strongest when prices are low, indicating that households evaluate price changes on their relative size to the price. Using different levels of fixed-effects, we find that households react more strongly to price changes over the day than across days, with implied intra- and inter-day price elasticities of 1.67 and 0.45, respectively. Our results indicate that significant load shifts over the day can be achieved by using time-varying energy prices, which opens the possibility to offset consumption and production fluctuations in electricity consumption using monetary incentives.

“Investigating the Role of Local Resistance against Wind Turbines”

(with Moritz Mendel)

“Job Search Autonomy”

(with Patrick Arni and Amelie Schiprowski)

Abstract: Matching unemployed workers to jobs is an important policy agenda. Search effort being a key input to job matching, unemployment policy commonly imposes restrictions regarding the amount and direction of job seekers’ effort provision. We study the labor market effects of alleviating these restrictions by means of a large-scale policy change in the Swiss canton Bern. Over the course of the policy change, the Public Employment Service increased the autonomy of job seekers by reducing job search requirements, abolishing mandatory vacancy referrals, and referring to job seekers as customers. Using detailed administrative data, we find that job search lowered and became more narrow after the policy change. This came at the cost of an increased average unemployment duration ($\approx 8\%$), but at the benefit of increased re-employment earnings ($\approx 2\%$). Moreover, results show that the local scope for job search externalities is decisive for the average effect of changes in search autonomy.

“Quantifying the Salience Bias of Electricity Consumption using Smart Meter Data”

(with Lorenz Goette)

Abstract: Using price variation as a means to control energy consumption has often been proposed as an effective tool to adapt aggregate energy demand to energy supply. However, usually, electricity costs are not fully salient at the time of consumption, as they are not incurred immediately. Using high-frequency household electricity consumption data from a field experiment in Zurich, Switzerland, we first show that providing households with Smart Meters and In-Home-Displays to monitor their electricity consumption reduces domestic energy consumption. Additionally, by exploiting the swiss energy pricing mechanism, we show that feedback provision increases households’ energy price sensitivity by more than 40 percent. Using a structural framework, we find that due to salience bias, households perceive less than 70 percent of their actual electricity costs. Heterogeneity analyses show that the treatment effect of feedback provision is increasing in pre-treatment baseline energy consumption and In-Home-Display usage. Finally, we observe low-education and low-income households to be stronger biased than their highly educated, high-income counterparts.