

# Stephan Sagl

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## EDUCATION

Ph.D. Economics, Pennsylvania State University	2018 –
MSc Economics, University of Vienna	2015 – 2017
BSc Economics, University of Vienna	2012 – 2015

## FIELDS OF INTEREST

Industrial Organization, Applied Microeconomics

## WORKING PAPERS

1. “Dispersion, Discrimination, and the Price of your Pickup”, October 2023. (Job Market Paper)

*Abstract:* Price discrimination is a controversial and pervasive feature of the automobile market. Using repeat purchase data on pickup trucks, fully controlling for product heterogeneity, I establish that individual consumers pay persistently high or persistently low prices across vehicle purchases. On average, women and Hispanics pay higher prices for the same pickup, but this explains less than 0.5% of price dispersion. These results suggest that persistent consumer preferences beyond coarse demographics are known by dealers and used for pricing. Using a structural model, I study the role of information about consumers available to firms in the welfare effects of price discrimination. To do so, I overcome a missing data problem common to settings with transaction data: consumer-specific prices of non-chosen alternatives are unobservable. I solve this problem by developing and estimating a novel discrete choice model of supply and demand that recovers unobserved consumer-specific prices and consumer-specific price sensitivity. Compared to uniform pricing, price discrimination increases profits and total welfare but, on average, harms consumers. Women and Hispanics lose most from price discrimination. However, price discrimination only on broad demographic groups, including gender, race, and income, is not profitable relative to uniform pricing. This suggests that information beyond demographic groups drives the profitability of price discrimination.

2. “Conformant and Efficient Estimation of Discrete Choice Demand Models”, May 2023.  
with Paul Grieco, Charles Murry, and Joris Pinkse.

***R&R at Econometrica***

*Abstract:* We propose a conformant likelihood-based estimator with exogeneity restrictions (CLER) for random coefficients discrete choice demand models that is applicable in a broad range of data settings. It combines the likelihoods of two mixed logit estimators—one for consumer level data, and one for product level data—with product level exogeneity restrictions. Our estimator is both efficient and conformant: its rates of convergence will be the fastest possible given the variation available in the data. The researcher does not need to pre-test or adjust the estimator and the inference procedure is valid across a wide variety of scenarios. Moreover, it can be tractably applied to large datasets. We illustrate the features of our estimator by comparing it to alternatives in the literature.

## RESEARCH EXPERIENCE

<i>Research Assistant</i> , Pennsylvania State University	2018 –
<i>Research Assistant</i> , Oesterreichische Nationalbank (Austria's Central Bank)	2016

## TEACHING EXPERIENCE

<i>Teaching Assistant</i> , University of Vienna Introductory Microeconomics (Philipp Schmidt-Dengler)	2015 – 2016
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## SEMINARS

2023 (including scheduled) – Penn State, Penn State (Ag. Econ)

## AWARDS AND HONORS

RGSO Dissertation Fellowship, Pennsylvania State University	2022
Rosenberg Scholarship, Pennsylvania State University	2021
Performance Scholarship, University of Vienna	2012 – 2017

## LANGUAGES AND SKILLS

Languages: English (fluent), German (native).

Computer: Julia, MATLAB, Python, R, Stata.

## REFERENCES

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