## Department of Marketing



**Research Seminars Series** 

## Xiao Liu, New York University (US)

November 21, 2024 | 12:00 - 14:00 | TC Hall

## The Impact of Sustainability Certifications on Sales and Seller Competition: Evidence from Amazon Climate Pledge Friendly

Abstract: Amazon introduced the Climate Pledge Friendly (CPF) badge by consolidating various green certificates to examine its impact on market dynamics. We applied a game-theoretic model and causal inference using Amazon's data to explore the effects on consumer behavior, seller pricing, and market concentration. Our theoretical model outlines a three-stage process where sellers set prices, the marketplace determines badge eligibility, and consumers make purchase decisions. We discovered that increased demand, higher prices, and reduced market concentration occur when the benefits gained from attracting green consumers exceed the detriments of alienating non-green consumers due to increased prices. Optimal conditions were identified where certifying only the most sustainable products maximizes outcomes over strategies that either badge all or no products. Empirically, we gathered six months of data on 6,606 products across eight categories, utilizing the Interactive Fixed Effect Counterfactual (IFEct) estimator to manage endogeneity and treatment reversals. Our findings indicate that the CPF badge significantly enhances sales volume, increases product prices, and decreases market concentration, confirming a beneficial scenario for all market participants. These results guide sellers considering green certification and platforms contemplating unified eco-labeling policies.

