

**Kiriti Kanjilal**  
**Washington State University**  
**Dissertation Summary**

---

**Job Market Paper - Common Pool Resources with Endogenous Equity Shares.**

(with Felix Muñoz-Garcia) ([PDF](#))

We consider a common pool resource (CPR) where, in the first stage, every firm chooses an equity share on its rivals' profits (cross-ownership) and, in the second stage, firms compete for the resource. We identify equilibrium equity shares in this setting, and compare them against the socially optimal shares that maximize welfare. Our results show that equity shares are welfare improving under certain conditions, but can lead to a socially insufficient exploitation of the CPR if shares are large enough; as in a merger where firms equally share equity. We also find that, as the number of firms exploiting the resource increases, socially excessive exploitation occurs under larger parameter combinations. We analyze common policy tools, quotas and emission fees, evaluating how they are affected by equity shares; and then compare them against a novel policy tool: optimal equity subsidies.

**Rationalizing Time Inconsistent Behavior: The Case of Late Payments.**

(with Felix Muñoz-Garcia and Robert Rosenman) ([PDF](#))

Consumers often sign contracts in which they consume a good over a period of time, paying for it with a fee due at a later period. Most contracts of this form impose a penalty if the fee is paid late. Despite anecdotal evidence that customers intend to pay on time, many pay late; which we refer to as “preference reversal”. In this paper, we show that late payment requires present biasedness, and that shocks expand the range of parameter values under which consumers pay late. Moreover, we identify how sellers can increase profits by setting penalties to induce late payments from consumers, who fall prey to their preference reversals over time.

**Endogenous Equity Shares in Cournot: Welfare Analysis and Policy**

(with Felix Muñoz-Garcia) ([PDF](#))

We consider a duopoly in which firms can strategically choose equity shares on their rival's profits before competing in quantities. We identify equilibrium equity shares, and then compare them against the socially optimal equity shares that maximize welfare. Most previous studies assume that equity shares are exogenous, and those allowing for endogenous shares do not evaluate if equilibrium shares are socially excessive or insufficient. Our results also help us identify subsidies and taxes on equity acquisition that induce firms to produce a socially optimal output.

## **Additional Current Work:**

### **Estimating WTP and Designing Interruptible Contracts in Electricity Markets: A Case Study on Pullman.**

(with Xiangrui Wang and H. Alan Love)

In the market for electricity, there are temporal shortages due to accidents, natural disasters or sudden changes in aggregate demand. When a shortage occurs, the distributor must cut power supply to some consumers. In this paper, we estimate the willingness to pay (WTP) for electricity for each household by observing their hourly usage. Based on this WTP, we propose that electricity providers can offer optional “interruptible contracts”, wherein consumers who accept such a contract are the first to get cut off. They are given monetary compensations for this. Estimating WTPs helps us find the optimal amount of money to offer. In such a setting, consumers with lower WTPs accept this contract while those with higher WTPs prefer to not be cut off and reject this contract. Our estimations are based on data from Pullman, a university town in Washington. Our results show a distribution on these WTPs of each household, and their varying WTP for heating and cooling in summer and winter as well as peak and off-peak hours.