

## **Aiming for the Goal: Pricing and Contribution Dynamics of Crowdfunding**

**Faculty Member:** [Kevin Williams](#)

### **Proposal Description:**

The crowdfunding industry has been growing fast and stood at USD \$35 billion in 2016. It is emerging as a scalable alternative to traditional models of public or private financing. This project focuses on reward-based / donation crowdfunding which amounts to \$5.5 billion. In rewards-based crowdfunding, an entrepreneur raises money for a project from a collection of small backers, who typically contribute small amounts of money in exchange for a reward. This reward is often, but not always, the item being produced.

The overall objective of this project is to understand pricing and contribution dynamics in the rewards-based crowdfunding industry. We will develop a tractable theoretical model that captures the main features of this industry. First, entrepreneurs post projects on a crowdfunding platform, such as Kickstarter. They announce a contribution goal, a campaign deadline and a schedule of pledges and associated rewards for contributors during the campaign. Consumers (or contributors) with heterogeneous valuations on rewards decide whether and when to contribute. The central research question is to characterize the optimal campaign design. Further, we want to ask what the resulting contribution dynamics look like. Casual empirical observation suggests that most campaign designs offer an increasing pledge schedule, and contribution dynamics seems to be U-shaped with significant contributions coming in at the start and just before the deadline. In particular, we want to ask whether our theoretical predictions match these observations.

The second part of the project involves an empirical analysis using data collected from Kickstarter. The empirical portion of the project has two goals. The first is to empirically test the theoretical model, which will validate that the model correctly captures the key features of contribution

dynamics. The second goal of the empirical model is to increase our understanding of how information, pricing, and other customer decisions affect contributions. For example, we will be able to estimate how providing updates on product progress affects donations. Another avenue we will explore is how altering the pricing schedule affects the success or failure of projects.

**Requisite Skills and Qualifications:**

We are looking for an RA to help us with the data collection process and conduct exploratory data analysis. This involves downloading information from the internet, parsing HTML files, and then running data analyses on the aggregated files. The RA should have experience with Stata, Python, and web scraping

**Award:** Dimitrios Lippe '18

Michael Machado '19

**Tobin Application Link:** [Tobin Application](#)

**Project Type:** Tobin

**Project Year:** 2017

**Term:** Fall 2017

**Source URL:** <https://economics.yale.edu/undergraduate/tobin/fall-2017/aiming-goal-pricing-and-contribution-dynamics-crowdfunding-0>