

#### Education

University of Colorado at Boulder

Ph.D. Candidate, Finance

University of Colorado at Boulder

M.S., Applied Mathematics

Arizona State University

B.S., Mathematics

**Boulder, CO** 2013–present

Roulder CO

**Boulder, CO** 2011-2013

**Tempe, AZ** 2007-2011

### **Research Interests**

**Theoretical Corporate Finance**, Organizational Economics, Industrial Organization, Strategic Communication

# **Working Papers**

#### **Customer Friendly Finance**

2017 AFA Ph.D. Poster Session

http://ssrn.com/abstract=2755748

In the United States, customer owned firms are responsible for 35% of consumer insurance and 10% of consumer banking, yet receive little theoretical or empirical attention. In this paper, I propose a theory of internal finance for the customer owned firm. I show that its growth, pricing, and capital structure are tied together: *higher* sales tomorrow are achieved through *higher* prices today and *lower* leverage today. This result does not hold for a shareholder owned firm. I document stylized facts from the credit union industry and find that they are consistent with the theory's predictions. I discuss empirical implications for other customer owned firms, such as mutual insurance companies and agricultural credit associations.

#### The Shape of Cooperative Communication with Ed Van Wesep

http://ssrn.com/abstract=2464406

It is common for one who has information to share it cooperatively with one who needs it. Perhaps surprisingly, this information is often not communicated in the simplest possible way. For example, Standard and Poor's assigns ratings of at least "B-" to 97% of corporate issues, and segments these issues into 16 categories (AAA, AA, AA-, etc.). A full 7 of these 16 categories are devoted to issues with nearly identical default probabilities, leaving only 9 categories to cover the wide variety of default probabilities found in speculative corporate debt. Equally concerning, Yelp restaurant reviews are predominantly positive, with an average of 3.8 stars out

of 5. This limits the site's usefulness in distinguishing the highest quality fare. I show that the purpose of a reviewer generates the optimal distribution of reviews. If it is most important to separate great from good, then reviews will tend to be harsh, in the sense that most reviews will be below average. If it is most important to separate bad from worst, then reviews will tend to be polite, in the sense that most reviews will be above average. Importantly, politeness and harshness are emergent properties of the optimal messaging rule. Results are consistent with casual observation, and provide testable implications across a variety of settings, including credit reports, analyst ratings, credit ratings, wine ratings, referee reports, customer reviews, grade inflation, and letters of recommendation.

### Constrained Asset Prices with Ed Van Wesep

http://ssrn.com/abstract=2867730

We develop a model of asset pricing in which buyers are either unable or unwilling to buy an asset at a price substantially above its price in recent transactions. This constraint could result from legal restrictions on appraisals, behavioral preferences, or agency problems. The model features momentum, differential pricing for identical assets, "buyers" and "sellers" markets, and associations between price appreciation, volume, and liquidity. We apply the model to the market for residential real estate, in which a bank's willingness to lend for a home purchase is limited by the appraisal, which is, in turn, generated by recent transaction prices of similar properties. We confirm all six predictions of the model, none of which hold in the stock market, which is not subject to this constraint.

### **Presentations**

AFA Ph.D. Poster Session (Scheduled)

Output

Chicago, IL

January, 2017

## **Teaching**

FNCE 3010: Corporate Finance (x2)
University of Colorado at Boulder

BCOR 2200: Introductory Finance
University of Colorado at Boulder

Boulder, CO
Summers 2015, 2016

Boulder, CO
Summer 2015

## **Employment**

University of Colorado at Boulder, Leeds School of Business
Reseach Assistant

University of Colorado at Boulder, Applied Mathematics
Research Assistant

Boulder, CO
Fall 2013 - Present
Fall 2011 - Spring 2013

### **Other Publications**

Bengt Fornberg and **Jordan Martel**. On Spherical Harmonics Based Quadrature Over the Surface of a Sphere. *Advances in Computational Mathematics*, 40(5-6): 1169-1184, 2014.

**Jordan Martel** and Rodrigo Platte. Stability of Radial Basis Function Methods for Convection Problems on the Circle and Sphere. *Journal of Scientific Computing*, 69(2): 487-505, 2016.

# **Awards**

Gerald Hart Graduate Research Fellowship (x2)

University of Colorado at Boulder

Boulder, CO Summers 2014, 2016

University Fellowship for Outstanding Research in Finance
University of Colorado at Boulder

Boulder, CO

Fall 2016

## **Professional Service**

• Graduate Teacher Program Lead University of Colorado at Boulder

Boulder, CO

Fall 2015 – Spring 2016