



THE UNIVERSITY OF  
**CHICAGO**

Department of Statistics

MASTER'S THESIS PRESENTATION

---

JESSICA FOO

Department of Statistics  
The University of Chicago

Using Canonical Correlation Analysis to Uncover Latent  
Macroeconomic Effects on Online Peer-to-Peer Lending

FRIDAY, July 14, 2017, at 11:00 AM  
Jones 304, 5747 S. Ellis Avenue

### ABSTRACT

In the growing online peer-to-peer (P2P) lending market, the role of banks in the credit market is eliminated. We investigate whether macroeconomic conditions have an impact on interest rates of P2P loans, as they have on corporate loans and traditional credit markets. Using canonical correlation analysis, we uncover three latent factors - a macro default factor, a market uncertainty factor and a fundamental market value factor, that explain the common variation in P2P loans across different grade types. However, macroeconomic factors are not sufficient in explaining common variation in P2P loans across different term types.

---

For information about building access for persons with disabilities, please contact Laura Rigazzi at 773.702-0541 or send an email to [lrigazzi@galton.uchicago.edu](mailto:lrigazzi@galton.uchicago.edu). If you wish to subscribe to our email list, please visit the following web site: <https://lists.uchicago.edu/web/arc/statseminars>.