

Washington University in St. Louis

Washington University Open Scholarship

Volume 13

Washington University
Undergraduate Research Digest

Spring 2018

Credit Risk for Customers of a Financial Services Firm

Jessica Pang

Washington University in St. Louis

Follow this and additional works at: https://openscholarship.wustl.edu/wuurd_vol13

Recommended Citation

Pang, Jessica, "Credit Risk for Customers of a Financial Services Firm" (2018). *Volume 13*. 159.
https://openscholarship.wustl.edu/wuurd_vol13/159

This Abstracts J-R is brought to you for free and open access by the Washington University Undergraduate Research Digest at Washington University Open Scholarship. It has been accepted for inclusion in Volume 13 by an authorized administrator of Washington University Open Scholarship. For more information, please contact digital@wumail.wustl.edu.

CREDIT RISK FOR CUSTOMERS OF A FINANCIAL SERVICES FIRM

Jessica Pang

Mentor: Arun Gopalakrishnan

Financial services rely on credit risk scores in order to assess how likely a customer is to pay his or her bills on time, and thus, calculate profitability. An Asian credit card company assesses its customers based off a calculated risk score. This analysis uses customer and marketing data in order to predict how different customer spending and payment behaviors affect future risk scores. Specifically, the variables we evaluated were current and cumulative payment statuses, share of wallet, and whether a customer paid their bill in full amount at this bank and another bank in Asia. After running ordinary least squares, fixed effects, and random effects models, we concluded that last month's and cumulative payment statuses affect a customer's risk score the most, especially if a customer pays beyond the minimum. After controlling for customer heterogeneity, whether a customer paid their bill in full amount was no longer significant. These models could further be used to try to build more sophisticated models to predict when customers might churn based on risk score. With a better understanding of future risk scores, this can contribute to how the company interacts with its customers and overall lead to higher customer satisfaction and profitability.