# Yanchao Yang

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#### **EDUCATION**

Ph.D. in Economics - University of California, Riverside	June 2021(Expected)
M.A. in Economics - University of California, Riverside	2016
B.S. in Financial Engineering - Shanghai Finance University, Shanghai, China	2015
Exchange Student - Lakeland College, Wisconsin	2013-2014

#### **RESEARCH INTERESTS**

Health Economics, Financial Economics, Chinese Economy, Applied Econometrics

#### **WORKING PAPERS**

- 1. *"The Economics of Psychological Well-Being: Evidence From the United States Using Machine Learning Methods"* [Job Market Paper]
- 2. "Unemployment, Negative Equity, and Mortgage Loan Default"
- 3. "Which Matters More to Happiness, Consumption or Saving? Evidence from China"

### WORK IN PROGRESS

- 1. "*The Puzzling Decline in American Birth Weights with Big Data*" with Joseph Cummins, Will Masters
- 2. "The National Psychological Well-Being in China's Transition Period: A Machine Learning Approach"

### PUBLICATIONS

1. "Empirical Analysis of Decision of Transactional Money Demand in China's Transition

Period", Productivity Research, Vol. 264, No.7 2014, pp 152-154.(In Chinese)

#### **TEACHING EXPERIENCE**

Lecturer - University of California, Riverside

• Economic Development: Theory and Policy

Teaching Assistant - University of California, Riverside

- Intermediate Macroeconomics
- Statistics for Economics
- Introduction to Econometrics

Summer 2018-2020

Spring, Winter 2020 Spring 2019 Winter 2017

AWARDS AND CERTIFICATES		
Introduction to Microeconomics	Fall 2016, Winter 2019	
Introduction to Financial Management	Spring 2017	
Intermediate Microeconomics	Winter 2018	

#### HarvardX Data Science Machine Learning Professional Certificate 2020 Dean's Distinguished Fellowship, University of California, Riverside 2016-2020 Non-Residential Tuition Awards, University of California, Riverside 2016-2020 Teaching Assistantship, University of California, Riverside 2016-2020 Outstanding Student Scholarship, Shanghai Finance University, Shanghai, China 2012-2015 Student Scholarship, Lakeland College, Wisconsin 2013 Dean's Academic Honor, Lakeland College, Wisconsin 2013

## SEMINAR PRESENTATIONS

APPAM Regional Student Conference, Claremont Graduate University	March 2018
Applied Economics Brown Bag Seminar, University of California, Riverside	February 2018

#### **PROFESSIONAL AFFILIATIONS**

American Economics Association American Red Cross Member

#### **UNIVERSITY SERVICES**

University of California, Riverside

•	Peer Mentor for First-Year Ph.D. Students	2018
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• Member of Graduate Student Association 2018-2020

### **SKILLS AND LANGUAGES**

Software: Stata, Matlab, R, Eviews, Python, Latex, Microsoft Office

Languages: English(Fluent), Chinese(Native)

#### REFERENCES

Marcelle Chauvet (Dissertation Chair) Professor of Economics University of California, Riverside Tel: +1(951)827-1587 Email: <u>chauvet@ucr.edu</u>

Joseph Cummins Assistant Professor of Economics University of California, Riverside Tel: +1(951)827-1582 Email: joseph.cummins@ucr.edu Aman Ullah Distinguished Professor of Economics University of California, Riverside Tel: +1(951)827-1591 Email: <u>aman.ullah@ucr.edu</u>

Silviu Velovici (Teaching Reference) Lecturer University of California, Riverside Tel: +1(951)827-1475 Email: <u>silviu.velovici@ucr.edu</u>

#### ABSTRACTS

# The Economics of Psychological Well-Being: Evidence From the United States Using Machine Learning Methods [Job Market Paper]

This paper models people's psychological well-being (PWB) by applying machine learning methods to a large dataset in the United States. PWB can be quantified by three self-reported variables: general happiness, satisfaction with the financial situation, and satisfaction with the job. First, we run the K-nearest neighbor (KNN) algorithm for each respective feature to rank the importance of features. We found that marital status has a higher importance score than income for people's general happiness. Prestige score of occupation is the most important predictor of satisfaction with jobs. Next, we utilize the Forward Selection algorithm to find the best combination of predictions. Using this selected combination to predict people's PWB, we achieve 70% classification accuracy when detecting people with disadvantaged PWB. On top of that, we use ordered probit regression to quantify how each feature affects PWB. Lastly, we show that PWB is important to economics by investigating how happiness affects physical and mental health, risky goods consumption, investment decisions, and working behaviors. We find that happier people have better health conditions, smoke and drink less, have more confidence in financial institutions, and generally work more hours.

#### Unemployment, Negative Equity, and Mortgage Loan Default

Which factor triggers the mortgage loan default, the negative equity (owing more on the mortgage than the property is currently worth) or job loss? In this paper, we explore the differential impact of employment status and house prices on mortgage loan default. We use the household-level data, the Survey of Income and Program Participation(SIPP), between 1990-2018 in the United States. Exploiting the heterogeneity in house price changes and variation in employment status across the US states and over time, we find that low-income households are more likely to default because of job loss potentially due to the rigid demand for the house. Households whose number of homeownership are larger than one are more likely to strategically default because of negative equity. We also find that homeowners who applied for unemployment insurance exhibit a lower rate of default. Our findings provide important micro-foundations to the income effect on mortgage loan decisions.

#### Which Matters More to Happiness, Consumption or Saving? Evidence from China

This paper uses the China Household Finance Survey (CHFS) to examine the impact of consumption and saving on household's happiness in China. Using an ordered logistic model, we find that the impact of saving is statistically significant on happiness and its magnitude is larger than the effect of consumption using the full sample. We also show that the high saving rate in China is driven by high labor market risks and preference over homeownership. This paper provides new empirical evidence of the people's preference for consumption and saving in China.