Yuan (Ryan) REN

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EDUCATION

2016 – 2021 (Expected)	National University of Singapore, Ph.D., Finance
2014 - 2017	Renmin University of China, M.A., Quantitative Economics
2010 - 2014	Central University of Finance and Economics, B.A., Economics

FIELDS OF INTEREST

Household Finance, Financial Technology (FinTech), Behavioral Finance, Banking, Applied Micro

REFERENCES

Wenlan Qian (Supervisor)	Associate Professor, Dean's Chair, Department of Finance, NUS *wenlan.qian@nus.edu.sg*
Sumit Agarwal	Low Tuck Kwong Distinguished Professor, Department of Finance, NUS *ushakri@yahoo.com*
Johan Sulaeman	Associate Professor, Dean's Chair, Department of Finance, NUS *sulaeman@nus.edu.sg*

WORKING PAPER

Distracted by the Stock Market: Evidence from Workplace Records **(Job Market Paper)**

- Using administrative data from a large Chinese hospital covering about 560 doctors and 4 million patient visits during 2015–2019, this paper investigates the effect of stock market fluctuations on workplace inattention. Controlling for doctor and time fixed effects, I find that following a one standard deviation increase in stock market volatility in the morning, patients in the same-day afternoon are 2.8% more likely to pay a second visit and switch to an alternative doctor. This effect is significantly stronger for patients suffering from more severe conditions. Corresponding to the deterioration of workplace performance, doctors also provide shorter consultations and are more likely to prescribe medication without performing diagnostics tests after experiencing a volatile stock market. In contrast, consultations in the early morning sections before the market opens and the arrival of patients are not affected. To mitigate the concerns of confounding macro or local economic factors, I show that doctors are not influenced by the return volatility of the forex market, and are not particularly sensitive to local stocks. Overall, this paper highlights a hitherto unexplored cost of stock market participation.
- **Presentation**: NUS; Singapore Scholars Symposium

Missing Repayments on Haze Days: Evidence from the Consumer Credit Market (with Jianwen Li)

- Using data from a leading P2P lending platform in China, this paper investigates how air pollution influences consumers' credit repayment behavior. Consumers are more likely to miss their repayments when the scheduled repayment days witness heavier air pollution. A deterioration of air quality from "excellent" (i.e. Air Quality Index [AQI]<=50) to "severely polluted" (i.e. AQI>300) increases delinquency rates by 2.4%, equivalent to 19% of the sample average. These results are obtained after controlling for city-by-year-month, day-of-week, and loan fixed effects, as well as for local weather conditions. As a falsification test, the probability of outright default is not affected. Further analyses show that consumers in professions involving more outdoor activities, older consumers, or males are significantly more sensitive to air pollution. Consumers who borrow higher amounts from the platform, on the other hand, are less affected. While air pollution-induced delinquency is less persistent and barely reflects

consumers' lack of solvency, it leads to an equally large reduction in credit rating and the success rate of future loan applications.
- **<u>Presentation</u>**: NUS

Housing Booms and Shirking (with Quanlin Gu, Jia He, and Wenlan Qian)
- **Reject and resubmit, *The Review of Economics and Statistics***
- This paper studies the incentive costs of housing booms. We use the type and actual time stamps of 9.3 million credit card transactions by over 200,000 cardholders from a large commercial bank to detect non-work-related behavior during work hours. After positive shocks to house prices, treated employees experienced an immediate and permanent increase (by 8% per month) in their propensity to use work hours to attend to personal needs. The post-shock response is driven by homeowners with greater housing wealth gains, while heavily exposed renters exhibited a decrease in work-time distraction. Furthermore, the effect is more pronounced among employees with lower work incentives or for occupations with higher monitoring costs. Our results offer novel insight into the real effect of house price increase through its distortionary effect on work incentive—our estimate implies an elasticity of shirking propensity with respect to house price of 1.6.
- **<u>Presentation</u>**: NBER/China*; CFRC*; ABFER*; FinTech, Credit, and the Future of Banking conference*; Wisconsin Real Estate Conference*

The Real Impact of FinTech: Evidence from Mobile Payment Technology (with Sumit Agarwal, Wenlan Qian, Hsin-Tien Tsai, and Bernard Yeung)
- We utilize the introduction of a mobile payment technology by the largest bank in Singapore in 2017 to study how mobile payment technology reshapes economic activities and stimulates business creation. After the introduction, business-to-consumer industries witnessed a higher growth rate of business creation by 8.9% per month relative to business-to-business industries, with the effect driven by small firms and more pronounced among industries with a higher cash handling cost. Underlying this pattern is consumers' strong adoption of mobile payment and reduction in ATM cash withdrawals in the post-shock period. The reduced transaction cost also increases consumers' spending capacity, which justifies the business growth. Interestingly, part of the increased consumer demand shows up as credit card spending. The pattern of changes is consistent with the bank's response to the technological change: it reduces ATM machines and allows more credit card opening and higher credit limit. We develop a model that captures the interaction of the consumers, merchants, and banks to rationalize the responses and extend the empirical evidence to understand the key structural parameters that drive the effects of mobile payment technology.
- **<u>Presentation</u>**: AFA (s); ABFER (s); AEA*; Luohan Academy*; NUS*

Mortgage Debt, Hand-to-Mouth Households and Monetary Policy Transmission (with Sumit Agarwal, Yongheng Deng, Quanlin Gu, Jia He, and Wenlan Qian)
- Using a representative sample of credit card holders from a Chinese commercial bank with a 10% credit card market share, we investigate how consumers respond to an unexpected interest rate decrease that automatically reduces interest expenses for all mortgagors in the country and thereby generates significant positive disposable-income shocks. Our difference-in-differences analysis shows that compared with homeowners without mortgage obligations, mortgagors increased their monthly credit card spending by 7.2% after the 230bps mortgage rate reduction announced in September 2008. We find a significant spending response both immediately after the announcement and during the post-reset period. The credit card delinquency rate also decreased after the mortgage rate reset. Subsequent to an interest-rate-increase episode, mortgagors symmetrically reduced their credit card spending. Hand-to-mouth consumers experienced a pronounced spending increase, even among those with a high credit limit, and their response was concentrated in the post-reset period. The debt-service channel plays an important role in transmitting monetary policy—our estimate implies a marginal propensity to consume (MPC) of 0.40-0.51 through credit card spending.

- **Presentation**: AEA; American Real Estate and Urban Economics-ASSA; Cavalcade/Asia-Pacific; IBEFA/Tokyo*; Singapore Scholars Symposium; AREUEA-International Conference;2018 Global PhD Colloquium; NUS
  (* indicates co-author presentation)

PUBLICATIONS

Li, Bing, and Yuan Ren, 2015, **How Does Demographic Structure Affect Current Account Imbalance? Evidence from an Instrumental Variable Estimation (in Chinese)**, ***Economic Research Journal 经济研究***

- Using a panel of 165 countries from 2005 to 2012, this paper investigates how the dependent ratio affects the current account imbalance. Our identification relies on the fact that, during WWII, involved countries experienced a shart birth-rate decline, which was reversed after the war. This variation of birth rate around WWII significantly affects the dependent ratio of the involved countries 65 years later. In contrast to the prediction of the life-cycle theory, an increase in the dependent ratio makes a country more likely to experience a current account surplus, by enhancing households' precautionary saving motives and reducing their willingness to invest.
- Excellent Degree Thesis of Central University of Finance and Economics

TEACHING

2019/2020 SEM 1	Tutor, FIN2704X-Finance, NUS Business School - Teaching evaluation: 4.3 out of 5 (Business School average: 4.1)
2018/2019 SEM 2	Teaching assistant, FIN3012-Investment analysis, NUS Business School
2019/2020 SEM 2	Teaching assistant, BIZ6004-Applied econometrics II, NUS Business School

PROFESSIONAL EXPERIENCE

Ad Hoc Referee	Management Science (*5), Real Estate Economics (*5), Economics of Transition, International Review of Finance, Economic Research Journal
Organizer	Accounting and Finance Joint PhD Student Seminar, NUS Business School, 2020-Now
Review Committee	2021 Midwest Finance Association, household finance session

HONORS & AWARDS

06/2018	Wee Cho Yaw Finance and Banking Scholarship Awards, NUS
06/2016	President's Graduate Fellowship, NUS
09/2015	National Graduate Scholarship from the Ministry of Education of P.R.C.
09/2012	National Scholarship from the Ministry of Education of P.R.C.

CONFERENCE DISCUSSIONS

06/2018	"Household Balance Sheets and Consumption Responses to Income Shocks" *by Cho, Morley, and Singh* - AREUEA-International Conference, Guangzhou, 2019