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Education

Hong Kong University of Science and Technology

Doctor of Philosophy, Economics, 2024 (expected).

Master of Philosophy, Economics, 2020.

Master of Science, Economics, 2018.

Sun Yat-sen University

Bachelor of Economics, Finance 2017.

Research Interests

Macroeconomics, Monetary Policy and Inequality

Working Papers

1. [Overbuilding and Recession: A new Drawback of Housing Market Boom-and-Bust Cycle](#)

- **Abstract:** In this paper I unveil a new mechanism through which a housing market boom leads to a recession after the boom. Overbuilding, the increased construction triggered by optimism or fake news instead of the change in economic foundation, will induce a recession (or amplify the loss and prolong the span of the recession) via scarcity in physical capital as it crowds out physical investment during the boom. Relative intratemporal elasticity of substitution (to intertemporal elasticity), credit constraint and idiosyncratic shock can aggravate this crowd-out effect through intratemporal substitution, liquidity and precautionary saving. In addition to these three engines, wealth distribution also plays an important role in catalyzing these effects and creates feedback loop on inequality problem.
- **Conference** 16th RGS Doctoral Conference in Economics, 7th International Conference on Applied Theory, Macro and Empirical Finance.

2. [The Power of Quantitative Easing: Liquidity Channel vs Interest Rate Channel](#)

- **Abstract:** This paper disentangles the effectiveness of quantitative easing (QE) into two channels: Liquidity (injecting liquidity into the market) and interest rate (twisting the term yield). Through a general equilibrium model with household heterogeneity and financial friction, I demonstrate that they affect the power of QE by altering the liquidity and interest rate channel asymmetrically.

Based on the model and calibration, I conclude that the effect of liquidity channel to stimulation power of QE on output is approximately 1.5 times larger than that of interest rate channel. Meanwhile, the complementarity between household heterogeneity and financial friction plays a vital role in determining the power of QE. In the end, I empirically identify these two channels and support the quantitative result by proposing a new instrument variable in IV-VAR.

- **Conference** RES 2023 Annual Conference, 29th RSEP International Conference on Economics, Finance and Business, 12th International Conference on Economics, Business and Marketing Management, 12th International Conference on Economics and Finance Research, HKUST Macro Group

3. Real Exchange Rate, Leverage and Business Cycles in Emerging Economies with Sihao Chen, Kang Shi, Juanyi Xu

- **Abstract:** In this paper, we document difference in comovement of real exchange rates (RER) with other macroeconomic aggregates between emerging economies and developed small open economies, especially the significant and negative correlation between real interest rate and RER in emerging market economies. Motivated by these observations, we include the RER and real interest rate data in the estimation of a two-sector small open economy RBC model with tradable and non-tradable goods. We find that to explain the RER dynamics and comovement observed in emerging market economies, two features are important. First, imperfect substitution between home and foreign tradable goods are introduced into standard two-sector models to allow for deviation from law of one price in tradable goods. This helps to generate RER volatility relative to output which is consistent with data. Second, the interaction of pecuniary effects of real exchange rate changes and collateral constraint on firms borrowing helps to explain the negative correlation between RER and real interest rate and countercyclical real interest rates. A model with these features does well in matching business cycle moments in emerging market economies, including those related to RER. Finally, our estimation results also identify country premium shock as the major force in driving RER dynamics and output fluctuations, thus providing another evidence supporting the important role of country premium shock and financial frictions in explaining emerging market business cycle. balance sheet effect

Publications

1. (In Chinese) Supply-side economics, essence of supply-side reform and guidance to Chinese economy under new normal, Economic Research Guide, 2018, 1673-291X(2018)-0000-02

Teaching Experience

Hong Kong University of Science and Technology

ECON 6120W Quantitative Macroeconomics(PG), TA, Spring 2023

ECON 5330 Information Economics(PG), TA, Spring 2022

ECON 5250 Macroeconomic Theory I(PG), TA, Fall 2021, 2022

ECON 2174 Mathematics for Economists(UG), TA, Fall 2020

ECON 4234 Labour Economics and Human Resources(UG), TA, Spring 2020, 2021

ECON 3133 Microeconomic Theory II(UG), TA, Fall 2019

ECON 5420 Development Economics(PG), TA, Spring 2019

Awards and Fellowships

HKUST Postgraduate Studentship, 2018-2023

Best thesis Award, Sun Yat-sen University, 2017

Languages and Skills

Language: Mandarin (native), English (Fluent)

Skills: Stata; MATLAB (Advanced); Fortran(Advanced); OpenCL; R(Advanced)