

Zhenghua QI

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EDUCATION

- 08/2019 – Present** **Hong Kong University of Science and Technology**
PhD in Economics
- 08/2024 – 08/2024** **Bank of Italy**
Visiting scholar. Host: Tiziano Ropele
- 08/2023 – 06/2024** **University of California, Berkeley**
Visiting student scholar. Host: Prof. Yuriy Gorodnichenko
- 08/2018 – 06/2019** **London School of Economics and Political Science**
MSc in Finance and Economics
With distinction, full scholarship
- 09/2014 – 06/2018** **Shandong University**
Bec in Finance, transferred from Environmental Engineering
GPA: 91.22/100

RESEARCH

Endogenous Firm Entry and the Supply-Side Effects of Monetary Policy

Working paper, joint with Marc Dordal i Carreras (HKUST) and Seung Joo Lee (University of Oxford)

We present a model of business cycles with endogenous firm entry. In our framework, short-term supply shifts driven by new firm entries become a crucial factor in driving the economy's response to shocks, regardless of whether those shocks originate from the 'supply' or 'demand' blocks. Specifically, an uptick in aggregate demand triggers a cycle of increased firm entry, thereby enhancing aggregate supply and, in turn, further boosting demand through greater purchases of equipment by new entrants. Monetary policy becomes especially powerful, as it simultaneously impacts aggregate demand and the entry decisions of financially constrained firms. This effect is particularly noticeable in economies with a significant potential for new firm entries. Our analytical approach characterizes equilibrium firm entry as a function of the “policy room”, a *sufficient statistic* related to the effectiveness of monetary policy interventions in both the model and the data.

Bank loan reliance and inflation inattention

Working paper, joint with Tiziano Ropele (Bank of Italy)

Utilizing merged Italian firm-level data, we provide causal evidence that firms heavily reliant on bank loans are better informed about inflation and make smaller forecast errors. We also show that financing composition affects how firms learn from new information with randomized control trials. To explain these findings, we develop a partial equilibrium model featuring rational inattention where firms become more attentive when their financing costs are sensitive to aggregate inflation. Inflation impacts the relative cost of external versus internal funding, leading firms to adjust their investment, capital structure, and attention allocation. The heterogeneous financing compositions among firms generate dispersion in inflation expectations. Our model replicates the empirical evidence and offers interesting policy implications.

Diagnostic expectations in housing price dynamics

Mphil thesis, developed into a joint work with Byoungchan Lee (HKUST)

Abstract: Using the Survey of Consumer Expectations, I find the predictability of forecast error on the forecast in housing price growth rate. Overestimation is followed by disappointment in the housing market. To resolve the predictability without rational expectation (RE), I introduce the diagnostic expectation (DE) into a two-agent New Keynesian framework to understand the role of over-optimism from DE in affecting housing price dynamics and business cycles. Firstly, the DE significantly outperforms RE in affecting the responses of housing price, consumption, output, and other variables to TFP shock in magnitude and persistency. The DE plays a significant role in affecting both the extensive and intensive margin of the housing market. Secondly, the DE can generate a positive residential housing value share response that is consistent with data. The key mechanism comes from the strengthened income effect and consumption smoothing under overreaction. Thirdly, the monetary policy rule's impacts on the DE mechanisms suggest important policy implications.

AWARDS

06/2023	Oversea Research Award from HKUST
04/2023	Dean's Postgraduate Scholarship from HKUST
08/2019	Postgraduate Studentship from the HKUST
05/2018	Fully Sponsored by the China Scholarship Council for Postgraduate Study
11/2015	China National Scholarship for Undergraduate Students

SKILLS

Technical Skills: MATLAB, R, Stata, SPSS, EViews

Languages: English (fluent), Mandarin (native)

Student Work: HKUST UG Hall 9 Tutor (2021-2023)