# Zhenghua Qi

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### **BUSINESS ADDRESS**

Department of Economics, 6067 Lee Shau Kee Business Building The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong

### **DESIRED RESEARCH AND TEACHING FIELDS**

Macroeconomics, Monetary Economics, Applied Time Series

Field of concentration: Macroeconomics, Expectations, Firm Dynamics

### **EDUCATION** Hong Kong University of Science and Technology 2019 - 2025 (expected) Ph.D. in Economics Bank of Italy Aug 2024 Visiting scholar. Host: Tiziano Ropele 2023 - 2024 University of California, Berkeley Visiting student scholar. Host: Prof. Yuriy Gorodnichenko London School of Economics and Political Science 2018 - 2019 M.Sc. in Finance and Economics, with distinction 2014 - 2018 Shandong University B.Ec. in Finance

# WORKING PAPERS

- "Bank Loan Reliance and Inflation Inattention" (Job Market Paper), with Tiziano Ropele Abstract: 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 general 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.
- "Endogenous Firm Entry and the Supply-Side Effects of Monetary Policy", with Marc Dordal i Carreras and Seung Joo Lee

Abstract: 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.

### **WORK IN PROGRESS**

• "The Scarring Effects of Macroeconomic Conditions on New Firms"

**Abstract:** This project explores the persistent effects of economic conditions when businesses enter the market on the financing composition over the lifecycle. Since infant businesses' behaviors have sizable aggregate implications in job creation and investment, it is important to understand how the starting conditions affect new firms' ability to obtain financing and their longrun growth potential. Using firm-level data from Orbis and employing the local projection method, I provide new evidence that firms undergo credit contractions in their initial three years, start with a lower debt-to-equity ratio, and maintain this low leverage for the following six years. Additionally, these infant businesses have a larger share of tangible fixed assets, exhibit lower labor productivity, and have a lower investment ratio compared to their older counterparts. I further show that this persistence is linked to financial constraint: infant firms operating in sectors with high external financial dependence exhibit persistent differences in their balance sheet characteristics, productivity, and investment patterns. The empirical findings suggest a story with credit reputation accumulation. Due to imperfect information, a firm's quality is gradually revealed through interactions with financial institutions. Firms born during credit tightening start with low leverage ratios, which hampered their ability to attain external funding in the future due to the slow buildup of their credit reputation. In contrast, older firms whose quality is already better known by the financial market face less persistent impacts from the tighter credit conditions. Meanwhile, the aggregate economic conditions encourage the formation of low-leverage businesses, leading to a compositional effect.

• "Diagnostic Expectations in Housing Price Dynamics", Mphil thesis, with Byoungchan Lee 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.

### PROFESSIONAL EXPERIENCE

#### Research:

Research Assistant for Prof. Byoungchan Lee, Department of Economics, HKUST (2021-2022) Research Assistant for Prof. Marc Dordal i Carreras, Department of Economics, HKUST (2024-2025)

#### **Teaching:**

Teaching Assistant, Department of Economics, HKUST (2019-2024)

Macroeconomics, Money and Banking, The Economics of Entrepreneurship and Innovation, Microeconomic analysis

**Presentations:** (\* for scheduled)

EWMES 2024\*, ESAM 2024\*, CEP brownbag in HKUST, EEA-ESEM 2024, ESAM-China 2024, IAAE-Xiamen 2024, Café Macro in UC Berkeley, GEMS Fall-2023 and GEMS Spring-2024 in UC Berkeley

### FELLOWSHIPS AND AWARDS

2023	Dean's Postgraduate Scholarship from HKUST
2019	Postgraduate Studentship from the HKUST
2018	China Scholarship Council for Postgraduate Study
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)

### REFERENCES

### **Prof. Byoungchan Lee**

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# Prof. Yang Lu

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### Prof. Marc Dordal i Carreras

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