Francesco Beraldi

Address: Department of Economics

Yale University

New Haven, CT 06520-8268

Telephone: (+1) 203-906-4478

E-mail: francesco.beraldi@yale.edu

Web page: www.francescoberaldi.com

Citizenship: Italian, J-1 Visa (no residence requirement)

Fields of Concentration:

Primary field(s): Macroeconomics and Monetary Economics, Financial Economics

Secondary field(s): International Finance

Comprehensive Examinations Completed:

2021 (Oral): Macroeconomics (with distinction), 2021 (Oral): Financial Economics

Dissertation Title: Essays in Macroeconomics and Finance

Committee:

Professor Giuseppe Moscarini (Chair)

Professor Eduardo Dávila (Co-Chair)

Professor Stefano Giglio

Professor Zhen Huo

Education:

Ph.D., Economics, Yale University, 2025 (expected)

M.Phil., Economics, Yale University, 2022

M.A., Economics, Yale University, 2020

M.A., Economics (Allievi Program), Collegio Carlo Alberto, 2019

M.Sc., Economics, University of Turin, 2019

B.A., Economics, University of Turin, 2017

Fellowships, Grants, and Awards:

Economic Growth Center, Yale University, Sylff Research Fund (\$4,500), 2024

Cowles Foundation, Yale University, Carl Arvid Anderson Prize, 2022

Doctoral Fellowship, Yale University, 2019-2024

Allievi Scholarship, Honors Program, Collegio Carlo Alberto, 2014-2019

Unicredit Foundation, Summer School Scholarship, 2017

Teaching Experience:

Yale University

Fall 2023, Teaching Assistant to Prof. John Geanakoplos, Mathematical Economics (U) Spring 2023, Teaching Assistant to Prof. William English, Monetary Policy (MBA and U) Spring 2022, Teaching Assistant to Prof. Giuseppe Moscarini, Macroeconomics (PhD) Fall 2021, Teaching Assistant to Prof. Eduardo Dávila, Financial Economics (U)

Research and Work Experience:

Summer internships:

Federal Reserve Bank of St. Louis, Dissertation Fellow, 2024 Federal Reserve Bank of New York, Dissertation Fellow, 2024 International Monetary Fund, Fund Internship Program, 2022 CEMFI, Research Internship, Supervisor: Prof. Nezih Guner, 2017

Other:

Research Assistant to Prof. Costas Arkolakis and Giuseppe Moscarini, Yale University, 2021

Research Assistant to Prof. Juan Morales, Collegio Carlo Alberto, 2019 WeTaxi, Startup co-founder, 2014-2017

Working Papers:

"Banking Relationships and Loan Pricing Disconnect" (October 2024), Job Market Paper

"Fiscal Multipliers and Phillips Curves with a Consumption Network" with Cedomir Malgieri (August 2024), *R&R* at *American Economic Journal: Macroeconomics*

"Equity Flows in Uncertain Times: the Role of Heterogeneous Information" with Alessandro D. Lavia and Chenping Yang (August 2024)

"The Pricing-Out Phenomenon in the U.S. Housing Market", with Yunhui Zhao (2023), *IMF Working Paper No. 2023/001*

Seminar and Conference Presentations:

Presenter

2024 American Finance Association Meeting (Poster Session), Banco de México, Federal Reserve Bank of New York, Federal Reserve Bank of St. Louis, Carey Finance Conference

Invited Participant

- 2023 Financial Economics of Insurance Workshop, Macro Finance Research Program
- 2022 NBER Heterogeneous-Agent Macro Workshop
- 2021 Princeton Initiative: Macro, Money and Finance

Professional Service

Organizer for Macroeconomics and Finance sessions, Young Economists Symposium (2022)

Languages:

Italian (native), English (fluent), Spanish, Portuguese, French (beginner)

References:

Prof. Giuseppe Moscarini Yale University Department of Economics New Haven, CT 06520 PO Box 208281

Phone: (+1) 203-432-3596 giuseppe.moscarini@yale.edu

Prof. Stefano Giglio Yale University School of Management New Haven, CT 06520 PO Box 208281

Phone: (+1) 203-432-3373 stefano.giglio@yale.edu

Prof. Eduardo Dávila Yale University Department of Economics New Haven, CT 06520 PO Box 208281 Phone: (+1) 203-436-2506 eduardo.davila@yale.edu

Prof. Zhen Huo Yale University Department of Economics New Haven, CT 06520 PO Box 208281 Phone: (+1) 203-432-9598

Phone: (+1) 203-432-9598 zhen.huo@yale.edu

Dissertation Abstract

Banking Relationships and Loan Pricing Disconnect [Job Market Paper]

Competitive credit markets serve as the canonical benchmark for assessing loan pricing. Perfect mobility of firms across lenders implies that lending rates move one-for-one with both the firm's idiosyncratic default risk and the risk-free rate. In practice, long-term relationships between banks and firms are pervasive, suggesting that small deviations from competitive pricing are unlikely to trigger a separation, thus challenging the predictions of competitive markets. How do banking relationships shape loan pricing and ultimately the allocation of capital in the economy?

I answer this question by combining rich administrative data from Mexico's Credit Registry with a model that features heterogeneous firms and banking relationships as optimal contracts. I empirically test and reject the predictions of competitive pricing, finding a stark role for relationships as a source of insurance for firms. First, when a firm borrows again from the same bank, the pass-through of changes in its default risk—as assessed by the bank—to the lending rate is close to zero, but when a firm borrows from a new bank, this pass-through is close to one, as implied by competitive pricing. This finding is robust to using two instrumental variables, which address the endogeneity of the switching decision by leveraging shocks on the bank side that are plausibly orthogonal to the firm. Second, I document a strong history-dependence in credit conditions, a typical feature of long-term insurance arrangements: the default risk of a firm at the onset of a banking relationship is predictive of its borrowing rate several years later, even when controlling for the contemporaneous default risk.

To rationalize these findings, I develop a general equilibrium model where banks compete for borrowers by offering optimal long-term contracts. The model introduces two new elements that

allow for deviations from competitive pricing. First, one-period debt is enforceable, meaning it must be repaid even if a firm switches to a new bank. This ensures that the model has clear definitions of lending rate and default, which are typically absent in contracting models. Second, switching banks is costly, which sustains a commitment to the banking relationship and enables risk-sharing: firms pay higher rates in good times in exchange for cheap credit in bad times when they are more constrained. When switching costs go to zero, the model converges to a competitive credit market, with shocks fully passed through to the lending rate.

The estimated model matches the documented empirical patterns of limited pass-through and history dependence. It also generates new predictions, for which I find strong empirical support. First, firms receive cheap credit, compared to their default risk, when they are not distributing dividends, when their sales decline, and early in the relationship with their bank, when they are typically more constrained. Second, firms are tempted to switch to a new bank when their default risk has declined since the onset of the relationship and thus find themselves disadvantaged by the insurance arrangement.

I use the estimated model to quantify the welfare gains from banking relationships. Compared to an economy with perfect mobility, switching costs strengthen relationships, which improves capital allocation and recovers over 10 percent of the welfare losses from financial frictions. However, when embedded in a New Keynesian framework, banking relationships also dampen the pass-through of monetary and fiscal policy, as banks optimally absorb part of these policy shocks.

Fiscal Multipliers and Phillips Curves with a Consumption Network, with Cedomir Malgieri

We show that households spend their marginal and their average dollar differently across sectors. Crucially, marginal expenditure is biased toward sectors employing workers with a high marginal propensity to consume additional income (MPC), revealing a new redistribution channel that benefits high-MPC workers during expansions. We build a Multi-Sector, Two-Agent, New Keynesian model with non-homothetic preferences consistent with these findings. The new redistribution channel increases the fiscal multiplier by 10pp compared to an equivalent homothetic economy. The model also predicts steeper Phillips curves in sectors with high-MPC workers, a result we validate empirically with a novel identification strategy. The implied sectoral wage dynamics strengthen the redistribution towards high-MPC households and raise the inflationary impact of fiscal shocks by over 70 percent.

<u>Equity Flows in Uncertain Times: the Role of Heterogeneous Information</u>, with Alessandro D. Lavia and Chenping Yang

We study the role of information heterogeneity in determining capital flows during the global financial cycle. When global uncertainty increases, investors retrench toward their home country and the United States. We build a model of portfolio choice and information acquisition with heterogeneous learning costs across countries. Our model replicates the global financial cycle's stylized facts and has new predictions for forecasting accuracy, which we test using micro forecast data. Domestic forecasters better predict their own country's economic outcomes, especially with

increased global uncertainty. However, the US is an exception, where domestic forecasters do not outperform foreign institutions.

The Pricing-Out Phenomenon in the U.S. Housing Market, with Yunhui Zhao

We analyze the pricing-out phenomenon in the U.S. residential housing market due to higher house prices associated with monetary easing. We set up a stylized general equilibrium model and show that although monetary easing decreases mortgage payments, it raises house prices, lowers housing affordability for first-time homebuyers, and increases housing wealth inequality between first-time and repeat homebuyers. We then use U.S. household-level data to quantify the effect of the house price change on housing affordability relative to that of the interest rate change. We find evidence of the pricing-out effect for all homebuyers; moreover, we find that the pricing-out effect is stronger for first-time homebuyers than for repeat homebuyers. The paper highlights the importance of accounting for general equilibrium effects and distributional implications of monetary policy while assessing housing affordability and calls for complementing monetary easing with targeted policy measures that can boost housing affordability, particularly for first-time and lower-income households.