MIT Economics

ALEX CARRASCO

OFFICE CONTACT INFORMATION
MIT Department of Economics
77 Massachusetts Avenue, E52-301
Cambridge, MA 02139
alexcm@mit.edu
https://economics.mit.edu/people//phd-students/alex-carrasco

HOME CONTACT INFORMATION
282 Rear Vassar Street, Apt. H-2
Cambridge, MA 02139
Mobile: 857-251-6296

MIT PLACEMENT OFFICER
Professor David Autor
dautor@mit.edu
617-253-4669

MIT PLACEMENT ADMINISTRATOR
Mrs. Shannon Robinson
shmay@mit.edu
617-324-5857

DOCTORAL STUDIES

Massachusetts Institute of Technology (MIT)
PhD, Economics, Expected completion June 2026
DISSERTATION: "Essays on Macroeconomics"

DISSERTATION COMMITTEE AND REFERENCES

Professor Ivan Werning
MIT Department of Economics
77 Massachusetts Avenue, E52-536
Cambridge, MA 02139
617-452-3662
iwerning@mit.edu

Professor Martin Beraja
UC Berkeley's Haas School of Business
2220 Piedmont Avenue, F677
Berkeley, CA 94720
maberaja@berkeley.edu

Professor Christian Wolf
MIT Department of Economics
77 Massachusetts Avenue, E52-554
Cambridge, MA 02139
617-253-3399
ckwolf@mit.edu

PRIOR EDUCATION

Pontifical Catholic University of Rio de Janeiro (PUC-Rio) 2018
M.Sc. in Economics

Universidad Nacional Federico Villareal (UNFV) 2014
Bachelor in Economics

CITIZENSHIP Peru **GENDER:** Male

LANGUAGES Spanish (native), English (fluent), Portuguese (fluent)

FIELDS Primary Fields: Macroeconomics

Secondary Fields: International Economics, Public Economics

TEACHING EXPERIENCE

Dynamic Optimization Methods (graduate, MIT course 14.451) — 2024
Teaching Assistant to Professor Christian Wolf
(overall rating, 6.2/7.0)

Dynamic Optimization Methods (graduate, MIT course 14.451) — 2022
Teaching Assistant to Professor Christian Wolf
(overall rating, 7.0/7.0)

Economic Crises (graduate, MIT course 14.454) — 2024
Teaching Assistant to Professor Ricardo Caballero
(overall rating, 7.0/7.0)

Economic Crises (graduate, MIT course 14.454) — 2023
Teaching Assistant to Professor Ricardo Caballero
(overall rating, 7.0/7.0)

Economic Crises (graduate, MIT course 14.454) — 2022
Teaching Assistant to Professor Ricardo Caballero

Intermediate Macroeconomics (undergraduate, MIT course 14.05) — 2023
Teaching Assistant to Professor Christopher Cotton
(overall rating, 5.6/7.0)

Intermediate Macroeconomics (undergraduate, MIT course 14.05) — 2022
Teaching Assistant to Professors Chris Wolf & Chris Cotton
(overall rating, 6.6/7.0)

RELEVANT POSITIONS

Research Assistant to Professor Martin Beraja & Chris Wolf — 2021-2022
Research Assistant to Professor Ivan Werning — 2021
Central Reserve Bank of Peru (BCRP)
Senior Analyst in Macroeconomic Modelling Division — 2019-2020
Analyst in Macroeconomic Modelling Division — 2015-2016

FELLOWSHIPS, HONORS, AND AWARDS

Department of Economics Fellowship — 2021
MIT Presidential Fellowship — 2020
FAPERJ Bolsa Nota 10 Scholarship, Highest GPA Award — 2018
CNPq Scholarship for Master in Economics — 2017
Central Bank of Peru Research Award, *First place* in Summer Course — 2015

PUBLICATIONS

"External Shocks and FX Intervention Policy in Financially Dollarized Economies"
(with David Florian-Hoyle)
Journal of Macroeconomics, 2025
Abstract: We examine the role of sterilized FX interventions as a monetary policy tool in response to external shocks for dollarized emerging market economies. Our model highlights an agency problem that limits banks' ability to secure funds in both domestic and foreign currencies, with its intensity linked to currency mismatches in the banking sector. This leads to endogenous

deviations from the standard UIP condition, resulting in a non-neutral FX intervention policy. Sterilized FX interventions stabilize financial conditions not only by stabilizing real exchange rates but also by acting as a balance sheet policy that directly influences credit supply. Our quantitative analysis shows that FX policy rules that counteract exchange rate deviations reduce volatility in interest rate spreads including UIP deviations, credit, investment, and output, leading to significant welfare improvements compared to a flexible exchange rate regime.

RESEARCH PAPERS

"The Endogenous Longevity Channel: Health Investments, Aggregate Savings, and Macroeconomic Policy" (Job Market Paper)

Abstract: Motivated by evidence from U.S. microdata on income gradients in preventive health investment and survival, this paper studies how an endogenous longevity channel, the partial control of life expectancy through health investment, shapes macroeconomic outcomes and the design of public policy. I develop a tractable two-period overlapping-generations model in which health investment determines survival into old age and interacts with saving behavior. In a laissez-faire equilibrium, endogenous longevity generates a non-linear asset–income relationship: at low incomes, health behaves as a luxury good that dampens saving, while at higher incomes, longer expected lifespans strengthen the saving motive, making the asset policy convex. From a normative perspective, when annuity markets are incomplete, individuals extending their lifespan fail to internalize the social costs of longer survival. Under an optimal policy regime, efficiency requires a corrective tax on health investment. In more realistic second-best settings, however, health subsidies become optimal, as they both improve efficiency by compensating for annuity imperfections and enhance equity by narrowing longevity and income inequality. I then build a quantitative model disciplined by U.S. data to assess two applications: (i) how the endogenous longevity channel alters the contribution of demographic and inequality trends to the rise in aggregate saving and decline in real interest rates over the past five decades, and (ii) the welfare effects of alternative policy reforms in preventive health subsidies, pension design, and the progressivity of labor income taxation.

"Reassessing Central Bank Reputation: Beyond Long-Run Expectation"
(with Pedro Martínez-Bruera and Tomás E. Caravello)

Abstract: Central banks conduct monetary policy to satisfy a dual mandate: stabilize inflation and the output gap. This can entail a tradeoff between the two, and the public learns over time how the central bank prefers to balance that tradeoff. We study how to optimally conduct monetary policy in that context. Rather than setting policy to stabilize current conditions, it is optimal for the central bank to build a reputation for a strong willingness to fight inflation—a hawkish reputation. When the public believes the central bank is hawkish, their short-run inflation expectations become less sensitive to shocks, making it easier for the bank to stabilize the economy. We test our theory using cross-sectional variation in private forecasts about inflation and the output gap, and show that the data are consistent with the mechanisms driving our policy prescriptions.

Finally, we show that central banks can closely mimic the sophisticated optimal policy of our model by delegating policy decisions to a myopically conservative central banker.

"Health Dynamics and Annuitization Decisions: The Case of Social Security"
(with Diego Ascarza-Mendoza)
Abstract: Why do two out of three Americans claim Social Security benefits before reaching their Full Retirement Age? Why do even sufficiently rich people claim early very often? This paper resolves this puzzling phenomenon by extending a standard incomplete markets life-cycle model to incorporate health dynamics and bequest motives. Relative to the existing literature, health plays a broader role, affecting not only medical expenses and mortality but also directly the marginal utility of consumption. This role of health is disciplined using microdata on consumption, assets, income, and health from the Health and Retirement Study (HRS) and the Consumption and Activities Mail Survey (CAMS). The calibrated model successfully replicates the fraction of early claimers. Counterfactual exercises show that health-dependent preferences and bequest motives are crucial for this result. The model's success is explained by a novel channel that comes from the interaction between the negative effect of worsening health on the marginal utility of consumption, the downward health trend because of aging, and bequest motives. These two elements reduce the gains from delaying by 1) making individuals more impatient and 2) increasing the strength of bequest motives relative to future consumption. The results suggest that governments aiming to insure against longevity must consider the complementary interaction between individual incentives to insure against longevity and health risks.

"A Financial Frictions Model of FX Intervention in Emerging Market Economies"
(with César Vásquez)
Abstract: Due to structural characteristics such as foreign-currency debt and shallow domestic financial markets, emerging market economies are particularly vulnerable to external shocks. This paper examines the stabilization role of foreign exchange (FX) intervention following an increase in the foreign interest rate. I develop a small open economy model with market segmentation and financial frictions, in which banks are forward-looking and subject to balance sheet effects stemming from exchange rate movements. First, we show that incorporating balance sheet effects allows the model to replicate the empirical response of the uncovered interest parity (UIP) premium to foreign interest rate shocks. An unexpected exchange rate depreciation lowers banks' net worth and raises the UIP premium. Second, we investigate the effectiveness of FX intervention policies in this setting, finding that balance sheet effects are not important in shaping the general equilibrium responses, but the banks' forward-looking behavior is. Finally, we compare the performance of several FX intervention rules proposed in literature and policy.

RESEARCH IN PROGRESS

"Demographics, Real Interest Rate, and Inflation: The Role of Learning about Longevity"
(with Carlos Carvalho and Andrea Ferrero)

"Optimal Design of Pension and Health Systems in Dynamically Inefficient Economies"
(with Diego Ascarza-Mendoza)

"The Distributional Effects of Currency Devaluations in Emerging Market Economies"
(with Christian Velasquez and Hiroshi Toma)

POLICY WRITING

"La Tasa de Interés Natural en una Pequeña Economía Abierta y sus Determinantes"
(with David Florián-Hoyle)
Revista Moneda (BCRP), 2019

"Costos de Reducir la Inflación y la Credibilidad de la Política Monetaria"
Revista Moneda (BCRP), 2016