# CARLOS IVAN BOLIVAR HERRERA

1400 S 2nd St Minneapolis 55404, U.S.A

+1 2023447311 | boliv005@umn.edu | https://carlosbolivar.info/

Citizenship: Colombia (F-1 Visa)

**University of Minnesota** 

Department of Economics 4-101 Hanson Hall 1925 Fourth Street South Minneapolis, MN 55455

U.S.A.

Placement Directors

Kyle Herkenhoff (612) 624-4558 kfh@umn.edu

Aldo Rustichini (612) 625-4816 rusti001@umn.edu **Placement Coordinator** 

Wesley Peterson (612) 625-6859 pete6046@umn.edu

#### **ACADEMIC & RESEARCH INTEREST**

International Macroeconomics, Sovereign Debt, Production Networks, Monetary Policy

#### **EDUCATION**

### University of Minnesota

Ph.D. in Economics

Minneapolis, U.S.A | Sep. 2020-May 2026 (expected)

# Pontificia Universidad Javeriana

M.Sc. in Economics

Bogota, Colombia | Jan. 2016-Jun 2018

#### Pontificia Universidad Javeriana

B.A. in Economics

Bogota, Colombia | Jan. 2012-Dec 2016

#### **DISSERTATION**

Title: "Endogenous Networks, Trade Costs, and Aggregate Volatility"

Advisors: Professor Manuel Amador, Professor Timothy Kehoe, Dr. Javier Bianchi, Dr. Marco Basseto

**Expected Completion:** Summer 2026

#### **REFERENCES**

Professor Manuel Amador (612) 624-4060

amador@umn.edu Department of Economics

University of Minnesota

4-101 Hanson Hall

1925 Fourth Street South

**Professor Timothy Kehoe** (612) 625-1589

tkehoe@umn.edu Minneapolis, Minnesota 55455

**Dr. Javier Bianchi** Monetary Advisor

javier.i.bianchi@gmail.com Federal Reserve Bank of Minneapolis

90 Hennepin Avenue

Minneapolis, Minnesota 55401

**Dr. Marco Bassetto** Monetary Advisor

bassetto@nber.org Federal Reserve Bank of Minneapolis

#### **ACADEMIC & RESEARCH EXPERIENCE**

### Federal Reserve Bank Minneapolis - Research Department

Research Fellow

Minneapolis, United States of America | Sep. 2020 - Current

# University of Minnesota

Instructor for Principles of Macroeconomics

Minneapolis, United States of America | Sep 2020- May 2022

# Inter-American Development Bank – Research Department

Research Fellow

Washington DC, United States of America | Jun. 2018- July 2020

#### Universidad de La Sabana

Adjunct Professor

Bogota, Colombia | Jan. 2018- Jun 2018

#### Pontificia Universidad Javeriana

Research Assistant

Bogota, Colombia | Jun. 2014- Dec. 2016

#### **JOB MARKET PAPER**

Bolivar, Carlos, "The Micro Effects of Aggregate Shocks in Endogenous Trade Networks"

#### **WORKING PAPERS**

Bolivar, Wongrattanapiboon: "Optimal Maturity and Self-Fulfilling Crises"

Bolivar, Wongrattanapiboon: "Debt Sustainability, Confidence Risk and International Reserves"

Bianchi, Bolivar: "Sovereign Debt Crises and Monetary Policy"

Bianchi, Bolivar, Sosa-Padilla: "The Political Economy of Macroprudential Policies and Capital Flows"

Balestrini, Barreto, and Bolivar: "Sovereign Debt, Currency Composition, and Financial Repression"

Bolivar: "Domestic Debt and Self-Fulfilling Crises"

Bolivar, Dueñas, Valencia: "Natural Disasters, Adaptation, and Default Risk"

#### **WORK IN PROGRESS**

Bolivar, Carlos, "Connecting Sovereign Risk and Production Networks"

#### **PRESENTATIONS**

SED 2024, SED 2025, SED Winter 2024, MIDWEST Macro 2023, BSE Summer Forum 2024, BSE Summer Forum 2025, CEBRA 2025, Vigo Workshop 2025

# LANGUAGE AND COMPUTER SKILLS

**Languages:** Spanish (native) | English (Fluent – C1-level)

# ABSTRACT(S)

# "The Micro Effects of Aggregate Shocks in Endogenous Trade Networks" (Job Market Paper)

This paper examines how aggregate shocks affect production networks, introducing a multi county quantitative model in which firms balance cost and risk when choosing suppliers. Increased global uncertainty changes the network, impacting shock transmission and GDP growth. In the model, the effect of reorganization vary by the position on the network. Specifically during crises, firms shift away from central sectors in the production network as they become more risky. The model links 16-20% of the growth of the 2009 GDP to network reorganization. It also predicts that reducing trade costs boosts welfare but increases volatility for most countries in my sample.

# Bolivar, Wongrattanapiboon: "Optimal Maturity and Self-Fulfilling Crises"

This paper revisits the quantitative importance of self-fulfilling risk in the 2010 - 2012 European debt crisis. While a benchmark study by [?] finds a limited role using a Cole-Kehoe framework, we use a Calvostyle sovereign debt model. In our setting, a rollover crisis can occur without a government default—a mechanism more consistent with the empirical observation that countries like Italy never fully lost market access. Calibrating our model to pre-crisis Italy, we filter observed sovereign spreads. In sharp contrast to previous findings, our decomposition attributes a substantially larger role to shifts in investor beliefs, demonstrating that the specific modeling of the crisis mechanism is quantitatively critical.

# Bianchi, Bolivar: "Sovereign Debt Crises and Monetary Policy"

We examine self-fulfilling debt crises in a model of a monetary union with nominal rigidities. In the absence of policy commitment, the model features multiple equilibria, one with low interest rates and another with high rates, echoing the insights of calvo1988servicing. We show that a credible commitment to an *expansionary* monetary policy can eliminate the high-rate equilibrium and thereby avert self-fulfilling crises. Finally, the risk of confidence crises can lead to endogenous fragmentation within the union, as interest rate spreads diverge between countries. This asymmetry creates a trade-off for monetary policy, which must balance the differing conditions faced by high- and low-spread member states.

# Bolivar, Wongrattanapiboon: "Debt Sustainability, Confidence Risk and International Reserves"

This paper analyzes how a government can use reserves to prevent a self-fulfilling crisis, as described in [?], where confidence-driven fluctuations affect bond prices. We propose a three-period model in which the government follows a fixed fiscal surplus rule and chooses the optimal reserve accumulation policy. Our analysis reveals a new mechanism for which debt-financed reserves provide insurance against self-fulfilling crises in the presence of long-term bonds. We also present empirical evidence that governments

tend to accumulate reserves during periods of exceptionally high spreads and show how our theoretical framework could help explain this empirical pattern.

# Bianchi, Bolivar, Sosa-Padilla: "The Political Economy of Macroprudential Policies and Capital Flows"

This paper explores the implications of political economy frictions on the dynamics of credit booms and the design of macroprudential policy. We present an open-economy model of financial crises extended with political turnover, where political parties vary in their inclinations toward regulating financial markets. We show that when the more responsible party is in office, it implements regulations that exceed those that would be optimal in the absence of political frictions. We also draw lessons for the empirical literature on the effectiveness of macroprudential regulation, and show that accounting for political economy frictions can help reconcile the theory with the mixed results from the empirical literature.

# Balestrini, Barreto, and Bolivar: "Sovereign Debt, Currency Composition, and Financial Repression"

This paper examines the interaction between the currency denomination of sovereign debt and the composition of its holders. We document that, in emerging economies, local-currency bonds constitute the main instrument of government debt and are predominantly held by domestic investors. We develop a framework that characterizes the trade-offs governments face when domestic and foreign demand for bonds respond differently to policy changes. Domestic investors prefer local-currency bonds because these assets provide insurance against distortionary taxation. The government internalizes how currency denomination influences domestic demand and default risk, generating a novel endogenous link between the composition of bondholders and the choice of currency. Even abstracting from the standard hedging benefits against output fluctuations, it remains optimal for the government to issue local-currency debt to stimulate domestic demand, consistent with empirical evidence. Finally, we show that imposing minimum domestic holdings of foreign-currency bonds through financial repression can implement the optimal allocation without relying on local-currency issuance.

## "Domestic Debt and Self-Fulfilling Crises"

This paper shows the vulnerability of the government to face a self-fulling crisis characterized by low domestic demand for government bonds associated with a high probability of default. Investor expectations of low domestic demand increase foreign debt and default probability. High default risk decreases bond prices and prompts higher taxes or reduced government transfers. Consequently, domestic demand is low, confirming the initial expectation. I introduce a version of a sovereign debt model with domestic and foreign investors, analyze conditions for multiple equilibria, and establish that the government must announce a sequence of subsidies contingent on aggregate demand to restore efficiency.

# Bolivar, Dueñas, Valencia: "Natural Disasters, Adaptation and Default Risk"

This paper studies the link between sovereign default risk and public investment in climate adaptation, which reduces the economic cost of natural disasters. We develop a sovereign default model that incorporates adaptation investment and quantify its effects on bond prices and fiscal policy. Our empirical analysis shows that countries with higher adaptation levels, measured by the ND-GAIN index, experience lower economic losses from disasters and reduced sovereign risk. We demonstrate that adaptation public investment is inefficiently low due to lack of commitment . Finally, we analyze how sovereign risk influences adaptation policy .