### Cristina Manea

Curriculum Vitae

January 2025

### Economist

Monetary Policy Unit Monetary and Economic Department Bank for International Settlements Phone: + 41 76 350 86 70 Email: cristina.manea@bis.org

### EDUCATION

*PhD in Monetary Economics*, 2014-2020. Universitat Pompeu Fabra, Barcelona, Spain. Excellent cum Laude. Advisors: Jordi Galí, Alberto Martin. Defense Committee: Pierpaolo Benigno, Florin Bilbiie, Federico Ravenna

*MA in Econometrics, research focus,* 2010-2012. Université Catholique de Louvain, Louvain-la-Neuve, Belgium. Grande Distinction. Ranked 1st

*BA in Economics, major in Quantitative Economics*, 2007-2010. Université de Strasbourg, Strasbourg, France. Mention Très Bien. Ranked 1st

### EMPLOYMENT

Economist, Bank for International Settlements, Monetary and Economic Department, Monetary Policy Unit, Basel, Switzerland. September 2022– present. <u>Tasks</u>: research in monetay economics, policy notes for the BIS bimonthly meetings

**Research Economist, Deutsche Bundesbank, Research Center, Frankfurt–am–Main**, Germany. September 2020 – August 2022. <u>Tasks</u>: research, presentations to the Bundesbank's President and to DG Economics, conference organization, contribution to the Bundesbank President's preparations for the BIS bimonthly meetings

- 15 July 31 July 2022 Research visitor Federal Reserve Bank of San Francisco
- 25 May 15 July 2022 Research visitor Federal Reserve Bank of Kansas City

PhD Fellow, Bank for International Settlements, Basel, Switzerland. 2019. (14 Jan–31 March, 1 July–31 Dec). <u>Research projects:</u> "Monetary policy in a world of intangible capital and firm heterogeneity" (with R. Banerjee, B. Hofmann); "BigTech and the credit channel of monetary transmission" (with F. de Fiore, L. Gambacorta); "Financial stability and monetary policy" (with F. Boissay, F. Collard, J. Galí)

**Teaching Assistant, Barcelona Graduate School of Economics, Barcelona**, Spain. 2018 – 2019. <u>Courses</u>: Monetary Economics/Macrofinance for Prof. J. Galí, V. Asriyan and A. Martin

Research Assistant for Professor J. Galí, CREI Research Centre, Barcelona, Spain. 2014 – 2017. Projects: "Monetary Policy, Inflation, and the Business Cycle" textbook (2nd Edition), ECB Sintra Conference May 2015, eight academic publications (including the American Economic Review and Journal of Monetary Economics)

### Intern, Goldman Sachs, Global Investment Research Department, London, UK. Aug-Sept 2015.

<u>Contribution to:</u> a policy paper on the limits of unconventional policy measures with Huw Pill and Alain Durré presented at the U.K. Monetary and Financial Policy Conference on 20/09/2015

Research Analyst, European Central Bank, Monetary Policy Strategy Division, Frankfurt-am-Main, Germany. Jan 2014–Aug 2014. <u>Contribution to:</u> internal research monitor on monetary policy, money market note

Consultant, European Central Bank, Monetary Policy Stance Division, Frankfurt-am-Main, Germany. 15 Aug 2013- Dec 2013. Topic: unconventional monetary policy, monetary-fiscal nexus in New Keynesian models

**Trainee, European Central Bank, Financial Research Division, Frankfurt-am-Main**, Germany. 15 Aug 2012 -14 Aug 2013. <u>Contribution to:</u> regime switching analyses of the interaction of financial stress with the real economy such as Hubrich and Tetlow (2015), *Financial stress and economic dynamics: The transmission of crises*, Journal of Monetary Economics

**Study visit, European Parliament, Regional Development Committee, Brussels**, Belgium. July 2011. Topic: real convergence problems of the Central and Eastern European Union countries

Study visit, European Parliament, Economic and Monetary Affaires Committee, Brussels, Belgium. June 2010. Topic: legal framework, challenges, perspectives for Romania's integration in the Euro Area.

### **RECENT POLICY WORK**

### A. POLICY NOTES/SPEECHES

"November 2024 Global Economy Note", BIS Bimonthly Meetings, joint with Fernando Avalos, Ryan Banerjee, Matthias Burgert, Boris Hofmann and Matthias Rottner, November 2024

"Monetary policy in an era of supply headwinds – do the old principles still stand?", Speech by Andréa Maechler, Deputy General Manager, Bank for International Settlements, at the London School of Economics, London, joint with Ryan Banerjee, Boris Hofmann and Benoit Mojon, October 2024

"Targeted Inflation Targeting?", joint with Damiano Sandri, Boris Hofmann and Benoit Mojon, "New Monetary Policy Frameworks" meetings, Tokyo, Japan, May 2024

"November 2023 Global Economy Note", BIS Bimonthly Meetings, joint with Fernando Avalos, Deniz Igan, and Richhild Moessner, November 2023

"January 2023 Global Economy Note", BIS Bimonthly Meetings, joint with Miguel Ampudia, Fiorella De Fiore and Enisse Kharroubi, January 2023

### **B. PRESENTATIONS**

**Presentation to the BIS Banking Department**: "Monetary policy, financial conditions and real activity: is this time different?" (BIS Bulletin 80, joint with Fernando Avalos, Deniz Igan, and Richhild Moessner), April 2024

**Presentation to the BIS Banking Department, "Pre-bimonthly series"** (BIS January 2024 GEN joint with Miguel Ampudia, Fiorella De Fiore and Enisse Kharroubi), January 2024

**Presentation to Esther George, President Kansas City Fed, FOMC policy cycle**: "Financial stability risks posed by the upcoming monetary policy tightening cycle", July 2022

**Discussion in the DG Economics Deutsche Bundesbank Modeling Group** of the research findings on Big Techs and the credit channel of monetary policy, December 2021

Invitation to discussion with DG Economics of the Deutsche Bundesbank about the paper on monetary policy and financial stability in the context of the ECB Upcoming Governing Council, November 2021

"Jour Fixe Presentation" to the Deutsche Bundesbank President: "Monetary-fiscal interactions subject to the ELB and the fiscal limit" discussing policy prescriptions of own research, April 2021

Comment on the BIS GEM note on monetary-fiscal interactions, April 2021

Discussion in the DG Economics Deutsche Bundesbank Modeling Group of the research findings on monetary policy and financial stability, March 2021

### C. POLICY PAPERS

"Targeted Inflation Targeting: monetary policy responses to demand- and supply-driven inflation", joint with Boris Hofmann and Benoit Mojon, *BIS Quarterly Review Special Feature*, December 2024

"Big Tech, Financial Intermediation and the Macroeconomy", joint with Giulio Cornelli, Fiorella De Fiore, and Leonardo Gambacorta, paper requested for the Annual Boston Fed Research Conference, November 2024

"Monetary policy, financial conditions and real activity: is this time different?", joint with Fernando Avalos, Deniz Igan, and Richhild Moessner, *BIS Bulletin 80*, published in February 2023

"Private debt, monetary policy tightening and aggregate demand", joint with Miguel Ampudia, Fiorella De Fiore and Enisse Kharroubi, *BIS Bulletin 70*, published in February 2023

"Monetary policy in crisis mode, or fiscal policy incognito", joint with Alain Durré and Adrien Paul, Weekly issue 'Goldman Sachs Global Macro Research: European Economics Analyst published on November 26, 2015

### **RESEARCH PAPERS**

## "Monetary policy and Endogenous Financial Crises", joint with Frederic Boissay (BIS), Fabrice Collard (TSE), Jordi Galí (CREI). Revise & Resubmit "Review of Economic Studies"

What are the channels through which monetary policy affects financial stability? Can (and should) central banks prevent financial crises by tolerating higher inflation volatility? To what extent may monetary policy itself brew financial fragility? We study these questions through the lens of a textbook New Keynesian model augmented with capital accumulation and endogenous financial crises due to adverse selection in credit markets. Our main findings are threefold. First, monetary policy affects the probability of a crisis not only in the short-term (through its usual effects on aggregate demand) but also over the medium-term (through its effects on capital accumulation). Second, the central bank can significantly reduce the incidence of financial crises in the medium-term by tolerating higher inflation volatility in the short-term. Third, financial crises tend to occur in the wake of a protracted dis-inflationary boom —possibly combined with loose monetary policy, as the central bank reverses course and hikes its policy rate. NBER Working Paper, BIS Working Paper, Latest version

# "Monetary Tightening and Financial Stress during Supply- versus Demand-driven Inflation", joint with Frederic Boissay (BIS), Fabrice Collard (TSE), Adam Shapiro (FRBSF). Published in "International Journal of Central Banking", forthcoming April 2025

This paper explores the state-dependent effects of a monetary tightening on financial stress, focusing on a novel dimension: whether inflation is driven by supply versus demand factors at the time of the policy intervention. These underlying factors likely affect the economy's financial resilience to a monetary tightening. We estimate the effects of high frequency identified monetary surprises on financial stress, differentiating the effects based on whether inflation is supply- or demand-driven. We find that financial stress increases after a tightening when inflation is supply-driven, whereas it remains roughly unchanged or even declines when inflation is demand driven. BIS Working Paper, FRBSF Working Paper

### "Fintech vs bank credit: How do they react to monetary policy?", joint with Fiorella De Fiore (BIS), Giulio Cornelli (BIS), Leonardo Gambacorta (BIS). Published in "Economic Letters", January 2024.

Fintech credit, which includes peer-to-peer and marketplace lending as well as lending facilitated by major technology firms, is witnessing rapid growth worldwide. However, its responsiveness to monetary policy shifts remains largely unexplored. This study employs a novel credit dataset spanning 19 countries from 2005 to 2020 and conducts a PVAR analysis to shed some light on the different reaction of fintech and bank credit to changes in policy rates. The main result is that fintech credit shows a lower (even non-significant) reactivity to monetary policy shocks in comparison to traditional bank credit. Given the still marginal – although fast growing – macroeconomic significance of fintech credit, its contribution in explaining the variability of real GDP is less than 2%, against around one quarter for bank credit. BIS Working Paper

### "BigTech Credit and the Macroeconomy", joint with Fiorella De Fiore (BIS) and Leonardo Gambacorta (BIS), Top 3 Annual IFABS Best Paper Award, December 2024

We document the recent advent of big techs in finance and study the macroeconomic impact of these developments. To this end, we build a model where big techs facilitate matching between sellers and buyers on a e-commerce platform and extend loans to firms. Big techs reinforce credit repayment with the threat of exclusion from the platform, while bank credit is secured against collateral. Our calibrated model suggests that: (i) a rise in big techs' matching efficiency boosts firms' expected profits on the e-commerce platform, expands the supply of big tech credit, and approaches output to its efficient level, with the effects being amplified in a positive feedback loop; (ii) gains generated by big techs' improved efficiency are limited by the distortionary nature of fees collected from users; (iii) big tech credit can mitigate the transmission of business cycle shocks – most notably monetary policy shocks – to real activity. BIS Working Paper

### "Targeted Taylor Rules: Some Evidence and Theory", joint with Boris Hofmann (BIS) and Benoit Mojon (BIS).

Simple monetary policy rules (either empirical or theoretical) do not depend on the nature of inflation drivers. In this paper we challenge this assumption. Relying on recent methodologies to decompose inflation in demand and supply factors, we find that US monetary policy has historically reacted very strongly to demand–driven inflation, but only weakly to supply–driven inflation. We show that our empirical findings have key implications for the transmission of business cycle shocks, and that targeted Taylor rules akin those estimated in our empirical analysis allow to increase welfare upon conventional (unconditional) Taylor rules when business cycle fluctuations are simultaneously driven by demand and supply factors. BIS Working Paper

### **RESEARCH IN PROGRESS**

### "Firm Heterogeneity, Monetary Policy and Credit Constraints", joint with Ryan Banerjee (BIS)

Literature so far has studied the transmission and optimal design of monetary policy in setups with either only financially-unconstrained firms or with only financially-constrained firms. This paper analyses these questions in an extension of the basic New Keynesian model with both types of firms, and yields a number of novel theoretical insights. (i) The interactions of the two types of firms on input and output markets activate a new transmission channel (the "spillover channel"). Because of this new channel, (ii) aggregate output does not necessarily respond more strongly to monetary policy, and (iii) the optimal design of monetary policy does not necessarily change when the share of constrained firms is higher (contrary to the financial accelerator intuition). The model is used to discuss the responses to monetary policy of financially constrained and unconstrained firms in the UK (based on my second PhD chapter "Monetary Policy with Financially-Constrained and Unconstrained Firms").

#### "Inside-money in the New Keynesian Model"

The textbook New Keynesian framework has become a common tool for monetary policy analysis in central banks. Policy makers are nonetheless often concerned that this framework abstracts away from endogenous money creation, and lacks realism. To address this concern, I introduce endogenous money creation by the private banking sector (like deposits), or "inside money", into the textbook framework. I find that the new "inside money" model has the same equilibrium representation as the textbook "moneyless" one, and hence transmission and optimal design of monetary policy in the two models are identical. Link to latest draft

#### "Monetary Policy subject to an Endogenous Fiscal Limit," joint with Fabrice Collard (TSE)

With their aging populations, many advanced economies are currently facing (i) a rise in structural spending, and (ii) a decline in long-run real interest rates. This project studies how these structural trends may jointly affect the interaction between monetary and fiscal policy. The analysis is conducted within an extension of the basic New Keynesian model with an endogenous fiscal limit and ZLB constraints, solved with global solution methods. Based on previous work on: "Optimal monetary policy with ZLB and fiscal limit constraints", joint with Alain Durré.

"Monetary policy in a World of Intangible Capital and Firm Heterogeneity", with Ryan Banerjee (BIS), Boris Hofmann (BIS). The ratio of intangible to tangible capital ratio in advanced economies has been

raising steadily over the past decades. We study whether/how this trend affects the transmission of monetary policy. Using firm level data, we find that on average firms with a lower ratio of tangible capital (eg more R&D), respond more to monetary policy, and are less levered. We explain this result by the fact that intangible capital being less pledgeable than physical capital these firms are relatively more financially constrained. We use a theoretical model to rationalize these results and to study the implications for monetary policy design.

"Firm Heterogeneity, Investment, and Aggregate Transmission", with Florin Bilbiie (University of Cambridge), Diego Känzig (Northwestern University), and Paolo Surico (London Business School)

"Monetary Policy and Financial Conditions: Insights from a New Composite Index", with Marco Lombardi (BIS) and Andreas Schrimpf (BIS)

### PAPER DISCUSSIONS

"Monetary Policy and Corporate Investment: The Equity Financing Channel", by Ping McLemore (Federal Reserve Bank of Richmond) at the Workshop on Firm Heterogeneity and Macroeconomics, University of Mannheim, December 2024

"CBDC and banks: Disintermediation fast and slow", by Rhyss Bidder, Timothy Jackson and Matthias Rottner, Oxford Saïd – Risk Center at ETH Zürich Macro-finance Conference, June 2024

"Monetary Unions with Heterogeneous Fiscal Space," by Marco Bellifemine (London School of Economics), Adrien Couturier, (London School of Economics), Rustam Jamilov (All Souls College), at the NBER ISOM Conference, June 2024

"Heterogeneous Downward Nominal Wage Rigidity: Foundations of a Nonlinear Phillips Curve", by Stephanie Schmitt-Grohe (Columbia University) and Martin Uribe (Columbia University),  $R \ \ R \ Review \ of Economic Studies$  at the Women in Macro Conference, University of Chicago, Becker Friedman Center, May 2024

"Monetary Policy, Inflation, and Crises: Evidence from History and Administrative Data," by Jose-Luis Peydro (Imperial College Business School, Barcelona School of Economics), Gabriel Jiménez (Banco de España), Dmitry Kuvshinov (Universitat Pompeu Fabra), Björn Richter (Universitat Pompeu Fabra), at the ECB Inaugural conference of the ChaMP Research Network, April 2024

"Money Matters: Broad Divisia Money and the Recovery of Nominal GDP from the COVID-19 Recession", by Michael Bordo and John Duca, Oxford Saïd – Risk Center at ETH Zürich Macro-finance Conference, June 2023

### ACADEMIC PRESENTATIONS

- 2025: ASSA Annual Meetings, San Francisco (January 2025, forthcoming), 35 Year Anniversary of Inflation Targeting Conference, Reserve Bank of New Zealand (March 2025, forthcoming)
- 2024: CREI 30th Anniversary (November 2024), SNB Annual Research Conference (October 2024), BIS Internal Research Seminar (September 2024), QCGBF Annual Conference Kings' College London (July 2024), SED Annual Conference (June 2024), IJCB Annual Conference (June 2024), University of Warwick MIMA (May 2024), BIS-SNB Research Workshop (May 2024), BIS Americas Office (May 2024), Banco de México (May 2024), Deutsche Bundesbank (April 2024), ECB ChaMP Research conference, poster (April 2024), 22nd BIS Research Priority Group on Monetary Policy Frameworks (April 2024), Bocconi University and CEPR Conference on Financial Stability and Regulation (April 2024), Bank of Israel VIMACRO (April 2024), University of St Gallen (March 2024), WE\_ARE\_IN CEPR Research Seminar (March 2024)
- 2023: Hong-Kong Economic Association Conference (December 2024), Dutch Central Bank (December 2023), University of Lausanne (December 2023), Annual EEA Congress (August 2023), University of Auckland (August 2023), ERMAS (July 2023), Oxford Said - ETH Zurich Macro-finance conference (June 2023), Joint Bank of Finland- CEPR conference (June 2023), CESC Barcelona (June 2023), Konstantz Seminar on Monetary

Theory and Policy (May 2023), Padova Macro Talks (May 2023), BIS - SNB Workshop (May 2023), CEFIMO: Academy of Economic Sudies Bucharest (May 2023), BIS Internal research seminar (March 2023), Tinbergen Institute (February 2023)

- 2022: Research Seminar Federal Reserve Bank of New York (December 2022), EUI-Bank de France conference (December 2022), Women in Macro Conference, (September 2022), Workshop on Monetary Policy at Bank of Canada (September 2022), Oslo Macro Conference (September 2022), CEBRA (August 2022), National Bank of Romania (August 2022), ERMAS (July 2022), Federal Reserve Bank of San Francisco (July 2022), Federal Reserve Bank of Kansas City (June 2022), Barcelona Summer Forum - workshop on Monetary Policy and Central Banking (June 2022), Vimacro Bank of Israel (May 2022), NBER Monetary Economics Spring Meeting (March 2022), European Central Bank (March 2022)
- 2021: Bank for International Settlements (December 2021), Deutsche Bundesbank (Friendly Faces Event and Brown Bag seminar, November 2021), National Bank of Belgium (September 2021, presentation by co-author), 36th Annual Congress of the European Economic Association (Copenhagen –virtual, August 2021)
- 2020: 35th Annual Congress of the European Economic Association (Rotterdam -virtual, August 2020), Deutsche Bundesbank (January 2020), Banque Centrale de Luxemburg (January 2020), Bank of Canada (January 2020), Kansas City Fed (January 2020), Richmond Fed (January 2020)
- 2019: BIS Internal research meeting (November 25, 2019), 34th Annual Congress of the European Economic Association (Manchester, August 2019), BGSE PhD Jamboree 6th Edition (Barcelona, May 23, 2019), 15th CIREQ PhD Students' Conference (McGill University, Montreal May 24, 2019)
- 2018: IRES Macro Lunch Presentation, "Université Catholique de Louvain" (October 30, 2018), INFER Workshop on Finance and Fiscal Policy (Bucharest, September 21, 2018), Spring Meeting Young Economists 2018 (Palma de Mallorca), CREI Macroeconomics Lunch (2018)
- 2017, 2016, 2014: CREI Macro Breakfast

### Participation NBER SUMMER INSTITUTE: 2021, 2022, 2023

**REFEREE ACADEMIC JOURNALS** AEJ Macro, European Economic Review, Macroeconomic Dynamics, IJCB, JIMF, Economic Letters, Financial Letters, Economic Inquiry

SELECTION COMMITTEE ACADEMIC CONFERENCES WE-ARE in Macro 2024, IFABS 2023, WE-ARE in Macro 2023, IFABS 2022, CEBRA 2022, joint Bundesbank/Danmarks Nationalbank/Norges Bank Conference 2021

### **CONFERENCE ORGANISATION** (co-organiser)

Research workshop, Federal Reserve Bank of San Francisco – Deustche Bundesbank, November 2022 and January 2023 (two events), jointly with Elmar Mertens and Matthias Rottner

Research workshop, Federal Reserve Bank of Kansas City – Deustche Bundesbank, August 2022 (two events), jointly with Elmar Mertens and Matthias Rottner

Session on Monetary Policy and Financial Stability at CEBRA, 29-31 August 2022, with Mathias Hoffmann (Deutsche Bundesbank), Vivien Lewis (Deutsche Bundesbank), Matthias Rottner (Deutsche Bundesbank)

Lessons from the COVID-19 crisis and prospects for future policy, 13 -14 December 2021, conference organised by the Bundesbank in collaboration with Danmark National Bank and the Norges Bank, jointly with with Francesco Furlanetto (Norges Bank), Mathias Hoffmann (Deutsche Bundesbank), Stephane Moyen (Deutsche Bundesbank), Federico Ravenna (Danmarks Nationalbank), Tobias Renkin (Danmarks Nationalbank).

"Friendly Faces" Research Events Deustche Bundesbank Autumn 2021, Spring 2022, with Elmar Mertens and Matthias Rottner

### THEMATIC COURSES IN MONETARY ECONOMICS

Macroprudential Policies by Nabuhiro Kiyotaki, European University Institute, Florence, Italy, Nov. 2016 Unconventional Monetary Policy, Barcelona Graduate School of Economics, Barcelona, Spain, May 2015 Applied Empirical Analysis in Monetary Economics by Daniel Thorton (Vice President St. Louis FED), IESEG, Paris, France, Sep. 2014

### DISTINCTIONS AND GRANTS

American Economic Association Summer Fellow (2022)

EBES grants for PhD courses, conferences (2016, 2018)

PhD Teaching Grants "Universitat Pompeu Fabra" (2018, 2019), "Universite Catholique de Louvain" (2012)

 $Rank \ 1st \ county \ level, \ distinctions \ national \ level \ at \ the \ annual \ Biology \ (2003, \ 2004) \ and \ Economics \ (2006) \ Olympiads$ 

### COMPUTER SKILLS

Word, PowerPoint, Excel, MATLAB, STATA, RATS, LaTeX, Beamer, notions of Linux bash programming

### LANGUAGES

Romanian: native. English and French: fluent. German: advanced - B2/C1. Spanish: advanced understanding- C1