MARCO DI MAGGIO
COLUMBIA BUSINESS SCHOOL

Division of Economics and Finance
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ACADEMIC POSITIONS

Assistant Professor, Columbia Business School — July 2013-present
Division of Finance and Economics

EDUCATION

Massachusetts Institute of Technology (MIT), 2013
PhD, Economics
DISSERTATION: "Essays on Amplification Mechanisms in Financial Markets"
Committee: Daron Acemoglu, Stephen Ross, Abhijit Banerjee and Andrey Malenko

Northwestern University, Visiting Scholar, 2006-2007

University of Naples Federico II, 2003-2008
Laurea in Economics *summa cum laude* (110/110 *cum laude*)

RESEARCH INTERESTS

Macro-Finance, Household Finance, Market Microstructure, Asset Pricing with Frictions

RELEVANT POSITIONS

Research Associate, Credit Suisse, New York, NY

FELLOWSHIPS, HONORS, AND AWARDS

NBER Household Finance Grant Award (Sloan Foundation) (joint with A. Kermani)
Inquire Europe Research Grant (joint with Marcin Kacperczyk)
J. A. Chazen Institute of International Business Research Grant
Dissertation Grant, Shultz Fund
American Finance Association, PhD Travel Grant
European Economic Association, Travel Grant
George and Obie Shultz Fund Grants
"F. Adipietro" Prize for an outstanding research thesis
MIT Department of Economics, Supplemental Fellowship
"Giovanna Crivelli" Fellowship, Unicredit Group
"Ando-Modigliani" Fellowship, Bank of Italy (declined)

PROFESSIONAL ACTIVITIES

Invited Seminars:

2014-2015: NYU Stern, Federal Reserve Bank of NY, University of Toronto, Cornell University, Einaudi Institute of Economics and Finance, Federico II University.

2013: Stanford GSB, Chicago Booth, Boston College Carroll, Duke Fuqua, Northwestern Kellogg, Harvard Business School, Columbia Business School, UNC Kenan-Flagler, New York University (Stern), Berkeley Haas, Federal Reserve Boards of Governors, Federal Reserve of New York, Federal Reserve Bank of Philadelphia, EIEF, Collegio Carlo Alberto.

Conference Presentations:

Jackson Hole Finance Conference 2015
UBC Winter Finance Conference
Adam Smith Conference Asset Pricing
Adam Smith Conference Corporate Finance
2015 UNC/Duke Corporate Finance Conference

NBER Monetary Economics Fall Meeting 2014
Tel Aviv Finance Conference
Federal Reserve of New York
Cornell University
FMA Meeting
NBER Summer Institute Real Estate
NBER Summer Institute Monetary Economics
Western Finance Association
Bank of Canada "Monetary Policy and Financial Stability" Conference
European Summer Symposium in Economic Theory; Gerzensee
International Finance and Macro finance Workshop, Sciences Po Paris
Barcelona GSE Summer Forum
3rd ITAM Finance Conference 2014
The Financial Intermediation Research Society Meeting Quebec City
CSEF-IGIER Conference - June 2014
2014 SFS Finance Cavalcade
Texas Finance Festival | McCombs Business School
Adam Smith Conference Asset Pricing
American Finance Association (Asset Pricing Theory)
Econometric Society (Financial Regulation and Information)

Sixth Erasmus Liquidity Conference, Rotterdam, The Netherlands 2013
European Finance Association, Cambridge, UK
Ninth CSEF-IGIER Symposium on Economics and Institutions, Capri, Italy
SFS Finance Cavalcade, Miami, FL
Financial Intermediation Research Society, Dubrovnik, Croatia

North American Summer Meeting of the Econometric Society, Evanston, IL 2012
MOOD 12th Workshop in Economic Theory and Econometrics, Rome, Italy
CREI-CEPR conference on "Decision Theory and its Applications"

Workshop on Information in Networks, NYU Stern School of Business 2011
NBER Summer Institute 2011, Cambridge, MA
European Finance Association. Stockholm, Sweden
European Economic Association, Oslo, Norway
Conference on The Economics of Intellectual Property, Software and the Internet, Toulouse

Referee:
American Economic Review, Econometrica, Journal of Finance, Review of Economic Studies, Review of Financial Studies, Journal of Economic Theory, International Journal of Industrial Organization, Management Science.

RESEARCH PAPERS

"Monetary Policy Pass-Through: Household Consumption and Voluntary Deleveraging" (with Amir Kermani and Rodney Ramcharan)

Do households benefit from expansionary monetary policy? We investigate how indebted households' consumption and saving decisions are affected by anticipated changes in monthly interest payments. We focus on borrowers with adjustable rate mortgages originated between 2005 and 2007 featuring an automatic reset of the interest rate after five years. The monthly payment due from the average borrower falls by 52 percent ($900) upon reset, resulting in an increase in disposable income totaling tens of thousands of dollars over the remaining life of the mortgage. We uncover three patterns. First, the average household increases monthly car purchases by 40 percent ($150) upon reset. Second, this expansionary effect is attenuated by the borrowers' voluntary deleveraging, as a significant fraction of the increased income is deployed to accelerate debt repayment. Third, the marginal propensity to consume is significantly higher for low income and underwater borrowers. To complement these household-level findings, we employ county-level data to provide evidence that consumption responded more to a reduction in short-term interest rates in counties with a larger fraction of adjustable rate mortgage debt. Our results shed light on the income channel of monetary policy as well as the role of debt rigidity in reducing the effectiveness of monetary policy.

"Credit-Induced Boom and Bust" (with Amir Kermani)

Can a credit expansion induce a boom and bust in house prices and real economic activity? This paper exploits the federal preemption of national banks from local laws against predatory lending to gauge the effect of the supply of credit on the real economy. Specifically, we exploit the heterogeneity in the market share of national banks across counties in 2003 and that in state anti-predatory laws to instrument for an outward shift in the supply of credit. First, a comparison between counties in the top and bottom deciles of presence of national banks in states with anti-predatory laws suggests that the preemption regulation produced an 11% increase in annual lending. Our estimates show that to this lending increase is associated with a 12% rise in house prices and a 2% expansion of employment in the non-tradable sectors, followed by drops of similar magnitude in subsequent years. Finally, we show that the increase in the supply of credit reduced mortgage delinquency rates during the boom years but increased them in bust years. These effects are even stronger for subprime and inelastic regions.

"Market Turmoil and Destabilizing Speculation"

This paper explores how speculators can destabilize financial markets by amplifying negative shocks in periods of market turmoil. I propose a dynamic trading model with two types of investors -- long-term and speculative -- who interact in a market with search frictions. During periods of turmoil created by an uncertainty shock, speculators react to declining asset prices by liquidating their holdings in hopes of buying them back later at a gain, despite the asset's cash flows remaining

the same throughout. Interestingly, I show that a reduction in search frictions leads to more severe fluctuations in asset prices. At the root of this result are the strategic complementarities between speculators expected to follow similar strategies in the future.

"The Unintended Consequences of the Zero-Lower Bound" (with Marcin Kacperczyk)

Revision requested by *Journal of Financial Economics*

We investigate the effect of the zero-lower bound interest rate policy on money market funds industry. We find that, as the Fed funds rate approaches zero bound, money funds display reaching for yield incentives in that they invest in riskier asset classes and hold less diversified portfolios. The reduction in interest rates also increases the likelihood of funds exiting the market and lowers expenses funds charge to investors. Consistent with the reputation concerns at stake, we find that funds affiliated with large financial institutions are more likely to exit the market while funds managed by independent asset management companies take on relatively more risk. Additional evidence from the Fed's forward guidance policy corroborates the findings.

"Financial Intermediation Networks" (with Alireza Tahbaz-Salehi)

We study a dynamic model of financial intermediation in which interbank lending is subject to moral hazard, where intermediaries can divert funds towards inefficient projects. We show that despite the presence of moral hazard, secured lending contracts can discipline the investment choices of all market participants—even those with whom they are not directly contracting—thus partially overcoming market frictions. Our results provide a characterization of the relationship between the intermediation capacity of the system on the one hand, and the extent of moral hazard, the distribution of collateral and the network of interbank relationships on the other. We use this characterization to show that due to the recursive nature of the moral hazard problem, small changes in fundamentals may result in significant drops in the financial system's intermediation capacity, leading to a complete credit freeze.

"The Value of Trading Relationships in Turbulent Times"
(with Amir Kermani and Zhaogang Song)

This paper investigates how the network of relationships between dealers shapes their trading behavior and liquidity provision in the corporate bond market. First, we show that the market exhibits a clear core-periphery structure, where stronger bilateral relationships significantly reduce transaction costs. We show that dealers tend to provide liquidity during periods of distress to the counterparties with whom they have the strongest tie. However, core dealers exploit their connections at the expense of peripheral ones as well as of the clients, charging higher prices to the latter than to other core dealers. Similarly, being a highly connected and systemically important dealer becomes more valuable during periods of high uncertainty. We then examine the effects of the Lehman Brothers failure on its main counterparties' trading strategies, and show that these suffer in the aftermath of the crisis. These results sheds new light on how these relationships might sometime serve as a buffer in periods of distress, but also on how they increase the fragility of the system, as being connected to more fragile dealers might adversely affect trading outcomes by healthy dealers as well.

"Financial Disclosure and Market Transparency with Costly Information Processing"
(with Marco Pagano)

We study a model where some investors ("hedgers") are bad at information processing, while others ("speculators") have superior information-processing ability and trade purely to exploit it. The disclosure of financial information induces a trade externality: if speculators refrain from trading, hedgers do the same, depressing the asset price. Market transparency reinforces this mechanism, by making speculators' trades more visible to hedgers. As a consequence, asset sellers will oppose both the disclosure of fundamentals and trading transparency. This policy is socially inefficient if a large fraction of market participants are speculators and hedgers have low processing costs. But in these circumstances, forbidding hedgers' access to the market may dominate mandatory disclosure.

"Fake Alphas, Tail Risk and Reputation Traps"

This paper presents a model in which the investment funds' desire to enhance their reputation is decisive in determining the severity of aggregate shocks. Fund managers can generate active returns at a disutility or try to time the market, while investors learn about the manager's skill by observing past returns. During booms, star funds exploit their status by extracting higher rents from investors, while poor performers may end up in a reputation trap, limiting their ability to attract investment. In a crisis, the funds exploit their reputation more frequently and tend to exacerbate fluctuations insofar as in the search for higher short-term returns they expose investors' capital to tail risk. The model's predictions on the effect of volatility, skewness of returns and inflows of funds, are all supported by recent empirical evidence on fund managers' behavior.

"Information Sharing, Social Norms and Performance" (with Marshall Van Alstyne)

Revision requested by *Management Science*

What drives workers to seek information from their peers? And how does communication affect employee performance? We address these questions using an original panel data set that includes all accesses to an information-sharing platform, together with performance measures of all loan officers at a major commercial bank. We show that low skill agents benefit the most from consuming others' information. Moreover, we provide evidence that job rotation destroys specialized human capital, such as soft information about local borrowers. Finally, by instrumenting the demand for information with the exogenous variation arising from differences in social norms among branches, we are able to assess the causal effect of information sharing on performance.

RESEARCH IN PROGRESS

"On the Supply of Complex Mortgages"
(with Amir Kermani and Sanket Korgaonkar)

We take advantage of the pre-emption of national banks from state anti-predatory lending laws as a quasi-experiment to study the effect of deregulation on the supply of complex mortgages (interest only, negative amortization, and teaser mortgages). We first show that following the pre-emption ruling, national banks significantly increased their origination of loans with prepayment penalties and negative amortization features, relative to non-OCC regulated lenders, and lenders in states without anti-predatory lending laws. This increase in the supply of complex mortgages is mainly driven by banks that poorly performed in the previous quarters. Further, we show that in counties

where OCC regulated lenders had larger market share prior to the pre-emption, non-OCC lenders responded by increasing the presence of predatory terms to the extent permitted by the state anti-predatory lending laws. Finally, we examine the effect of such lending on household balance sheets and mortgage default, showing that these households suffered significantly more during the housing crisis. Overall, our evidence is suggestive that the deregulation of credit markets ignited a "race to the bottom" among the distressed financial institutions, working through the competition between lenders.