EIEFNews

EINAUDI INSTITUTE FOR ECONOMICS AND FINANCE

In this issue:

Marco Pagano argues that the perverse feedback loop between sovereign and bank solvency risk could be defused by inducing banks to hold the senior tranche of an internationally diversified sovereign bond (SBBS) instead of domestic sovereign debt.

The Rome Masters in Economics (RoME) started last September with a small class of rigorously selected students. After six months, we have asked them to discuss their experience so far.

Fabrizio Mattesini has joined the EIEF faculty as a Fellow.

EIEF hired a new Visiting Assistant Professor on the 2018 junior market.

Andrea Pozzi, who joined the Institute in 2009 from Stanford University, has become the third tenured Associate Professor at EIEF.

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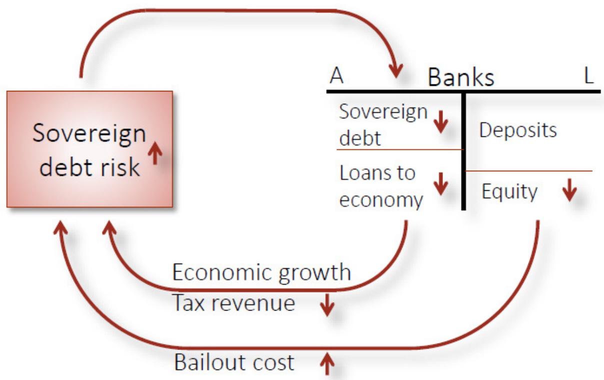
1. The sovereign-bank nexus and the case for Sovereign Bond Backed Securities

by Marco Pagano

The nexus between governments and banks has been the hallmark of the Eurozone sovereign debt crisis: indicators of sovereign and bank credit risk – such as CDS premia and bond yields – spiked together in Greece, Ireland, Italy, Portugal and Spain after the Greek bailout in 2010 and then subsided together in 2012 as the ECB committed to buying distressed sovereign debt. Banks' holdings of domestic sovereign debt have contributed to the strength of this nexus, in two ways.

First, banks' exposures to government debt have amplified the effects of sovereign distress on private credit: when sovereign bond prices dropped, the banks that held these bonds suffered equity losses, which increased their default risk and funding costs, and thus forced the most highly exposed ones to deleverage (see, among others, Altavilla, Pagano and Simonelli, 2017[1]). This mechanism operated in reverse once prices of stressed countries' debt recovered, after Draghi's famous "whatever it takes" speech in July 2012: then, banks most exposed to risky sovereigns experienced the largest capital gains, and this tacit recapitalisation allowed them to expand lending more than others.

Second, banks' sovereign exposures exacerbate the risk of self-fulfilling sovereign crises, as in the diabolic feedback loop models of Brunnermeier et al. (2016)[2] and Farhi and Tirole (2017)[3]: pessimistic beliefs about government solvency that lead to sovereign debt repricing inflict great losses on banks with large sovereign exposures, and trigger bailouts; these in turn increase the likelihood of government default, validating the initial pessimism.



In the Eurozone context, the diabolic loop is aggravated by the highly asymmetric provision of safe sovereign bonds: Germany supplies 83% of triple-A rated euro-denominated sovereign debt. This implies that a crisis in a Eurozone country triggers capital flight towards the countries providing safe assets, as investors seek safer sovereign bonds in which to invest, and correspondingly large spikes in sovereign yield differentials. The Eurozone has been experiencing this flight to safety since 2009, as investors began to question the solvency of some Eurozone sovereigns. Cross-border flight-to-safety compressed non-vulnerable nations' borrowing costs, allowing them to enjoy a "safety premium", while it raised vulnerable sovereigns' borrowing costs correspondingly, and thereby hurt their fiscal solvency even more.

(1) Altavilla, C., M. Pagano, and S. Simonelli (2017), "Bank Exposures and Sovereign Stress Transmission," *Review of Finance*, Vol. 21, Issue 6, pages 2103-2139.

(2) Brunnermeier, M.K., L. Garicano, P. Lane, M. Pagano, R. Reis, T. Santos, D. Thesmar, S. Van Nieuwerburgh, and D. Vayanos (2016), "The Sovereign-Bank Diabolic Loop and ESBies," *American Economic Review Papers and Proceedings*, Vol. 106, Issue 5, pages 508-512.

(3) Fahri, E. and J. Tirole (2017), "Deadly Embrace: Sovereign and Financial Balance Sheets Doom Loops," *Review of Economic Studies*, forthcoming.

Currently, in fiscally vulnerable countries of the Eurozone, banks' domestic sovereign exposures stills stand well above their level in 2010-11. Hence, should there be a resurgence of sovereign stress comparable to that experienced in 2010-11 their contribution to the strength of the sovereign-bank nexus is likely to be at least as significant as in the past crisis.

This underscores the importance and urgency of reducing the considerable exposure of Eurozone banks to their domestic sovereigns. To this purpose, European policy makers should change the current prudential regulatory framework, in which debt issued by Eurozone sovereigns entails no capital charge (it is zero risk-weighted in measuring bank assets' risk) and is not subject to any portfolio concentration limit. This induces banks to invest in risky sovereign debt rather than other assets of similar riskiness. Furthermore, the zero risk weights on sovereign debt enable politicians to encourage local banks to buy sovereign bonds. In sum, the regulatory status quo gives banks a strong incentive to load up on sovereign risk in a socially inefficient way.

However, moving to a regime that encourages the holdings of safer sovereign debt by banks (differentiating the capital charges of various sovereign debts according to their riskiness) would favor the few Eurozone countries that supply AAA-rated euro-denominated sovereign debt—especially Germany, which is their main supplier. This can be avoided by expanding the supply of safe assets, via the issuance of a synthetic security that pools together the safe portions of the various Eurozone sovereign securities, and by providing regulatory incentives to banks to replace their domestic debt holdings with such a security. The proposal of such a sovereign debt securitization was initially put forward by Brunnermeier et al. (2011,[4] 2016 and 2017[5]). Recently, its feasibility has been explored in detail by the report of the High-Level Task Force on Safe Assets (2018)[6] of the ESRB.

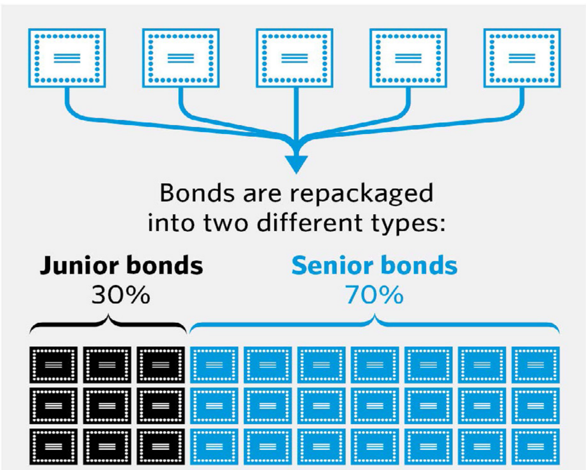
A simple example might help clarify the idea at the basis of this proposal. Imagine two countries, A and B, each with a public debt of 100 billion euros. The debt of country A is safe, while country B might default on its debt: the total provision of safe assets is therefore 100 billion. Imagine also that, if country B were to default, the holder of its debt would recover at most 40 cents on the euro.

(4) Brunnermeier, M.K., L. Garicano, P. Lane, M. Pagano, R. Reis, T. Santos, D. Thesmar, S. Van Nieuwerburgh, and D. Vayanos (2011), "European Safe Bonds (ESBies)," The Euronomics Group.

(5) Brunnermeier, M. K., S. Langfield, M. Pagano, R. Reis, S. Van Nieuwerburgh and D. Vayanos (2017), "ESBies: Safety in the Tranches," *Economic Policy*, Volume 32, Issue 90, pages 175–219.

(6) High-Level Task Force on Safe Assets (2018), "Sovereign bond-backed securities: A feasibility study", European Systemic Risk Board.

Consider now a portfolio that pools together the two debts and whose cash flow can be used to back the issuance of two securities: a senior tranche, whose holders are given seniority in getting their money back (i.e. are the first in line to get repaid), and a junior tranche, whose holders are the residual claimants (i.e. they get whatever is left after the holders of the senior tranche get repaid). It is clear that the maximum possible size of a fully safe senior tranche is 140 billion: even in the worst possible case, there are 140 billion to be distributed, and the holders of the senior tranche could be repaid in full (assuming for simplicity that the interest rate on the senior tranche is zero). In this worst possible case, the holders of the junior tranche would get no repayment: hence the junior tranche is risky, and its holders would ask for an appropriate rate of return to be compensated for the risk they bear. Hence the market value of the junior tranche will be less than 60 billion, so that its holders earn a positive return in the no-default case. Still, the total supply of safe assets would be increased from 100 to 140 billion.



Sovereign Bond Backed Securities (SBBS)

More generally, it is possible to increase the total supply of safe government debt in the Eurozone by creating synthetic euro-wide assets – named Sovereign Bond Backed Securities (SBBS) – by securitizing national government bonds. The issuers of these bonds – either financial institutions or public institutions such as the European Investment Bank – would buy a GDP-weighted portfolio of bonds from Eurozone sovereigns, and use them as collateral to issue two securities: (i) a senior claim on the payments from the sovereign bonds held in the portfolio, and (ii) a junior claim on these payments, which would be first in line to absorb losses arising from the pool of sovereign bonds that backs these issues. The proposal by Brunnermeier et al. (2011, 2016, 2017) referred to the senior claims as European Safe Bonds (or ESBies), and to the junior ones as European Junior Bonds.

Owing to the double protection stemming from seniority and from diversification of country-specific risk,[7] senior SBBS would have virtually no exposure to sovereign risk, and therefore would be an ideal asset for Eurozone banks to diversify their sovereign portfolios. The simulations reported by Brunnermeier et al. (2017) show that with a subordination level of 20% (or more) the senior SBBS would have an expected loss rate lower than German sovereign bonds. Accordingly, it should receive zero weight in the calculation of banks' regulatory capital, and not be subject to any large exposure limit. This would encourage Eurozone banks to hold this senior claim, rather than the riskier bonds issued by their respective sovereigns. Hence, banks could avoid the diabolic loop between their own solvency and that of their sovereign. The availability of such securities would also ensure that flight-to-safety capital flows occur across the two tranches produced by the securitization rather than across national boundaries, thereby avoiding fire sales of national sovereign bonds.

(7) The simple example presented above neglets the advantage of diversification.

The availability of the senior tranche of SBBS would overcome the current scarcity of safe assets in the Eurozone: according to the simulations in Brunnermeier et al. (2017), if the underlying bonds amounted to 60% of Eurozone GDP, SBBS would generate 2.7 trillion euro of additional safe assets – more than doubling the supply of AAA-rated safe assets generated by Eurozone sovereigns relative to the status quo. Also, the issuance of SBBS would reduce the current asymmetry in the supply of safe assets in the Eurozone: being backed by sovereign bonds issued by all Eurozone governments, they would enable fiscally vulnerable countries to participate in the supply of the safe asset that banks are encouraged to hold.

Importantly, SBBS would not create any joint liability by Eurozone member states, and as such are very different from all proposed types of Eurobonds, which imply joint liability. Hence, there is no substantial political obstacle to their creation. Their successful issuance, however, requires Eurozone governments to set common standards for SBBS and remove the current penalizing treatment of securitized assets in terms of capital and liquidity requirements for banks and other intermediaries, in comparison with direct holdings of national sovereign bonds (High-Level Task Force on Safe Assets, 2018).

A key incentive to the issuance of SBBS would be to reform banking regulation by differentiating the capital charges of various sovereign debts according to their riskiness, and recognize the SBBS status as a 'safe asset' in the context of such a reform. Hence, the introduction of SBBS and the reform of the treatment of bank sovereign exposures are complementary policies: on one hand, the availability of SBBS will allow a smoother diversification of banks' sovereign bond holdings, easing the transition to the new prudential regime; on the other hand, the new regime will raise banks' demand for safe sovereign debt securities, thus boosting the demand for SBBS.

2. A view from RoME

The Rome Masters in Economics (RoME) is a small, highly selective two-year graduate program (Laurea Magistrale), offered jointly by EIEF (Einaudi Institute for Economics and Finance) and LUISS (Libera Università di Studi Sociali). It started in September 2017, with the objective of (i) easing and speeding up access to the best PhD programs and the qualified job market; (ii) attracting and retaining talent in Italy; (iii) offering excellence in education for the capable and deserving independently of family background; and (iv) promoting the aggregation of the best academic resources in the Rome area.

The selection of students is based solely on academic merit (see the RoME website for additional information on the structure of the program and financial aid possibilities). For the Academic Year 2017-18 the total applicants to the RoME program amounted to around 90, 38% of which Italians, 25% from Asia, 13% each from other European contries and from Africa, 11% from South America; about 40% of the applicants were women. For the Academic Year 2018-19, the program has already received more than 150 applications.

The current class consists of nine students: four are Italian, the others are from Russia, South America and the United Kingdom; three are females. In the fall term they followed six courses, with an exam at the end of each course, and attended an economics workshop where they presented academic papers on the research fronteer; spring term courses finished at the beginning of March and, after a one-week break, students took the corresponding exams. Compared to current practice in the Italian university, RoME is innovative along several dimensions; after six months we invited the students to (anonymously) answer a few questions about their experience so far, regarding both the program and their life in Rome.

EIEF: ***RoME students must respect an honor code that specifies, among other things, that each exam has to be taken at the end of the corresponding module and cannot be repeated. This is quite different from standard practice in the Italian university, where students can choose when to take an exam and can re-take it if they are not satisfied with the score. Why do you think RoME is organized in this way? Do you see any advantage, for you, or do you mostly regret the lack of flexibility?***

The majority of students has given a positive assessment of the rules adopted by RoME: some of them think it makes the learning process more intense and efficient while others emphasize that it favors cooperative learning and stimulates interactions among skilled peers as the entire class proceeds on the same path; some students, presumably the foreign ones, find the current practice of the Italian university "surprising". They acknowledge that the organization of RoME corresponds to the standards of leading international master's programs, giving RoME students the ability to compete internationally. All in all, the lack of flexibility imposed by this policy is not an issue; on the contrary it is thought to contribute to aiding students in self-organization and productivity. On the other hand, a concern expressed by some students regards the fact that RoME students might end up with a lower GPA than students enrolled in a standard Italian program, where they could get higher scores by re-taking exams. *We are aware that grading at RoME should take this legitimate concern into account, but also believe that this concern will become less pressing once the program garners widespread recognition.*

EIEF: ***RoME is a challenging program, with demanding class assignments, a tight schedule and students are required to have an active role in classes and workshops. Why didn't you choose an easier path? What do you think you will gain by working so hard?***

All students state they have chosen a pretty hard path purposely as, according to their point of view, following a challenging program is the best way to acquire the strong analytical background they need for their future professional career. Some of them claim that in order to be able to express their full potential a hard program must be followed. At the same time, most think that, compared to other programs with the same degree of difficulty, RoME has an advantage as it offers more intense tutoring (due to the small class size) and the opportunity to engage in continuous interaction with the faculty, which aids in negotiating the most difficult hurdles. A couple of students find some tension between working on the class assignments and learning theory. *While class assignments should in fact help students to learn theory, these concerns perhaps reflect the worry that each class assignment is perceived as an additional exam rather than as a learning tool.*

EIEF: ***RoME stresses the need for students to interact and work together, discuss each other's ideas, present papers and class assignment solutions in front of the class, speak frequently, ask questions. Do you find this too stressful? Do you find it useful? Do you think you are learning how to do it?***

All students agree that the opportunity to interact and share ideas with their peers is one of the most interesting features of RoME. A few claim this is one of the hardest part of the program and it is very stressful, but they think that the ability to interact and discuss different points of view is very important for any economist and that the program is very useful in honing these skills.

EIEF: ***RoME, to quote from its website, is "a gateway to the world's best PhD programs and a successful professional career as economist". Do you already know which of these two paths - academic or professional - you would like to follow after completing the program? If yes, which one? If not, which kind of experience and information do you think would be helpful to make up your mind?***

Most students already have clear in mind which path (academic or professional) they are going to follow after completing the program; only a couple of them are still uncertain. Half of them are planning to apply for a PhD, while others would prefer to find a job after completing the program; for the latter the summer internship opportunities offered by RoME are found to be very useful.

EIEF: ***Student life takes place partly at EIEF, partly at LUISS. What do you think about RoME's logistics: classrooms, time schedules, spaces for studying, places you can drink a coffee and have a break, opportunities to meet the members of the faculty? Any suggestions to improve the environment?***

Although the facilities are judged as broadly appropriate, most students are concerned with the need to commute during the day between the two institutions, also taking into account the poor quality of the public transportation system in Rome. *This is a legitimate concern and in the future we will reorganize the schedule in order to avoid, as much as possible, the daily commute.*

EIEF: ***RoME is held in Rome. And Rome is a beautiful and unique city. How much has this influenced your choice? What do you like most about living here? And what do you dislike most?***

Unanimously, the students chose the program solely on the basis of academic considerations. Nevertheless, all students are impressed by the artistic legacy of Rome, its favorable climate and delicious food. That said, due to the heavy workload of the program, some students feel they have few opportunities to enjoy the city life. There is a general consensus that the public transportation system is a major problem. *This is a message that we pass along to the Mayor!*

EIEF: ***The first cohort of RoME students includes two students from Russia, one from Uruguay, one from Peru, one from the UK, and four from Italy (Florence, Pavia, Rome, Sassari). Are the different cultural backgrounds of your fellow students an obstacle to communication, in class and outside the class? Or are they a valuable asset in your cultural growth?***

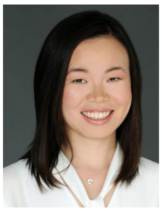
The international environment and the differences in cultural backgrounds are felt by all students as an important opportunity for enriching the quality of education. Some students acknowledge that cultural diversity has played a positive role, but claim that the preexisting heterogeneity in academic background has sometimes caused some tension in the learning process, due to the trade-off between depth and speed; this might also have hindered developing the optimal level of cooperation among peers. *To overcome this problem we will be devoting some classes, at the beginning of the program, to level out possible differences in the training background.*

EIEF: ***If you were to name one single aspect of RoME that we should emphasize in trying to recruit the new cohorts of students, what would that be?***

For the majority of students, one aspect that should be emphasized is the opportunity to interact with the faculty in classes, coffee breaks and workshops. It was also mentioned that the option for internships in the summer of the first year should be advertised more.

3. New People at EIEF

Fabrizio Mattesini has joined the EIEF Faculty in April 2018 as a Fellow. Fabrizio is a Full Professor of Economics and Chairman of the Department of Economics and Finance at the University of Rome "Tor Vergata". He has a Ph.D in Economics from New York University and has been a Visiting Scholar at the University of Pennsylvania, an Associate and Assistant Professor of Economics at the University of Molise (Campobasso), and Jean Monnet Fellow at the European University Institute (Florence). His research focuses on monetary theory, macroeconomics and theory of banking and, in these fields, he has published several articles in top international journals such as Econometrica, Journal of Political Economy and the Review of Economic Studies. He has also directed a few research projects financed by the Ministry of Education (PRIN). At EIEF, Fabrizio will be teaching courses in Monetary Theory for RoME and for the Graduate Program and will be involved in a research project on *"Private Money Creation and Liquidity"* together with other EIEF's researchers.



In January 2018 EIEF participated in the **junior job market** in Philadelphia and hired one new Visiting Assistant Professor: Liyan Shi from the University of California, Los Angeles, who will join the EIEF faculty next summer.

Liyan Shi's main fields of interest are macroeconomics, firm dynamics, and labor economics. Her job market paper: "Restrictions on Executive Mobility and Reallocation: The Aggregate Effect of Non-Competition Contracts" analyzes the welfare implications of non-compete clauses in managerial contracts. The stated purpose of non-compete clauses is to protect firms from losing the benefits of their own investment in human capital but this comes at the cost of restricting potentially valuable managerial reallocation. Liyan studies the welfare effects of non-compete clauses both at the theoretical and empirical level. On the theory side, she develops a dynamic model where non-compete clauses protect firm investments from holdup, while restricting mobility and thus the optimal reallocation of managerial talent across firms. On the empirical side, Liyan constructs an original dataset of managerial contracts with and without non-compete clauses, with variation in the use of non-compete clauses due to differences across states in their regulation. It turns out that in her data sample, including almost 10,000 firm-executive employment relations, 64% of the executives are subject to non-compete clauses and exhibit 14% less mobility while investments are 9% higher in the employing firms. Matching moments in her dataset on wage profiles, mobility and investment, she assigns paramenter values in the model so that she can perform a series of counterfactuals. In particular, she finds that banning non-compete clauses would lead to welfare gains of about 4%, relative to laissez-faire.

4. Conferences and other events

In 2017 EIEF hosted or organized, in co-operation with other institutions, several conferences and events. Some highlights are presented below, while further information is available here or by clicking on the links below.

In May, EIEF hosted and organized the 2nd Rome Junior Finance Conference. The goal of the conference was to bring together junior researchers active in empirical and theoretical finance and create an opportunity for informal discussions and other academic-related activities. The presenters included: Anas Babus (Federal Reserve of Chicago), Song Ma (Yale School of Management), Boris Vallée (Harvard Business School), Pavel Zryumov (Wharton School-University of Pennsylvania)

In June, EIEF hosted and organized the 2nd Rome Junior Conference on Applied Microeconomics. The aim was to foster interaction and dissemination of ideas among researchers active in different areas of applied microeconomics. The presenters included: Emily Breza (Harvard University), Daniel Garret (Toulouse School of Economics), Joshua Gottlieb (Vancouver School of Economics), Christopher Nelson (Princeton University), The conference was preceded by a one-day Doctoral Workshop to give young economists the chance to receive feedback on a preliminary version of their job-market paper.

Always in June, EIEF hosted and organized the sixth edition of the "Rome Conference on Macroeconomics", a.k.a. "Pizzanomics". The spirit of this event is to bring together brilliant economists from around the world with a strong interest in macroeconomics in order to discuss pioneer research in a friendly and highly interactive environment. The presenters included: Martin Beraja (MIT), Jennifer La'O (Columbia University), Ezra Oberfield (Princeton University), Juan Passadore (EIEF). Lunch was, of course, pizza-based.

In August, the International School of Economics at Tbilisi State University (ISET) with the support of EIEF, the Tbilisi State University and the Italian Embassy in Tbilisi (Georgia) organized a Workshop on Innovation and Entrepreneurship, held in Tbilisi. The objective was to bring together researchers active in the field and to create a discussion opportunity with local academics and policy makers.

In October, the CEPR Network on Household Finance, EIEF, University of Naples Federico II, and the Swedish House of Finance, with the partial support of the Think Forward Initiative (TFI), as well as further support from Copenhagen Business School, HEC Paris, and Observatoire de l'Epargne Européenne, organized the eighth edition of the European Conference on Household Finance,held in Alghero (Sardinia). The aim of this annual conference is to present the state-of-the art empirical research and empirically motivated theoretical research on household financial behavior. The participants included: Luigi Guiso (EIEF), Michael Haliassos (Goethe University Frankfurt), Monica Paiella (University of Naples), Andy Schwartz (University of California, Berkeley).

In November, EIEF hosted the 2017 edition of the annual workshop on "New Developments in Econometrics and Time Series". The program included time series, high dimension statistics, quantiles, statistical depth and their applications in economics. The participants included: Manfred Deister (EOS-TUWien), Holger Dette (Ruhr-Universitaet Bochum), Marc Hallin (ECARES-ULB), Marco Lippi (EIEF).

Forthcoming Conferences and Workshops in 2018

On April 6-7, EIEF hosted and organized the conference *"Recent Developments in Macroeconomics"*. The conference was funded by the ERC Advanced Grant awarded to Francesco Lippi for his research on "The Macroeconomic Effects of Microeconomic Inaction" (N° 324008 - MEF). The program is available here.

On April 12-13, EIEF hosted the *"3rd Annual Workshop on Economics of Platforms"*. Emphasis was given to business models, competitive strategies, as well as antitrust and regulation issues related to platforms' business practices. The program is available here.

On June 5-6, EIEF will host the *"3rd Rome Junior Finance Conference"*. Further information will be available here.

On June 11-12, EIEF will host the *"7th Rome Conference on Macroeconomics"*. Further information will be available here.

On June 21-22, EIEF will host the *"3rd Rome Junior Conference on Applied Microeconomics"*. Further information will be available here.

On December 20-21, EIEF will host the *"8th EIEF-UNIBO-IGIER Bocconi Workshop on Industrial Organization"*. Further information will be available here.

5. Visitors

Fall 2017/Spring 2018

Treb Allen
Dartmouth College

Fernando Alvarez
University of Chicago

Luca Anderlini
Georgetown University

Mark Armstrong
All Souls College Oxford

Paul Beaudry
Vancouver School of Economics

Saki Bigio
Columbia University

Tobias Broer
Stockholm University

Leonardo Bursztyn
University of Chicago

Maria Cecilia Bustamante
University of Maryland

Robert Chirinko
University of Illinois at Chicago

Rahul Deb
University of Toronto

Jeffrey Ely
Northwestern University

Andreas Fagereng
Statistics Norway

Maryam Farboodi
Princeton University

Mark Gradstein
Ben-Gurion University of the Negev

Marina Halac
Columbia Business School

Douglas Hanley
University of Pittsburgh

Joseph Harrington
University of Pennsylvania, Warton School

Clifford Holderness
Boston College

Alberto Holly
Université de Lausanne

Namrata Kala
MIT Sloan School of Management

Karam Kang
Carnegie Mellon University

Anastasios Karantounias
Federal Reserve Bank of Atlanta

Hubert Kempf
Ecole Normale Supériore Paris-Saclay

Anastasia Litina
University of Ioannina

Giuseppe Lopomo
Duke's Fuqua School of Business

Alexander Ludwig
SAFE

Andrey Malenko
MIT Sloan School of Management

Nadya Malenko
Boston College

Marco Manacorda
Queen Mary University of London

Adrien Matray
Princeton University

Kiminori Matsuyama
Northwestern University

Guido Menzio
University of Pennsylvania

Christopher Neilson
Princeton University

Guillermo Noguera
Yale University

Gautam Rao
Harvard University

Alejandro Rivera
University of Texas at Dallas

Maryam Saeedi
Carnegie Mellon University

Dov Samet
Tel Aviv University

Alan Schwartz
Yale Law School

Ali Shourideh
Carnegie Mellon University

Zachary Stangebye
University of Notre Dame

Colin Stewart
University of Toronto

Aleh Tsyvinski
Yale University

Pierre Yared
Columbia Business School

Stephen Yeaple
Pennsylvania State University

William Zame
University of California, Los Angeles

Joseph Zeira
The Hebrew University of Jerusalem

Further information on 2018 Visiting Program is available here.

6. Grants

In Fall 2016 EIEF invited applications to fund four new, one-year research projects, carried out by young researchers based in an Italian institution. In May 2017 EIEF awarded four new grants to:

Emilio CALVANO
Alma Mater Studiorum - Università di Bologna and CSEF
"Does Ability, as Perceived by Others, Affect Popularity?"
Team members: Giovanni Immordino (Università di Napoli Federico II and CSEF) and Annalisa Scognamiglio (Università di Napoli Federico II and CSEF).

Stefano COMINO
Università degli Studi di Udine
"The Origin of Patent Protection: Evidence from the Renaissance Venice's Patent System".
Team members: Alberto Galasso (Rotman School of Management) and Clara Graziano (Università degli Studi di Udine)

Elena Lucchese
Alma Mater Studiorum - Università di Bologna
"Emergency Medical Performances: Why and How Should we Care?"

Enrica Maria Martina
Università degli Studi di Torino
"Back to Black? The Impact of Regularizing Migrant Workers".
Team members: Edoardo Di Porto (Università di Napoli Federico II and CSEF) and Paolo Naticchioni (Università di Roma 3 and IZA).

In Fall 2017 EIEF invited again applications to fund four new research projects. 29 proposals were received and the process of selection has already started. The list of awarded grants will be available here.

Published Projects financed by EIEF Grants

In the following, we provide the list of research projects financed by EIEF Grants which were published in international peer-reviewed journals. Given the long time needed for publication, for more recent years the list is obviously incomplete.

Grants 2008

"Non-exclusive competition in the market for lemons" by **Andrea Attar**, with Thomas Mariotti and Francois Salanié, **Econometrica**, 2011, Volume 79, Issue 6, pages 1869-1918.

Latent Markov Models for Longitudinal Data (book) by **Francesco Bartolucci**, with Antonietta Mira, Fulvia Pennoni and Alessio Farcomeni, **Chapman&Hall/CRC**, March 2013.

"Cooperative strategies in anonymous economies: an experiment" by **Marco Casari**, with Gabriele Camera and Maria Bigoni, **Games and Economic Behavior,** 2012, Volume 75, Issue 2, pages 570-586.

"Life expectancy, schooling, and lifetime labor supply: Theory and evidence revisited" by **Matteo Cervellati**, with Uwe Sunde and Paolo Vanin, **Econometrica,** 2013, Volume 81, Issue 3, pages 2055-2086.

"Tenure in Office and Public Procurement" by **Decio Coviello**, with Stefano Gagliarducci, **American Economic Journal: Economic Policy**, 2017, Volume 9, Issue 3, pages 59-105.

"Indirect Effects of a Policy Altering Criminal Behavior: Evidence from the Italian Prison Experiment" by **Francesco Drago**, with Roberto Galbiati, **American Economic Journal: Applied Economics,** 2012, Volume 4, Issue 2, pages 199-218.

"Effective Reminders" by **Mattia Nardotto**, with Giacomo Calzolari, **Management Science**, 2017, Volume 63, Issue 9, pages 2915-2932.

Grants 2011

"In a Small Moment: Moral Hazard and Class Size in Italian Mezzogiorno" by **Erich Battistin** and **Daniela Vuri**, with Joshua Angrist, **American Economic Journal: Applied Economics**, 2017, Volume 9, Issue 4, pages 216-249.

"Minimality of State Space Solutions of DSGE models and Existence Conditions for their VAR Representation" by **Massimo Franchi**, with Paolo Paruolo, **Computational Economics**, 2015, Volume 46, Issue 4, pages 613-626.

"Social Risk and the Dimensionality of Intentions" by **Joshua Miller**, with Jeffrey Butler, **Management Science**, forthcoming.

"The Preference for Belief Consonance" by **Luca Zarri**, with Russel Golman, George Loewenstein and Karl Ove Moene, **Journal of Economic Perspectives,** 2016, Volume 30, Issue 3, pages 165-188.

Grants 2012

"Preference Shifts and the Change of Consumption Composition", by **William Addessi**, **Economics Letters**, 2014, Volume 125, Issue 1, pages 14-17.

"Impact of Changes in Consumer Preferences on Sectoral Labour Reallocation: Evidence from the Italian Economy" by **William Addessi,** with Federico Sallusti and Manuela Pulina, **Oxford Bulletin of Economics and Statistics**, 2017, Volume 79, Issue 3, pages 348-365.

"Earthquakes, Religion, and Transition to Self-Government in Italian Cities", by **Marianna Belloc**, with Francesco Drago and Roberto Galbiati, **Quarterly Journal of Economics**, 2016, Volume 131, Issue 4, pages 1875-1926.

"Organized Crime and Electoral Outcomes. Evidence from Sicily at the Turn of the XXI Century" by **Paolo Buonanno**, with Giovanni Prarolo and Paolo Vanin, **The European Journal of Political Economy**, 2016, Volume 41, pages 61-64.

"Sovereign Credit Risk, Liquidity and ECB Intervention: Deus ex machina?" by **Loriana Pelizzon**, with Davide Tomio, Jun Uno and Marti G. Subrahmanyam, **Journal of Financial Economics,** 2016, Volume 122, Issue 1, pages 86-115.

Grants 2013

"CEO Compensation, Regulation, and Risk in Banks: Theory and Evidence from the Financial Crisis", by **Oliviero Toscano**, with Vittoria Cerasi, **International Journal of Central Banking**, 2015, Volume 11, Issue 3, pages 241-297.

"When Foul Play Seems Fair: Exploring the link between just deserts and honesty", by **Raimondello Orsini**, with Fabio Galeotti and Reuben Kline, **Journal of Economic Behavior and Organization**, 2017, Volume 142, pages 451-467.

7. Graduate Program

The start of RoME prompted EIEF to modify the courses it offers to Ph.D. students (Graduate Program), so as to better integrate them with the RoME program. In particular, in the academic year 2017-18, the review classes in Micro, Macro, Econometrics and Finance, previously held in September-October, were dropped not to overlap with first-year RoME courses.

As in the RoME program, the Graduate Program is now organized into two terms (Fall and Spring) both consisting in two modules; exams are taken at the end of each module.

The topics covered in the Fall 2017 term were: Asset Pricing, International Macro, Topics in Macroeconometrics, Topics in Entrepreneurial Finance, Models with Heterogeneous Agents, Experimental Economics and Topics in VAR Modeling. Further information on these courses is available here.

The courses offered in the Spring 2018 term include: Monetary Economics, Policy Evaluation, Firm Dynamics, Household Finance, Econometric Theory, Empirical Banking, Methods in Continuous Time Finance and History of Macroeconomics. Further information on these courses is available here.

8. Seminars

As in previous years, EIEF has organized an intense program of seminars. The Institute offers two weekly seminars (one more macro/theory and the other more applied/empirical) and less regular series of lunch seminars and special lectures.

Regarding the **macro/theory** series, presenters included: **Yeon-Koo Che** (Columbia University), **João Cocco** (London Business School), **Manuel García-Santana** (Barcelona GSE), **Nicola Gennaioli** (Bocconi University), **Veronica Guerrieri** (Chicago Booth School of Business), **Philipp Kircher** (University of Edinburgh), **Doron Y. Levit** (University of Pennsylvania), **Guido Lorenzoni** (Northwestern University), **Martin Oehmke** (Columbia Business School), **Nicola Pavoni** (Bocconi University), **Joseph Pijoan-Mas** (CEMFI), **Matthew D. Shapiro** (University of Michigan), **Kjetil Storesletten** (University of Oslo), **Aleh Tsyvinski** (Yale University), **Pietro Veronesi** (Columbia Business School).

Regarding the **applied/empirical** series, presenters included: **Jaap Abbring** (Tilburg University), **Joseph Altonji** (Yale University), **Eric J. Bartlesman** (Tinbergen Institute), **Paul Beaudry** (University of British Columbia), **Wouter Dessein** (Columbia Business School), **Michela Giorcelli** (University of California, Los Angeles), **Avi Goldfarb** (Rotman School of Management), **Toru Kitagawa** (University College London), **Alexandre Mas** (Princeton University), **Massimo Motta** (Barcelona GSE), **Ariel Pakes** (Harvard University), **Isabelle Perrigne** (Rice University), **Jean-Marc Robin** (Science Po, Paris), **Pasquale Schiraldi** (London School of Economics), **Daniel Strum** (London School of Economics).

Further information on past and forthcoming seminars is available here.

9. Latest Working Papers

Highlights of some recent EIEF Working Papers are presented below. The full list is available here.

WP 2018/05

In "The IT Revolution and Southern Europe's Two Lost Decades" **Fabiano Schivardi**, with Tom Schmitz, observes that since the mid-Nineties productivity growth in Southern Europe has been much lower than in other developed countries. The authors claim that this negative performance has been partly caused by the interaction between IT revolution and inefficient management practices in place at Southern European firms. To quantify this effect they calibrate a multi-country general equilibrium model using firm-level evidence. In their model, management practices and IT adoption interact in three ways: inefficient management limits Southern firms' productivity gains from IT adoption; IT increases the aggregate relevance of management, making its inefficiencies more crucial; IT-driven wage increases in other countries stimulate high-skilled workers' emigration from Southern countries. The authors show that inefficient management can account for 28% of Italy's, 39% of Spain's and 67% of Portugal's lower productivity growth compared to Germany between 1995 to 2008.

WP 2018/04

In "Fiscal Rules as Bargaining Chips" **Facundo Piguillem**, with Alessandro Riboni, observes that in recent years fiscal rules have been adopted by more and more countries. Though most fiscal rules can be overridden by consensus, they show that this possibility does not make fiscal rules ineffectual: as they determine the outside option in case of disagreement, the opposition uses fiscal rules as "bargaining chips". Then the party in power offers spending concessions to the opposition to avoid the application of the fiscal rule. This political bargain has two main implications. Firstly, the accumulation of debt becomes more costly because the opposition will only agree to bypassing the fiscal rule in exchange for more spending on the public goods they prefer. Secondly, the expectation of future compromise increases the benefit of transferring resources to the future. All in all, the paper shows that the incentives for inefficient debt accumulation are reduced, leading to a favorable assessment of fiscal rules.

WP 2018/02

In "Comments on 'Unobservable Selection and Coefficient Stability: Theory and Evidence' and 'Poorly Measured Confounders are More Useful on the Left Than on the Right'", **Franco Peracchi**, with Giuseppe De Luca and Jan R. Magnus, establish a linkage between the approaches proposed by Oster (2017) and Pei, Pischke and Schwandt (2017) which contribute to the development of inferential procedures for causal effects in the challenging and empirically relevant spending on the public goods they prefer. Secondly, the expectation of future compromise increases the benefit of transferring resources to the future. All in all, the paper shows that the incentives for inefficient debt accumulation are reduced, leading to a favorable assessment of fiscal rules.

WP 2018/03

In "War of the Waves: Radio and Resistance During World War II", **Stefano Gagliarducci**, with Massimiliano Onorato, Francesco Sobbrio and Guido Tabellini, analyze the role of the media in the context of the Nazi-fascist occupation of Italy between 1943 and 1945, and of the related civil war between fascist and partisan forces. In particular, the paper studies the effects of the BBC counter-propaganda (*Radio Londra*) on the intensity of the partisan and civilian resistance. To this aim it exploits exogenous time and geographic variation in the BBC signal strength across Italian municipalities to predict the number of episodes of violence perpetrated by the Nazi-fascists in response to partisan or civilian resistance. The main result is that a 10% increase in the BBC signal strength increases the number of episodes of Nazi-fascist violence by more than 2.5 times, relative to the monthly average.

10. Recently published papers

Forthcoming

"*Influencing Connected Legislators*", Marco Battaglini and Eleonora Patacchini, **Journal of Political Economy**.

"*Comparing Procurement Auctions*", Francesco Decarolis, **International Economic Review**.

"*What Drives Women out of Management. The Joint Role of Testosterone and Culture*", Luigi Guiso (with A. Rustichini), **European Economic Review**.

"*Time Varying Risk Aversion*", Luigi Guiso (with Sapienza. P., and L. Zingales), **Journal of Financial Economics**.

"*Pre-Commercial Procurement, Procurement of Innovative Solutions and Innovative Partnerships in the EU: Rationale and Strategy*", Elisabetta Iossa (with Biagi, F., and P. Valbonesi), **Economics of Innovation and New Technology**.

"*Maintaining Competition in Recurrent Procurement Contracts: A case study on the London bus market*, Elisabetta Iossa (with M. Waterson), **Transport Policy**.

"*Technological Revolutions and the Three Great Slumps: A Medium-Run Analysis*", Jean-Paul L'Huillier (with D. Cao), **Journal of Monetary Economics**.

"*Dynamic Factor Models with infinite-dimensional factor space: Forecasting*", Marco Lippi (with Forni, M., Giovannelli, A., and S. Soccorsi), **Journal of Applied Econometrics**.

"*Price Dynamics with Customer Markets*", Luigi Paciello and Andrea Pozzi (with N. Trachter), **International Economic Review**.

"*Balanced variable addition in linear models*", Franco Peracchi (with De Luca, G., and J. Magnus), **Journal of Economic Surveys**.

"*Asymmetric Information and Imperfect Competition in Lending Markets*", Fabiano Schivardi (with Crawford, G. S., and N. Pavanini), **American Economic Review**.

"*Court Efficiency and Procurement Performance*", Giancarlo Spagnolo (with Coviello, D., Moretti, L., and P. Valbonesi), **Scandinavian Journal of Economics.**

"*Alternating-Offer Bargaining with Global Games Information Structure*", Anton Tsoy, **Theoretical Economics**.

2018

"*Understanding the size and profitability of firms: The role of a biological factor*", Luigi Guiso (with A. Rustichini), **Research in Economics**, 2018, Volume 72, Issue 1, pages 65-85.

"*Portfolio Choices, Firm Shocks, and Uninsurable Wage Risk*, Luigi Guiso (with Fagereng, A. , and L. Pistaferri), **Review of Economic Studies**, 2018, Volume 85, Issue 1, pages 437-474.

"*Public Private Partnerships in Europe for Building and Managing Public Infrastructures: An Economic Perspective*", Elisabetta Iossa (with S. Saussier), **Annals of Public and Cooperative Economics** (invited paper), 2018, Volume 89, Issue 1, pages 25-48.

"*Monetary Shocks in Models with Observation and Menu Costs*", Francesco Lippi and Luigi Paciello (with F. Alvarez), **Journal of the European Economic Association**, 2018, Volume 16, Issue 2, pages 353-382.

"Financial Disclosure and Market Transparency with Costly Information Processing", Marco Pagano (with M. Di Maggio), **Review of Finance**, 2018, Volume 22, Issue 1, pages 117-153.

"Employment and Wage Insurance within Firms: Worldwide Evidence", Marco Pagano and Fabiano Schivardi (with A. Ellul), **Review of Financial Studies**, 2018, Volume 31, Issue 4, pages 1298-1340.

"Weighted-average least-squares estimation of generalized linear models", Franco Peracchi (with De Luca, G., and J. Magnus), **Journal of Econometrics**, 2018, Volume 204, Issue 1, pages 1-17.

"The Effect of Discretion on Procurement Performance", Giancarlo Spagnolo (with Coviello, D., and A. Guglielmo), **Management Science**, 2018, Volume 64, Issue 2, Pages 715-738.

2017

"Self-Control and Peer Groups: An empirical Analysis", Marco Battaglini and Eleonora Patacchini (with C. Diaz), **Journal of Economic Behavior and Organization**, 2017, Volume 134, pages 240-254.

"Public Protests and Policy Making", Marco Battaglini, **Quarterly Journal of Economics**, 2017, Volume 132, Issue 1, pages 485-549.

"Safe Assets, Liquidity, and Monetary Policy", Pierpaolo Benigno (with S. Nisticò), **American Economic Journal: Macroeconomics**, 2017, Volume 9, Issue 2, pages 1-47.

"Insurers' Response to Selection Risk: Evidence from Medicare Enrollment Reforms", Francesco Decarolis (with A. Guglielmo), **Journal of Health Economics**, 2017, Volume 56, pages 383-396.

"Tenure in Office and Public Procurement", Stefano Gagliarducci (with D. Coviello), **American Economic Journal: Economic Policy**, 2017, Volume 9, Issue 3, pages 59-105.

"Firm-Related Risk and Precautionary Saving Response", Luigi Guiso (with Fagereng A., and L. Pistaferri), **American Economic Review (Papers & Proceedings)**, 2017, Volume 107, Issue 5, pages 393-397.

"An Empirical Study of the Interaction-Based Aggregate Investment Fluctuations", Luigi Guiso (with Lai, C., and M. Nirei), **Japanese Economic Review**, 2017, Volume 68, Issue 2, pages 133-157.

"I Will Put My Law in Their Minds: Social Control and Cheating Behavior among Catholics and Protestants", Luigi Guiso and Jean-Paul L'Huillier (with Quiamzade, A., Sommet, N., and J. Burgos Laborde), **Journal for the Scientific Study of Religion**, 2017, Volume 56, Issue 2, pages 365-382.

"Asset Market Participation and Portfolio Choice over the Life-Cycle", Luigi Guiso (with Fagereng, A., and C. Gottlieb), **Journal of Finance**, 2017, Volume 72, Issue 2, pages 705-750.

"Bad News in the Great Depression, the Great Recession, and Other U.S. recessions: A comparative study", Jean-Paul L'Huillier (with D. Yoo), **Journal of Economic Dynamics and Control**, 2017, Volume 81, pages 79-98.

"Short-run effects of lower productivity growth. A twist on the secular stagnation hypothesis", Jean-Paul L'Huillier (with Blanchard, O., and G. Lorenzoni), **Journal of Policy Modeling**, 2017, Volume 39, Issue 4, pages 639-649.

"*Cash burns: An inventory model with a cash-credit choice*", Francesco Lippi (with F. Alvarez), **Journal of Monetary Economics**, 2017, Volume 90, pages 99-112.

"*Are State and Time dependent models really different?*", Francesco Lippi and Juan Passadore (with F. Alvarez), in M. Eichenbaum and J.A. Parker, eds., **NBER Macroeconomics Annual, 2016, Volume 31**, University of Chicago Press, 2017.

"*Noisy News in Business Cycles*", Marco Lippi (with Forni, M., Gambetti, L., and L. Sala), **American Economic Journal: Macroeconomics**, 2017, Volume 9, Issue 4, pages 122-152.

"*Noise Bubbles*", Marco Lippi (with Forni, M., Gambetti, L., and L. Sala), **Economic Journal**, 2017, Volume 127, Issue 604, pages 1940 - 1976.

"*Dynamic factor models with infinite-dimensional factor space: Asymptotic analysis*", Marco Lippi (with Forni, M., Hallin, M., and P. Zaffaroni), **Journal of Econometrics**, 2017, Volume 199, Issue 1, pages 74-92.

"*ESBies: Safety in the Tranches*", Marco Pagano (with Brunnermeier, M.K., Langfield, S., Reis, R., Van Nieuwerburgh, S., and D. Vayanos), **Economic Policy**, 2017, Volume 32, Issue 90, pages 175-219.

"*Bank Exposures and Sovereign Stress Transmission*", Marco Pagano (with Altavilla, C., and S. Simonelli), **Review of Finance**, 2017, Volume 21, Issue 6, pages 2103-2139.

"*Heterogeneous peer effects in education*", Eleonora Patacchini (with Rainone, E., and Y. Zenou), **Journal of Economic Behavior and Organization**, 2017, Volume 134, pages 190-227.

"*Social Ties and the Demand for Financial Services*", Eleonora Patacchini (with E. Rainone), **Journal of Financial Services Research**, 2017, Volume 52, Issue 1-2, pages 35-88.

"*Peer Effects in Bed Time Decisions among Adolescents: A Social Network Model with Sampled Data*", Eleonora Patacchini (with Xiaodong, L., and E. Rainone), **The Econometrics Journal**, 2017, Volume 20, Issue 3, pages S103-S125.

"*Growing up in wartime: Evidence from the era of two world wars*", Franco Peracchi (with E. Havari), **Economics & Human Biology**, 2017, Volume 25, pages 9-32.

"*Unhealthy Retirement?*", Franco Peracchi (with F. Mazzonna), **Journal of Human Resources**, 2017, Volume 52, Issue 1, pages 128-151.

"*Leniency, Collusion, Corruption, and Whistleblowing*", Giancarlo Spagnolo (with R.D. Luz), **Journal of Competition, Law and Economics**, 2017, Volume 13, Issue 4, pages 719-766.

"*Equilibrium Trust*", Daniele Terlizzese (with L. Anderlini), **Games and Economic Behavior**, 2017, Volume 102, pages 624-644.