



Dear colleagues and friends,

in the wake of the inclusion of our department in Italy's Departments of Excellence and our remarkable success in Research Projects of National Relevance, I would like to welcome you to the first issue of our newly launched Annual Newsletter, which with your help can disseminate the most important information on the scientific activities and achievements of our department.

Giorgio Bellettini, Head of the Department of Economics, University of Bologna

The Department in numbers: 2018

- 41 full professors
- **33** associate professors
- 06 senior assistant professors (with tenure track)
- estriction 08 assistant professors (permanent)
- 05 junior assistant professors (fixed term)
- 08 post-doc researchers
- 39 phd students



New hires

- Enrico Cantoni, junior assistant professor, PhD Massachusetts Institute of Technology (international job market recruitment)
- Elias Carroni, senior assistant professor, PhD University of Namur and University of Louvain
- Massimiliano Gaetano Onorato, senior assistant professor, PhD Bocconi University
- Alessandro Tavoni, senior assistant professor, PhD Ca' Foscari University of Venice

Retired faculty

 Gabriella Chiesa, full professor, PhD London School of Economics

Pierpaolo Giannoccolo

This year our department suffered the tragic and unexpected loss of Dr Pierpaolo Giannoccolo. He was an Assistant Professor of Economics, and a member of the department since 2009. His research interests focused on migration (brain drain), political economy, and financial accounting.



He has taught several courses in his career, not only in Bologna, but also in Barcelona, Paris, Southampton, Glasgow, and Milan.

Pierpaolo was a passionate admirer of the economic science with a profound knowledge of the history of economic thought. A person always eager to learn with a strong propensity to observe the surrounding reality. Having built over the years a comprehensive body of knowledge in different realms of economics, he was always keen to discuss new research ideas, test divergent perspectives, and interpret, through economic theory, the boldness of real-world economic policies.

From the human point of view, he was a very generous person, always ready to play down problems. He was modest, the modesty – he used to say – that should identify people defining themselves as scholars. He was moderate, disliking extreme positions, because he thought they are more likely to show logical flaws. He was a friendly person always ready to listen and help others, paying the same attention to colleagues, students, and the Institution alike. To his office neighbours, he was always bringing a sincere smile, nice words and a flavour of his generosity, made of little things: from sharing taralli just brought from Apulia to giving small presents for friends' kids.

He will be greatly missed.

Completed doctorates

The editorial board and the Faculty of the Department of Economics wish to recognize and congratulate newly-minted PhDs from our department's programmes who have completed and defended their thesis in the year 2018. We wish them the best and successful careers!

PhD in Economics

Nicola Brugali	Essays on Conflict and Terrorism	Giovanni Prarolo
Milenko Andres Fadic	Essays in Empirical Development Economics: The Role	Lucio Picci
Quijano	of Income Shocks on Firm and Household Dynamics	
Norhan Ossama Shaaban	Essays on Institutional Economics: On Crime and	Giacomo Calzolari
Hafez	Enforcement	
Peter Henning Karlstroem	Essays on Financial Crises	Gabriella Chiesa
Elena Lucchese	Emergency Medical Performance: Why and How Should	Margherita Fort
	We Care?	Matteo Lippi Bruni
Marco Magnani	Essays in Vertical Agreements and Consumer Behavior	Vincenzo Denicolò
Selin Efsan Nas Ozen	Essays in Discrimination and Inequality	Maria Bigoni
Marta Magdalena Paczos	Essays in International Trade and Finance	Paolo Manasse
Paolo Zanghieri	Essays in Applied Insurance Economics	Paolo Vanin

European Doctorate in Law and Economics

Phd Student Thesis title **Supervisor**

Ritchelle Alburo	Ownership Choice, Contracts and Regulation: Forestalling Ownership Irrelevance - A Law and Economics Perspective	Raimondello Orsini Roger Van den Bergh
Goran Dominioni	Accuracy, Gender and Race in Tort Trials: A (Behavioral) Law and Economics Perspective	Louis Visscher Peter Desmet
Xufeng Jia	Do Home Country Institutions Matter in Cross-border Mergers and Acquisitions? The case of China	Wolfgang Drobetz Michael Faure Luigi A. Franzoni
Shaheen Naseer	The Policy Choices of Bureaucrats: An Institutional Analysis	Klaus Heine Jan Schnellenbach Luigi A. Franzoni
Bernold Nieuwesteeg	The Law and Economics of Cyber Security	Louis Visscher Kees Van Noortwijk Enrico Santarelli
Yalnazov Orlin	Essays on Precedent and Statute	Florian Faust Michael Faure Luigi A. Franzoni



Selected publications

Econometrics



Angelini, G., L. De Angelis

Efficiency of Online Football Betting Markets. International Journal of Forecasting.



Cavaliere, G., L. De Angelis, L. Fanelli

Co-integration Rank Determination in Partial Systems Using Information Criteria. Oxford Bulletin of Economics and Statistics 80(1): 65-89.



Cavaliere, G., L. De Angelis, A. Rahbek, A.M.R. Taylor

Determining the Cointegration Rank in Heteroskedastic VAR Models of Unknown Order. Econometric Theory 34(2): 349-82.



Cavaliere, G., I. Georgiev, A.M.R. Taylor

Unit Root Inference for non-Stationary Linear Processes Driven by Infinite Variance Innovations. Econometric Theory 34(2): 302-48.



Fabrizi, E., M.R. Ferrante, C. Trivisano

Bayesian Small Area Estimation for Skewed Business Survey Variables. Journal of the Royal Statistical Society Series C Applied Statistics 67(4): 861-79.



Georgiev, I., D.I. Harvey, S.J. Leybourne, A.M.R. Taylor

Testing for Parameter Instability in Predictive Regression Models. Journal of Econometrics 204(1): 101–18.



Industrial Organization

Athey, S., E. Calvano, J.S. Gans

The Impact of Consumer Multi-homing on Advertising Markets and Media Competition. *Management Science 64(4):* 1574–90.

Bacchiega, E., O. Bonroy, E. Petrakis

Contract Contingency in Vertically Related Markets. Journal of Economics & Management Strategy 27(4): 772–91.

Barigozzi, F., C.A. Ma

<u>Product Differentiation with Multiple Qualities</u>. *International Journal of Industrial Organization* 61: 380–412.

Carroni, E.

Poaching in Media: Harm to subscribers? Journal of Economics & Management Strategy 27(2): 221–36.

Delbono, F., L. Lambertini

Choosing Roles under Supply Function Competition. Energy Economics 71: 83–8.

Giordani, P.E., F. Rullani, L. Zirulia

Endogenous Growth of Open Collaborative Innovation Communities: A Supply-side Perspective. *Industrial and Corporate Change* 27(4): 745–62.

Kiri, B., N. Lacetera, L. Zirulia

Above a Swamp: A Theory of High-quality Scientific Production. Research Policy 47(5): 827–39.

Lambertini, L.

Coordinating Research and Development Efforts for Quality Improvement along a Supply Chain. *European Journal of Operational Research* 270(2): 599–605.

Lambertini, L.

<u>Differential Games in Industrial Economics</u>. Cambridge University Press, Cambridge.

Monetary and Financial Economics

Bacchiocchi, E., E. Castelnuovo, L. Fanelli

Gimme a Break! Identification and Estimation of the Macroeconomic Effects of Monetary Policy Shocks in the United States. *Macroeconomic Dynamics* 22(6): 1613–51.

<u>Bajo, E.</u>, M. Barbi

Financial Illiteracy and Mortgage Refinancing Decisions. Journal of Banking & Finance 94: 279–96.



Labor and Household Economics Public Economics

Ballatore, R.M., M. Fort, A. Ichino

Tower of Babel in the Classroom: Immigrants and Natives in Italian Schools. Journal of Labor Economics 36(4): 885-921.



Barigozzi, F., N. Burani, D. Raggi

Productivity Crowding-out in Labor Markets with Motivated Workers. Journal of Economic Behavior & Organization 151: 199-218.



Barigozzi, F., H. Cremer, K. Roeder

Women's Career Choices, Social Norms and Child Care Policies. Journal of Public Economics 168: 162–73.



Rupert, P., G. Zanella

Grandchildren and Their Grandparents' Labor Supply. Journal of Public Economics 159: 89-103.151: 199-218.



Political Economy Development Economics

Cardinale, I., <u>R. Scazzieri</u> (Eds)

The Palgrave Handbook of Political Economy. Palgrave Macmillan,

Cervellati, M., E. Esposito, U. Sunde, S. Valmori

Long-term Exposure to Malaria and Violence in Africa. *Economic Policy* 33(95): 403-46.

<u>Cervellati, M., A. Naghavi</u>, F. Toubal

<u>Trade Liberalization, Democratization, and Technology Adoption</u>. *Journal* of Economic Growth 23(2): 145-73.

Michalopoulos, S., A. Naghavi, G. Prarolo Trade and Geography in the Spread of Islam. The Economic Journal 128(616): 3210-41.



International and Spatial Economics

- Hudec, O., <u>A. Reggiani</u>, M. Šiserová
 - Resilience Capacity and Vulnerability: A Joint Analysis with Reference to Slovak Urban Districts. Cities 73: 24–35.
- Majocchi, A., A. D'Angelo, <u>E. Forlani</u>, T. Buck

 Bifurcation Bias and Exporting: Can Foreign Work Experience Be an Answer? Insight from European family SMEs.

 Journal of World Business 53(2): 237–47.
- Naghavi, A., G. Prarolo

 Harmonisation and Globalisation of Intellectual Property Culture. The World Economy 41(7): 1847–66.
- Östh, J., M. Dolciotti, <u>A. Reggiani</u>, P. Nijkamp Social Capital, Resilience and Accessibility in Urban Systems: A Study on Sweden. *Networks and Spatial Economics* 18(2): 313–36.

Experimental and Behavioral Economics

Dengler-Roscher, K., N. Montinari, M. Panganiban, M. Ploner, B. Werner
On the Malleability of Fairness Ideals: Order Effects in Partial

and Impartial Allocation Tasks. Journal of Economic Psychology 65: 60–74.

Maggian, V., N. Montinari, A. Nicolò

Back Scratching in Hierarchical Organizations. The Journal of
Law, Economics, & Organization 34(2): 133–61.

Montinari, N., M. Rancan
Risk Taking on behalf of Others: The Role of Social Distance.

Journal of Risk and Uncertainty 57(1): 81–109.





Tourism Economics



Battilani, P., C. Bernini, A. Mariotti

How to Cope with Dissonant Heritage: A Way towards Sustainable Tourism Development. Journal of Sustainable Tourism 26: 1417-36.

Law and Economics



Carbonara, E., E. Santarelli, M. Obschonka, H.T. Tran, J. Potter, S.D.

Agency Culture, Constitutional Provisions and Entrepreneurship: A Cross-Country Analysis. Industrial and Corporate Change 27(3): 507-24.

Health Economics



Fiorentini, G., S. Robone, R. Verzulli

How Do Hospital-Specialty Characteristics Influence Health System Responsiveness? An Empirical Evaluation of Inpatient Care in the Italian Region of Emilia-Romagna. Health Economics 27(2): 266-81.

Environmental and Resource Economics



Manoussi, V., A. Xepapadeas, J. Emmerling

Climate Engineering under Deep Uncertainty. Journal of Economic Dynamics and Control 94: 207–24.

Research in Brief

Carbonara, E., E. Santarelli, M. Obschonka, H.T. Tran, J. Potter, S.D. Gosling (2018) **Agency Culture, Constitutional Provisions and Entrepreneurship: A Cross-Country Analysis.** *Industrial and Corporate Change* 27(3): 507–24.

Substantial and systematic cross-country variation in entrepreneurship rates has been found in various studies. We attempt to explain such differences focusing on the interaction between institutional factors and population psychological characteristics. Constitutional provisions supporting economic freedom are our measure of the institutional context, whereas we proxy psychological characteristics with a country's endowment of agency culture. Our results demonstrate that agency culture is indeed an important predictor of entrepreneurship and that this effect is moderated by constitutional provisions supporting economic freedom. In particular, the impact of agency culture on entrepreneurship becomes stronger as a country expands the constitutional protection of economic rights.

Manoussi, V., A. Xepapadeas, J. Emmerling (2018) **Climate Engineering under Deep Uncertainty.** *Journal of Economic Dynamics and Control* 94: 207–24.

Climate engineering, and in particular solar radiation management (SRM), is attracting increasing attention as a climate policy option. However, its potentially strategic nature and unforeseen side effects provide major policy and scientific challenges. The role of SRM is studied in a two-country model with the notable feature of deep uncertainty modeled as model misspecification of SRM side effects. We find that deep uncertainty leads to a reduction in SRM deployment under both global cooperation and strategic Nash behavior and that the effect is larger if countries act strategically. Furthermore, we demonstrate that if countries have different model confidence about SRM impacts, then the more confident country will engage more strongly in using SRM, leading this country to "free drive".

Michalopoulos, S., A.
Naghavi, G. Prarolo
(2018) **Trade and Geogra- phy in the Spread of Islam.**

The Economic Journal 128(616): 3210-41.

We construct detailed data on pre-Islamic trade routes to investigate their role in facilitating the spread of Islam. Looking at the relationship between Muslim adherence across ethnic groups in the Old World and their historical homelands' proximity to pre-600 AD trade routes and ports, we find that groups further away from the pre-Islamic trade network are systematically less likely to be Muslim today. An innovation of Islam was the practice of direct trade, where Muslim merchants personally carried goods over long distances along the trade routes and preferred to conduct trade with co-religionists. The acceptance of Islam in Asia and Africa is known to have occurred primarily through contacts with Muslim merchants. We also explore whether a region's ecological similarity to the Arabian Peninsula predicts the presence of Muslim communities. Arabia has a distinct geography, mainly consisting of desert with few pockets of fertile land. Groups residing along geographically unequal territories had stark differences in the underlying productive endowments, which generated incentives to trade but also led to conflict that disrupted trade flows. We construct for each ethnic homeland the Gini coefficient of land quality for agriculture and conjecture that the trade-promoting Islamic institutions with its redistributive economic principles was likely to be adopted across such challenging geographies to bring the clashing populations together and coordinate their activities.

Cervellati, M., A. Naghavi, F. Toubal (2018) **Trade liberalization, democratization, and technology adoption.** *Journal of Economic Growth* 23 (2): 145–173.

We study the role of trade liberalization, democratization and their interaction for technology adoption. A general equilibrium theory with heterogeneous skills predicts a complementarity between trade and political regimes. Trade liberalization or democratization should accelerate technology adoption if coupled, but alone may lead to vested interests that slow down progress. We use panel data on technology adoption at the sectoral level for the period 1980-2000 by exploiting within country variation and the heterogenous timing of openness and democratization. The results document the existence of a significant and sizable positive interaction between these institutional changes for technology adoption. The result that transitions to open democracies are beneficial for technological dynamics is robust to a large set of checks.



Funded Projects

New Projects

Enrico Cantoni is a partner in the research project "Does Context Trump Individual Drivers of Voting Behavior? Evidence from U.S. Movers", supported by The Foundations of Human Behavior Initiative (FHB) (2018–20; Harvard University; \$40,000). The grant's holder is Vincent Pons, Harvard Business School, Harvard University.

Natalia Montinari started the project "The Power of Identity in Multicultural Societies", jointly funded through Almaldea Junior (2018–19; University of Bologna, €20,000) and a Modigliani Research Grant (2018–20; Unicredit Foundation, €20,000).

Luca Lambertini participates in the project "The Economic Effects of a Joint European Security and Defence Policy", funded through the EIB University Research Sponsorship (EIBURS) programme (2018–21; European Investment Bank; €271,000; coordinator: Giampiero Giacomello (University of Bologna); partners: University of Groningen, Stockholm University). The project is meant to outline the technological spillovers of military R&D onto the civil sector, the size of such externalities and the time span needed to make it operational and visible in products made available to consumers. The impact on this process exerted by the political aspects of the primary development phase specifically designed to deliver new defensive or offensive weapons will also be investigated.

Roberto Scazzieri and **Aura Reggiani** participate in the Almaldea 2017 research project "I-Core: Interconnectivity and Resilience. Interdisciplinary Project on Complex Systems, Resilience and Vulnerability", funded by the University of Bologna (2018–20; €20,000). The principal investigator of the project is Raffaella Campaner (Department of Philosophy, University of Bologna). The project moves from the identification of alternative patterns of connectivity between sub-systems of the economy as a complex system, to assess which policies are more likely to reduce vulnerability and promote resilience under different connectivity scenarios. Project website: https://site.unibo.it/icore/en.

Paolo Figini started, in collaboration with Roberto Patuelli, the project "Analysis on the economic impact of the European Union tourism sector", financed by the Executive Agency for SMEs (EASME) (European Commission; €14,500).

Paolo Figini is the local coordinator at Unibo for the H2020 project SOCLIMPACT (Downscaling climate impacts and decarbonisation pathways in EU islands, and enhancing socio-economic and non-market evaluation of cli-

mate change for Europe, for 2050 and beyond) (2018-21; European Commission; €4,481,340; coordinator: University of Las Palmas de Gran Canarias). SO-CLIMPACT aims at modelling downscaled CC effects and their socioeconomic impacts in European islands for 2030-2100 and assess corresponding decarbonisation and adaptation pathways. The Bologna Unit collaborates in estimating the economic values of changes in the environmental services of the marine and coastal ecosystems, and in assessing the socioeconomic impacts of climate impacts and climate mitigation policies on islands. Further members of DSE involved in SOCLIMPACT are Rainer Andergassen, Anastasia Arabadzhyan, Anna Montini, Roberto Patuelli. The total budget for the University of Bologna Unit is €155,800.



Photo by Helloquence on Unsplash

Funded Projects

Recently Completed Projects

Anastasios Xepapadeas recently completed the research project "Economic Policy - including Monetary Policy - for Climate Change", funded by the Bank of Greece and Athens University of Economics and Business (2017–19; €80,000).

Gianpaolo Rossini was responsible for research grant on Firm Organization, Innovation, and International Trade, funded by Fondazione Cassa dei Risparmi di Forlì (23,000 euro; concluded in April 2018). Further partners: **Pierpaolo Giannoccolo**, Marco Grazzi, Chiara Piccardo, **Lucio Picci**, Cecilia Vergari. The project granted a post-doc position and studies different aspects of firms' strategies in terms of innovation activity and internationalization. By resorting to the virtual universe of Italian firms, the relationship between firm performance, in terms of revenues, growth and survival, and innovation activity, as proxied by patents and trademarks, is analysed. Moreover, the project examines the relationship between firms' vertical organization and export activity to show how the "make or buy" decision of intermediate goods is related with firm's productivity and export intensity.





Determinants of macroeconomic performance in the European Monetary Union.

Commentary by Riccardo Rovelli

In 2018, I have been studying the determinants of countries' macroeconomic performance within the EMU – with a particular focus on the origin and consequences of inflation differentials, and hence also on real exchange rate appreciations/depreciations with the euro area. In joint work with Gaetano D'Adamo ("Patterns of inflation in the EU: The role of domestic labor market institutions", in progress), we show that these differentials can in part be related to differences in countries' labor market institutions. In particular, we find that, as wage coordination and/or union strength increase, wages and henceforth prices become less sensitive to unemployment shocks. On the other hand, unions that are more powerful may be able to obtain wages increases to avoid losses in purchasing power after a real depreciation, thus causing a higher (in absolute value) exchange rate pass-through to inflation.

These observations may be important from a normative viewpoint. In the case of euro area countries, differences in these labor market institutions imply that monetary policy may have asymmetric transmission effects across countries. Thus, institutionally heterogeneous labor markets may be associated with significant departures from an optimal monetary area. In particular our findings suggest that, within the EU and also the euro area, there can be divergent wage and price developments as a result of both symmetric and asymmetric shocks, depending on the extent of domestic coordination of wage bargaining. In addition, we find that the "classical" adjustment mechanism that had been advocated by Robert Mundell (that is, wage flexibility) is less likely to operate, the more centralized wage bargaining is.

A plausible explanation of this result is that when wage bargaining is more centralized, unions become more able to insulate wages from macro shocks. Although this generates some degree of wage rigidity, this is not necessarily a "bad" outcome. On the contrary, we note that countries with high coordination include both the best and the worst performers within the EMU, in terms of external competitiveness and overall macro performance. This suggests that a profitable direction for future research would be to better understand and model trade unions' objectives and their patterns of inter-industry coordination.

In a second, more policy-oriented paper ("Don't forget the Current Account! On some neglected economics and political economy of completing EMU", in progress), I document that countries within EMU have accumulated persistent current account imbalances in the period up to the Financial Crisis of 2008 – and they have done so at a much higher rate than during the fixed exchange rate period known as the Bretton Woods regime (which lasted until 1971).

Why has EMU generated, and then tolerated, the accumulation of such imbalances? The rather disappointing answer to this question is that the whole issue of current account imbalances has been underestimated in the design of the EMU. The purpose of this paper is then to suggest that a new, reformed governance of the EMU should place much greater emphasis on preventing the accumulation of current account imbalances by member countries, also by linking such virtuous behavior to appropriate incentives of a macro-financial nature.

Editorial Board

Natalia Montinari Alireza Naghavi Roberto Patuelli

