

## Sophie BÉREAU-GNABO

Date of birth: October 6, 1981

Citizenship: French

Family status: Married, two children  
(born in 2015 and 2020)

## Contact:

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## 1. Positions

### Current positions

|          |  |  |
|----------|--|--|
| 2020-... | Professor of Economics                                 | Université de Lorraine (UL)                                    |
| 2019-... | Professor of finance and<br>quantitative methods (FQM) | Université de Namur (UNamur), on leave as from January<br>2021 |

### Past positions

|           |  |  |
|-----------|--|--|
| 2016-2019 | Associate professor of FQM                       |  |
| 2014-2018 | Associate professor of finance<br>Faculty member | UNamur<br>Université catholique de Louvain (UCL, on leave since 2016)  |
| 2015-2017 | Consultant                                       | Center for Operations Research and Econometrics (CORE)<br>Banque de France, Business Conditions and<br>Macroeconomic forecasting directorate |
| 2014-2016 | Co-director                                      | CORE   |
| 2012-2014 | Research fellow                                  | CORE   |
| 2011-2014 | Assistant professor of finance                   | CORE   |
| 2010-2011 | Research scholar<br>Visiting lecturer            | UCL<br>CREST-INSEE, Macroeconomics department  |
| 2009-2011 | Associate researcher                             | UNamur   |
| 2009-2010 | Visiting scholar                                 | Center for Economic Studies (CES), KULeuven  |
| 2007-2010 | Research scholar                                 | CES, KULeuven  |
| 2006-2008 | Intern   | Université Paris-Nanterre (UPN)<br>Centre d'Etudes Prospectives et d'Information<br>Internationale (CEPII, France)                           |

## 2. Education

|           |   |             |
|-----------|---|-------------|
| 2007-2010 | PhD in Economics, under the supervision of Prof. V. Mignon<br>Defended on October 08, 2010 and obtained with highest honours<br><u>Title:</u> Exchange rate nonlinear dynamics - From the short to the long run<br><u>Committee:</u> A. Bénassy-Quéré (CEPII and Ecole Polytechnique), P. De Grauwe<br>(KULeuven), C. Hurlin (referee, Université d'Orléans), R. MacDonald (referee,<br>University of Glasgow), V. Mignon (supervisor), H. Raymond-Feingold<br>(president, Université Paris-Nanterre) | UPN         |
| 2005-2007 | M.Sc. in Econometrics, with highest honours   | UPN         |
| 2002-2005 | B.Sc. in Applied Mathematics and Econometrics, with highest honours   | Univ. Paris |
| 1999-2002 | Musical studies, harp classes in Dijon, Paris (France) and Venise (Italy)   | Diderot     |
| 1999      | High school degree, major in Physics, with highest honours  |             |

## 3. Distinctions and grants

2018 BNB grant (8000 EUR) for the project on "Endogenous categories in European mutual funds' industry over time: an empirical investigation"

2013 FSR grant (42,860 EUR) for the project on "The Econometrics of Financial Complexity", UCL  
N.B. FSR stands for the "Fonds Spéciaux de la Recherche" from the Belgian National Fund for Scientific Research

2011 Fondation Banque de France Prize for the « Best PhD in Monetary, Financial and Banking Economics »

2010-11 CREST-INSEE research grant

2007-10 Ministerial scholarship for PhD research

2006-07 Ministerial scholarship for studies in a Master's program

#### 4. Research activities

##### Research interests

International Finance: exchange rate and asset price dynamics, systemic risk

Financial complexity: heterogeneous agent models, financial complex systems, financial networks

Sustainability: sustainability metrics, sustainable finance strategies

Econometrics: time series, macro panel data, nonlinear modelling, econometrics of network

##### Grants

Béreau, S., 2018. 'Endogenous categories in European mutual funds' industry over time: an empirical investigation', BNB grant, UNamur

Béreau, S., 2013. 'A spatial econometrics approach of financial complexity'. Fonds Spéciaux de Recherche (FSR), UCL

##### Publications

Gandica, Y., Béreau, S. and J.-Y. Gnabo, 2020. 'A multilevel analysis of financial institutions' systemic exposure from local and system-wide information', Scientific Report, 10(1).

Béreau, S., Gnabo, J.-Y. and H. Vanhomwegen, 2019. 'Making a difference: European mutual funds distinctiveness and peers' performance'. Finance, vol. 41, 7-51.

Gandica, Y., Geraci, M., Béreau, S. and J.-Y. Gnabo, 2018. 'Fragmentation, integration and macroprudential surveillance of the US financial industry: Insights from network science', PLOS ONE 13(4).

Béreau, S., Gnabo, J.-Y., Kerkour, M. and H Raymond, 2017. 'Sovereign wealth funds' investments and industry performance: Evidence from Europe', Handbook of Sovereign Wealth Funds, Oxford Univ. Press.

Béreau, S., 2013. 'Time is Money: An Heterogenous Agent Model for the FX', in "Proceedings of the European Conference on Complex Systems 2012", Springer Proceedings in Complexity, [B1].

Béreau, S., López Villavicencio, A. and V. Mignon, 2012. 'Real Exchange Rate Misalignments and Growth: A New Look using Nonlinear Panel Data methods'. Applied Economics, 44(27), 3503-3511.

Bénassy-Quéré, A. and S. Béreau, 2010. 'Rebalancing IMF Quotas'. The World Economy, 34(2), 223-247.

Bénassy-Quéré, A., Béreau, S. and V. Mignon, 2010. 'On the complementarity of equilibrium exchange rate approaches'. Review of International Economics, 18(4), 618-632.

Béreau, S., López Villavicencio, A. and V. Mignon, 2010. 'Nonlinear Adjustment of the Real Exchange Rate Towards its Equilibrium Value: A Panel Smooth Transition Error Correction Modelling'. Economic Modelling, 27(1), 404-416.

Bénassy-Quéré, A., Béreau, S. and V. Mignon, 2009. 'The Dollar in the Turmoil'. Journal of the Japanese and International Economies, 23(4), 427-436.

Bénassy-Quéré, A., Béreau, S. and V. Mignon, 2009. 'Robust Estimations of Equilibrium Exchange Rates within the G20: A Panel BEER Approach'. The Scottish Journal of Political Economy, 56(5), 608-633.

Bénassy-Quéré, A., Béreau, S. and V. Mignon, 2009. 'Taux de change d'équilibre : une question d'horizon'. Revue Economique, vol. 60, n°3, 657-666.

Bénassy-Quéré, A., Béreau, S. et V. Mignon, 2009. 'Taux de change de l'euro : perspectives de moyen et long termes', in "L'économie mondiale 2009", Paris : La découverte, collection Repères.

Béreau, S., 2007. 'Une mesure macroéconométrique "à la Feldstein-Horioka" du degré d'intégration financière en Europe', *Economie Internationale*, n°110, 63-106.

#### Working papers/work in progress

Béreau, S., Gnabo, J.-Y. and J. Soudant, 2019. 'ECB Monetary Policy and Cross-Market Financial Spillovers: Evidence from large TVP-VAR'. CORE working paper, submitted.

Béreau, S., Gnabo, J.-Y. and H. Vanhomwegen, 2018. 'Making a difference: European mutual funds distinctiveness and peers' performance'. CORE working paper, forthcoming.

Béreau, S., Faubert, V., and K. Schmidt, 2017. 'Inflation forecasts in the euro area: Are domestic and global factors useful in forecasting the mean and the distribution of euro area inflation?'. Banque de France working paper #663, [BFS].

Béreau, S., Debarsy, N., Dossougoin, C. and J.-Y. Gnabo, 2017. 'Contagion in large US banking institutions: A robust analysis'. In revision, [BDDG].

Béreau, S., Casteleyn, A., Gnabo, J., Zwinkels, R., 2015. 'Commonality among equity mutual funds: impact on financial stability and price discovery'. In revision.

Béreau, S., Dahlqvist, C.-H. and J.-Y. Gnabo, 2015. 'Effective network inference through multivariate information transfer estimation'. [BDG].

Béreau, S., 2015. 'An agent-based modelling of the exchange rate disconnect puzzle' [B2].

Béreau, S. and C.-H. Dahlqvist, 2015. 'The relationship between CDS spreads and bond yields revisited: An information-based test of causality'. Submitted, [BD].

Béreau, S. and A. Casteleyn, 2015. 'The impact of short-selling regulation on financial stability: An HAM-based empirical assessment'. Mimeo, [BC].

Béreau, S., Gnabo, J.-Y., and D. Zountcheme, 2014. 'Risk-sharing or risk contagion in financial systems. An empirical investigation'. Mimeo, [BGZ].

Béreau, S., Gnabo, J.-Y. and T. Quang, 2013. 'Debt structure and growth in emerging economies'. Mimeo, [BGQ].

Bénassy-Quéré, A., Béreau, S., Decreux, Y., Gouel, C. and S. Poncet, 2007. 'IMF Quotas at Year 2030'. CEPII Working Paper, n°2007-12.

#### Selected presentation in conferences/workshops/seminars

|                            |                      |             |  |
|----------------------------|----------------------|-------------|--|
| CRESE seminar              | Univ. Besançon       | 19/04/11    | presentation [BDDG]                        |
| Workshop on SES            | Univ. Bourgogne      | 18/05/25    | presentation [BDDG]                        |
| Internal seminar           | Banque de France     | 18/01/25    | presentation [BFS]                         |
| DeFiPP workshop            | UNamur               | 17/12/12    | presentation [BFS]                         |
| Winter school and workshop | UCL                  | 16/12/12-16 | co-organisation                            |
| BENet'16                   | UCL                  | 16/12/15    | co-organisation                            |
| Winter school and workshop | UCL                  | 14/12/1-5   | co-organisation, presentation [BDG]        |
| BENet'14                   | ULB                  | 14/10/03    | presentation of [BGZ]                      |
| ECCS'14                    | IMT, Lucca           | 14/09/22    | presentation of [BD]                       |
| Invited keynote lecture    | Ghent Univ.          | 14/09/19    | keynote lecture                            |
| Skema                      | Univ. de Lille       | 14/04/31    | presentation of [BGZ]                      |
| ISBA Statistical workshop  | UCL                  | 14/04/11    | presentation of [BGZ]                      |
| PhD conf.                  | Univ. Paris-Nanterre | 14/03/19    | co-organisation and discussion             |
| Journée d'Econométrie      | Univ. Paris-Nanterre | 13/12/11    | presentation of [BGZ] and [BD], discussion |
| IRES Research seminar      | UCL                  | 13/10/24    | presentation of [B1]                       |
| FiXS workshop              | Univ. de Namur       | 13/06/20    | co-organisation, presentation of [B1]      |
| naXys seminar              | Univ. de Namur       | 13/06/11    | presentation of [B1]                       |

|                                   |                             |          |   |
|-----------------------------------|-----------------------------|----------|---|
| ICMAIF                            | Univ. of Crete              | 13/05/31 | presentation of [B1]                              |
| PhD conf.                         | Univ. Paris-Nanterre        | 13/03/27 | co-organisation and discussion                    |
| ECORE seminar                     | ULB                         | 13/03/25 | discussion  |
| External seminar                  | Univ. of Amsterdam          | 13/11/23 | presentation of [B2]                              |
| Journée d’Econométrie             | Univ. Paris-Nanterre        | 13/11/21 | presentation of [BGQ]                             |
| Large Graphs and Networks seminar | UCL                         | 13/09/21 | presentation of [B2]                              |
| DEGIT conf.                       | Univ. degli Studi di Milano | 12/09/13 | presentation of [BGQ]                             |
| ECCS’12                           | ULB                         | 12/09/03 | presentation of [B1]                              |
| ICMAIF                            | Univ. of Crete              | 12/05/24 | presentation of [B2], discussion                  |
| Séminaire « 18 mois »             | Univ. Paris 1               | 12/03/22 | discussion  |
| CORE Econometrics seminar         | UCL                         | 11/12/12 | presentation of [B2]                              |
| MIFN conf.                        | Univ. d’Orléans             | 11/10/21 | presentation of [B2]                              |
| AFSE congress                     | Univ. Paris-Nanterre        | 11/09/08 | reception of the Fondation Banque de France prize |

N.B.: AFSE, MIFN, ECCS, DEGIT, ICMAIF, BENet and FiXS acronyms stand for: “Association Française de Sciences Economiques”, “Methods in International Finance Network”, “European Conference in Complex Systems”, “Dynamics, Economic Growth, and International Trade”, “International Conference in Macroeconomic Analysis and International Finance”, “Belgian network”, “Financial Complex Systems” resp. PhD conf. corresponds joint [doctoral workshop](#).

#### PhD (co-)supervisions

*Camille Baily* (2018-., UNamur, FRESH grant), “Sustainable finance and the AM industry: Exploring the role of competition in the transition of mutual funds towards sustainable investments”, ongoing  
*Joey Soudant* (2016-., UNamur, FNRS grant), “Heterogeneity, learning and monetary policy », ongoing  
*Cyrille Dossougoin* (2013-2018, UCL with N. Debarsy, FNRS grant), “Essays on empirical financial spillovers”, now Financial Services consultant at CapGemini  
*Nicolas K. Scholtes* (2013-2018, UCL-UNamur with J.-Y. Gnabo, ARC grant), “Interbank Networks and Financial Stability”, now Treasury Risk Analyst at Euroclear  
*Carl-Henrik Dahlqvist* (2013-2018, UCL-UNamur with J.-Y. Gnabo), “Essays in Econophysics and Applied Econometrics: Modelling Complexity in Finance”, now PhD candidate in Physics at the Univ. of Liège

#### Participation to PhD committees

Felix Sommers (UCL, Machine Learning, 2017); Pauline Gandré (ENS Lyon, Economics, 2016); Malik Kerkour (UNamur, Finance, 2016); Diane Pierret (UCL, Statistics, 2014) ; Maïa Gejadze (UCL, Finance, 2014); Ilham Riachi (UCL, Finance, 2013)

#### Referee reports

Review of Financial Analysis, Economics Research International, Economie Internationale / International Economics, Economie et Prévision, Finance, Revue Economique, Revue d’Economie Politique

### **5. Teaching activities**

#### Current teaching

|          |  |                      |
|----------|--|----------------------|
| 2020-... | Multiivariate Analysis and Data Mining for Financial Time Series | Master’s program, UL |
|          | Programming in R   | Master’s program, UL |

|                      |   |  |
|----------------------|---|--|
|                      | Finance éthique                           | Master's program, UL                               |
|                      | Marchés énergétiques et finance verte     | Master's program, UL                               |
| 2019-...             | Econométrie pour ingénieurs               | Bachelor's program in Business Engineering, UNamur |
| <b>Past teaching</b> |   |  |
| 2018-2020            | Sustainable Finance                       | Master's program in Management, UNamur             |
|                      | Portfolio Theory                          | Bachelor's program in Economics, UCL               |
| 2016-2019            | Statistiques pour Sciences Humaines       | Bachelor's program in Political Sciences, UNamur   |
| 2017-2020            | Théorie financière                        | Master's program in Management, UNamur             |
| 2016-2020            | Probabilités et statistique inférentielle | Bachelor's program in Economics, UNamur            |
|                      | Portfolio Management                      | Master's program in Management, UNamur             |
|                      | Introduction à l'économétrie              | UCL's MOOC on the edX platform <sup>1</sup>        |
| 2016-2018            | Computational Finance                     | Master's program in Management, UCL                |
| 2014-2016            | Capital Markets' Theory                   | Master's program in Economics, UCL                 |
|                      | Empirical Finance                         | Master's program in Management, UCL                |
| 2011-2015            | Portfolio theory                          | Bachelor's program in Economics, UCL               |
|                      | Advanced Finance                          | Master's program in Management, UCL                |
| 2013-2014            | Econometrics and Forecasting              | Master's program in Management, UCL                |
| 2010-2011            | Théorie financière                        | Master's program in Management, UNamur             |
| 2008-2010            | Analyse de données                        | Master's program in Economics, UPN                 |

## 6. Administrative responsibilities

|           |  |   |
|-----------|--|---|
| 2019-2020 | Organizer of the Belgian Finance PhD workshop <sup>2</sup>   | UNamur                                  |
| 2018-...  | Academic director of the bachelor's and master's programs in Business Engineering                    | UNamur                                  |
|           | Academic responsible of the Finance domain   | UNamur                                  |
| 2016-...  | Responsible of the task-force devoted to "Rethinking Economics and Management in a transition world" | UNamur                                  |
| 2013-...  | Co-organizer of the PhD conference in International macroeconomics and financial econometrics series | Univ. Paris-Nanterre, UNamur and UCL    |
| 2014-2016 | Co-director of CORE  | UCL                                     |
|           | Co-organizer of the "Winter School and workshop in Economics and Finance" series                     | UCL and UNamur                          |
| 2016      | Co-organizer of BeNet'16   | CORE, UCL                               |
| 2013-2015 | Co-organizer of the "Reading group in Econometrics"  | CORE, UCL                               |
| 2012-2015 | Co-organizer of the "Econometrics seminar" series  | CORE, UCL                               |
| 2013-2014 | Vice-director of the CeSAM (Center of Studies in Asset Management, Louvain School of Management)     | Louvain School of Management (LSM), UCL |
| 2011-2012 | Co-organizer of the "CEMS Finance conference" and PhD course   | LSM, UCL                                |

<sup>1</sup> <https://www.edx.org/course/introduction-leconometrie-louvainx-louv14x>

<sup>2</sup> This PhD workshop has been organized for 5 years now and gathers academics and PhD students from various partner universities in Benelux (HEC Liège, University of Luxembourg, University of Maastricht, University of Radboud, and UNamur).