Frédérique BEC

Curriculum Vitae

1 Positions

1.1 Present

- 2006- : Full-Professor of Economics at CY Cergy-Paris University.
- 2007- : Head of the Master in Economics Engineering and Data Analysis, CY Cergy-Paris University.
- 2006- : Research fellow at THEMA laboratory (UMR 8184), CY Cergy-Paris University, and *Centre de Recherche en Economie et Statistique* (CREST), National Institute for Statistics and Economics Studies (INSEE).
- 2019- : Member of the National Council of Universities.
- 2020- : Member of the national committee of the French business cycles datation, French Association of Economics - AFSE.
- 2022- : Member of the steering committee of the French Association of Economics - AFSE.
- 2023- : Research fellow at Institut Louis Bachelier (ILB).
- 2023- : Research fellow at the European Commission (Economic and Financial Affairs Directorate).

1.2 Previous

- 2019-2023 : Member of the High Council of Public Finances chaired by Pierre Moscovici – President of Cour des Comptes, nominated by the President of the French National Assembly (Richard Ferrand).
- 2014-2016: Head of the national committee for the *Cursus Master Engineering (CMI)* in “Statistics, Economics and Finance” (new integrated program at university including the Bachelor and the Master degrees).
- 2006-2007: Head of Master in International Economics, Cergy-Pontoise University.

- 2001-2006: Full-Professor of Economics at ENSAE (National School of Statistics and Economic Administration).
- 1996-2001: Full-Professor of Economics at Cergy-Pontoise University.
- 1994-1996: Full-Professor of Economics at Lille 2 University.
- 1993-1994: Assistant Professor of Economics at Paris 1 University.
- PhD and HDR in Economics, Paris 1 University, 1993.

2 Research activities

2.1 Publications

"Power of Unit Root Tests Against Nonlinear and Noncausal Alternatives with an Application to the Brent Crude Oil Price" accepted for publication in *Studies in Nonlinear Dynamics and Econometrics* (with A. Guay, H.B. Nielsen and S. Saïdi). https://doi.org/10.1515/snde-2022-0084

"Why are inflation forecasts sticky? Theory and Application to France and Germany", *International Journal of Central Banking*, vol. 19, pages 215-249, 2023 (with R. Boucekkine and C. Jardet).

"Les cycles économiques de la France : une datation de référence", *Revue Economique*, vol. 74, pages 5-52, mars 2023, (with A. Aviat, C. Diebolt, C. Doz, D. Ferrand, L. Ferrara, E. Heyer, V. Mignon and P.-A. Pionnier).

"Mixed Causal-Noncausal Autoregressions: Bimodality Issues in Estimation and Unit Root Testing", *Oxford Bulletin of Economics and Statistics*, vol. 82, pages 1413-1428, 2020, (with H. Bohn Nielsen and S. Saïdi).

"An asymmetrical overshooting correction model for G20 nominal effective exchange rates", *Economics Bulletin*, vol. 40, pages 1937-1947, 2020 (with M. Ben Salem).

"Is inflation driven by survey-based, VAR-based or myopic expectations? An empirical assessment from US real-time data", *North American Journal of Economics and Finance*, vol. 51(C), 2020 (with P. Kanda).

“Le modèle autorégressif à seuil avec effet rebond : Une application aux rendements boursiers francais et américains”, 2020, Chapter 5 in “Prévisions en finance”,A. Charles, O. Darné and L. Ferrara (ed), Economica, (with A. De Gaye).

“How do oil price forecast errors impact inflation forecast errors? An empirical analysis from French and US inflation forecasts”, *Economic Modelling*, vol. 53, pages 75-88, 2016 (with A. De Gaye).

“Nowcasting French GDP in Real-Time from Survey Opinions: Information or Forecast Combinations?”, *International Journal of Forecasting*, vol. 31(4), pages 1021-1042, 2015 (with M. Mogliani).

“Comparing the shape of recoveries: France, the UK and the US”, *Economic Modelling*, vol. 44, pages 327-334, 2015 (with O. Bouabdallah and L. Ferrara).

“Do Stock Returns Rebound After Bear Markets? An Empirical Analysis From Five OECD Countries,” *Journal of Empirical Finance*, vol. 30, pages 50-61, 2015 (with S. Zeng).

“Cyclicality and term structure of Value-at-Risk within a threshold autoregression setup”, *Bankers, Markets and Investors*, vol. 134, pages 18-32, 2015 (with C. Gollier).

“The way out of recessions : A forecasting analysis for some Euro area countries”, *International Journal of Forecasting*, vol. 30(3), pages 539-549, 2014 (with O. Bouabdallah and L. Ferrara).

“Inventory Investment Dynamics and Recoveries: A Comparison of Manufacturing and Retail Trade Sectors”, *Economics Bulletin*, AccessEcon, vol. 33(3), pages 2209-2222, 2013 (with M. Bessec).

“Are Southeast Asian real exchange rates mean reverting?”, *Journal of International Financial Markets, Institutions and Money*, Elsevier, vol. 23(C), pages 265-282, 2013 (with S. Zeng).

“Inventory investment and the business cycle: the usual suspect”, *Studies in Nonlinear Dynamics and Econometrics*, De Gruyter, vol. 17(3), pages 335-343, 2013 (with M. Ben Salem).

“Detecting Mean Reversion in Real Exchange Rates from a Multiple Regime STAR Model”, *Annals of Economics and Statistics*, n.99/100, 2010 (with M. Ben Salem and M. Carrasco).

"The Federal Funds Rate Stationarity: New Evidence", *Economics Bulletin*, vol. 22(9), 2009 (with C. Bassil).

"The Autoregressive Conditional Root (ACR) Model", *Oxford Bulletin of Economics and Statistics*, vol. 70(5), pages 583-618, 2008 (with A. Rahbek and N. Shephard).

"Adaptive Consistent Unit Root Tests Based on Autoregressive Threshold Model with an Application to the Term Structure of Interest Rates", *Journal of Econometrics*, vol. 142, n^o 1, 2008 (with A. Guay and E. Guerre).

"Purchasing power parity: A nonlinear multivariate perspective", *Economics Bulletin*, vol. 6(39), pages 1-6, 2008 (with M. Ben Salem and A. Rahbek).

"The Transmission of Aggregate Supply and Aggregate Demand Shocks in Japan: Has There Been a Structural Change ?", *Studies in Nonlinear Dynamics and Econometrics*, vol. 11, n^o 4, 2007 (with A. Bastien).

"Real Exchange Rates and Real Interest Rates : A Nonlinear Perspective", *Recherches Economiques de Louvain*, vol. 72, n^o 2, 2006 (with M. Ben Salem and R. MacDonald).

"Tests for Unit Root versus Threshold Specification with an Application to the PPP", *Journal of Business and Economic Statistics*, vol. 22, n^o 4, 2004 (with M. Ben Salem and M. Carrasco).

"A Vector Equilibrium Correction Model with Non-linear Discontinuous Adjustments", *Econometrics Journal*, vol. 7, 2004 (with A. Rahbek).

"L'ajustement à seuil des processus cointégrés: Que sait-on des modèles à trois régimes?" ("Threshold Adjustment of Cointegrated Processes : What Do We Know About Three-Regime Models?"), *Revue d'Economie Politique*, vol. 114, n^o 4, 2004 (with M. Ben Salem).

"Asymmetric Monetary Policy Reaction Function : Evidence for the U.S., French and German Central Banks", *Studies in Nonlinear Dynamics and Econometrics*, vol. 6, n^o 2, 2002 (with M. Ben Salem and F. Collard).

"Mondialisation, mobilité du capital et volatilité macroéconomique" ("Globalization, capital mobility and aggregate volatility"), *Economie et Prévision*, n^o 152-153, 2002-1/2.

"L'équilibre Keynésien en Economie Ouverte" ("Keynesian Equilibrium in Open Economy"), Chapter 5 in Analyse Macro-économique 1, J.-O. Hairault (ed), Paris: La Découverte, 2000.

"Offre Globale/Demande Globale" ("Aggregate Supply/Aggregate Demand"), Chapter 2 in Analyse Macro-économique 1, J.-O. Hairault (ed), Paris: La Découverte, 2000.

"Automatic Stabilizers in a European Perspective", in *Business Cycles and Macroeconomic Stability*, J.O. Hairault, P.Y. Hénin and F. Portier (ed), Kluwer, 1997 (with J.O. Hairault).

"Les implications macroéoconomiques de l'incomplétude des marchés d'actifs" ("Macroeconomic Implications of Financial Markets Incompleteness"), *Revue d'Economie Politique*, n^{o}4, 1997 (with J.O. Hairault).

"Une évaluation empirique de l'efficience du marché des changes" ("An Empirical Evaluation of Exchange Rate Market Efficiency"), *Revue Economique*, vol.48, n^{o}4, 1997 (with M. Ben Salem and E. Ben Youssef).

"Fédéralisme Budgétaire et Stabilisation Macroéconomique en Europe" ("Fiscal Federalism and Macroeconomic Stabilization in Europe"), *Revue Economique*, vol.48, n^{o}3, 1997 (with J.O. Hairault).

"Fiscal Policies, Public Deficit Restraints and Economic Stabilization", *Recherches Economiques de Louvain*, vol.62, n^{o}3-4, 1996. (with J.O. Hairault).

"The International Transmission of Real Business Cycle", in *Advances in Business Cycle Research*, P.Y. Hénin (ed), Springer-Verlag, 1995.

"Impulsions dominantes et analyse des fluctuations de l'économie française" ("Dominant Impulses and Business Cycles Analysis in France"), *L'Actualité Economique*, vol. 70, n^{o}1, 1994, winner of the Prize of this journal in 1995.

"La transmission internationale des fluctuations : une explication de la corrélation croisée des consommations" ("International Transmission of Business Cycles : an explanation of the cross-country correlation of consumption"), *Revue Economique*, Vol. 45, n^{o}1, 1994.

"Taux d'intérêt, politique monétaire et activité économique en France : un examen empirique" ("Interest Rates, Monetary Policy and Macroeconomic Activity in France : An Empirical Investigation"), *Economie et Prévision*, n^{o}109, 1993-3 (with J.O. Hairault).

“Une étude empirique des sources de fluctuations économiques dans le cadre d’un modèle à tendances communes” (“An Empirical Analysis of Business Cycles Drivers in a Common Trends Model”), *Annales d’Economie et de Statistique*, n^o 30, April-June 1993 (with J.O. Hairault).

“Une analyse empirique de différentes structures de taux d’intérêt: une comparaison entre les Etats-Unis et la France” (“An Empirical Analysis of the Term Structure of Interest Rates : A Comparison of French and US Data”), *Revue Economies et Sociétés, série Economie Monétaire*, n^o 3, March 1991 (with J.O. Hairault).

2.2 Working Papers

“Forecast performance of non-causal autoregressions and the importance of unit root pretesting”, manuscript, R & R for *Journal of Forecasting* (with H.B. Nielsen).

2.3 Work in Progress

“Stochastic Debt Sustainability Analysis: A VAR Approach for France” (with K. Baret and M. Cochart)

“Can Recurrent Neural Networks Help Assessing The Role Of Inflation Expectations In The New Keynesian Phillips Curve?” (with H. B. Nielsen).

“Secular Inflation Anti-Persistence” (with E. Girardin).

2.4 Recent communications

2023: Conference “Non-stationarity, cyclostationarity and applications”, Paris-Nanterre University (invited speaker) — 5th Quantitative Finance and Financial Econometrics International Conference, AMSE, Marseille — AFSE 71st Annual Congress, Paris.
2022: 6th International Workshop in Financial Markets and Nonlinear Dynamics, Paris — 4th Quantitative Finance and Financial Econometrics International Conference, AMSE, Marseille — Invited inaugural presentation at the French/Japanese webinar in Economics.
2021: Anglo-French-Italian macro workshop, Venise, Italy — 27th International Conference on Computating in Economics and Finance, online con-

ference — 15th International Conference on Computational and Financial Econometrics, online conference.
2020: 22th Annual Conference INFER, online conference, 14th International Conference on Computational and Financial Econometrics, online conference.
2019: 13th International Conference on Computational and Financial Econometrics, London — 2nd Quantitative Finance and Financial Econometrics International Conference, AMSE, Marseille — Annual Congress of the Canadian Society for Economics, Québec, Canada.
2018: European Central Bank Workshop on "France: Structural challenges and Reforms", Frankfurt (invited contribution) — 1st Vienna Workshop on Economic Forecasting, Austria (invited contribution).
2017: 11th International Conference on Computational and Financial Econometrics, London — 19th OxMetrics Conference, Paris — Durham University Economics Department, United Kingdom (invited seminar) — 25th Symposium of the Society for Nonlinear Dynamics and Econometrics, Paris.
2016: 8th French Econometrics Conference, Cergy-Pontoise — 33th CIRET Conference, Copenhagen — 4th International Symposium in Computational Economics and Finance, Paris.
2015: 9th International Conference on Computational and Financial Econometrics, London — Annual Congress of the Canadian Society for Economics, UQAM, Montréal — Copenhagen University Economics Department, Denmark (invited seminar).
2014: Zhongnan University of Economics and Law, Wuhan, China (invited seminar) — 32th CIRET Conference, Hangzhou, China — 2nd workshop on Econometrics Applied to Macroeconomics, Paris Nord University, Paris — Fourgeaud seminar, Ministry of Economics and Finance (invited seminar), Paris.
2013: 7th International Conference on Computational and Financial Econometrics, London — CORE, UCL, Belgium (invited seminar).
2012: "Nonlinear and Asymmetric Models in Applied Economics" International Workshop, Paris — Econometrics Institute, Erasmus University, Rotterdam (invited seminar) — Macroeconomics Workshop, Paris 1 University, Paris.

2.5 Participation to conferences organization

-Co-organizer of the workshop "Expectations, Shocks and Fluctuations", Paris-La Défense, France, 2024.
-Co-organizer of the workshop "Forecasting inflation : The state of the art", Paris-La Défense, France, 2021.

-Scientific Program Committee of the 22nd annual conference ”International Network For Economic Research”, Paris, 2020.
-Scientific Program Committee of the annual workshop on Econometrics Applied to Macroeconomics, Paris, France, every year from 2013 to 2019.
-Scientific Program Committee of the 25th Symposium of the Society for Nonlinear Dynamics and Econometrics, Paris, France, 2017.
-Scientific Program Committee of the 4th International Symposium in Computational Economics and Finance, Paris, France, 2016.
-Co-organizer of the workshop ”Advances in time series and forecasting”, in honour of Prof. J-P Indjehagopian, Paris-La Défense, France, 2015.
-Co-organizer of the workshop ”Time series econometrics : The state of the art”, Paris-La Défense, France, 2015.
-Scientific Program Committee of the 3rd International Symposium in Computational Economics and Finance, Paris, 2014.
-Scientific Program Committee of the *7th International conference on Computational and Financial Econometrics* (CFE'13), December 13-16, London 2013.
-Scientific Program Committee of the *18th International Panel Data Conference*, Paris 2012.
-Co-organizer of the macroeconomics workshop in the honour of Pierre-Yves Hénin, Paris 1 University, 2012.
-Special “Nonlinear Econometrics” session organizer, 18th Annual Symposium of the Society for Nonlinear Dynamics and Econometrics, Italy, 2010.
-Scientific Program Committee of the *Computational Economics and Finance annual conference*, 2008.
-Scientific Program Committee of the *Annual Congress of French Economics Association*, 2008, 2010, 2012.
-Organizer of the *15th Annual Symposium of the Society for Nonlinear Dynamics and Econometrics*, 2007, Paris.

2.6 Editorial Activities

2021- : Advisory Board of *Economie et Statistique*
2016- : Editorial Board of *La revue de l'OFCE*, SciencesPo Press, Paris.
2014-2023 : Advisory Board of *Revue Economique.*
2013-2015 : Editorial Board of *Mathematical Economics Letters.*
2005-2013: Editorial Board of *Revue Economique.*
Referee reviewer for many international and French economics/econometrics journals.

3 Teaching/supervision activities

3.1 Current lectures

-Time Series (Master of Econometrics, 30 hours)
-Financial Econometrics (Master of Finance, 20 hours)
-Applied Econometrics (Master of Econometrics, 15 hours)
-Nonlinear Time Series (1st year of PhD of Econometrics, 20 hours)
-Applied Macroeconometrics (1st year of PhD of Econometrics, 20 hours)
-Advanced Macroeconomics (1st year of PhD of Economic Analysis, 24 hours)

3.2 PhD Supervisions:

-Sarra SAIDI : “Noncausal processes and macroeconomic time series modelling”, Cergy-Pontoise University (defense in May 2023), post-doc Univerité du Mans.
-Jérôme TRINH : “Chinese Business Cysles Analysis”, Cergy-Pontoise University (defense in May 2022), Economist at the Directorate-General for Treasury, French Ministry of Economics and Finance.
-Patrick KANDA : “Professional Forecasters Behavior”, Cergy-Pontoise University (defense in September 2021), Economist at the Directorate-General for Treasury, French Ministry of Economics and Finance.
-Arnaud DAYMARD : “Intergenerational Ecological Debt”, Cergy-Pontoise University (defense in November 2020), co-supervision (50%) with Katheline Schubert, Paris School of Economics, post-doc INRAE.
-Davide ROMELLI : “Central Bank Independence Indexes”, Cergy-Pontoise University (defense in December 2015), co-supervision (50%) with Cristina Terra, Associate Professor at Trinity College, Dublin, Ireland.
-Romain LEGRAND : “ European Monetary Union and Stabilization Policies”, Cergy-Pontoise University (defense in December 2013), Quantitative Researcher at QUBE RESEARCH & TECHNOLOGIES.
-Songlin ZENG : “ Real Exchange Rates Dynamics in ASEAN countries”, Cergy-Pontoise University (defense in October 2013), Full Professor and Vice Director of research center of international finance at Zhongnan University of Economics and Law, Wuhan, China.
-Charbel BASSIL : “Stabilization Policies and Structural Change in the US”, Cergy-Pontoise University (defense in July 2013), Associate Professor at Notre Dame University, Lebanon.
-Céline POILLY : “Optimal Monetary Policy in the Euro Area”, Cergy-Pontoise University (defense in September 2008), Full Professor at Aix-Marseille School of Economics.

-Alexandra OLMEDO : “Asymmetrical Effects of Monetary Policy”, Cergy-Pontoise University (defense in July 2006), Economist at AXA Investment Managers.
-Othman BOUABDALLAH : “Nonlinear Models and Macroeconomic Aggregates Forecasts”, Paris 1 University (defense in December 2004), Senior Economist at the European Central Bank.

4 Recent participations in national and international evaluation committees

-Member of the committee awarding the “Prix de Thèse - Jeune Docteur”, Banque de France, 2024.
-Member of the steering committee of the French Association of Economics (AFSE), since 2022.
-Member of the committee awarding the “Prix de Thèse de l’AFSE”, French Association of Economics, since 2022.
-Member of the national committee of the French business cycles datation, French Association of Economics - AFSE, since 2020.
-Member of the national committee awarding the best PhD thesis in Economics and Management, Chancellerie de l’Académie de Paris, 2020-2021.
-Member of the High Council of Public Finances chaired by Pierre Moscovici– Cour des Comptes, nominated by the President of the French National Assembly (Richard Ferrand), since 2019.
-Member of the National Council of Universities, since 2019.
-Member of the national committee awarding the “Prix de Thèse monétaire, financière et bancaire de la Fondation Banque de France pour la recherche”, Banque de France and French Association of Economics, 2018, 2019, 2021.
-Member of the international committee in charge of the evaluation of Danish academics research projects in Economics and Management, Danish Agency for Science, Technology and Innovation, Copenhagen, Denmark, 2014.
-Member of the national committee in charge of the allocation of PhD surpervision and Research grants (PEDR), French Ministry of Universities and Research, France, 2008, 2010.
-Member of the national Masters degrees evaluation committee (Agence d’Evaluation de la Recherche et de l’Enseignement Superieur), France, 2010.
-Member of the national research laboratories (in economics) evaluation committee (Agence d’Evaluation de la Recherche et de l’Enseignement Supérieur), France, 2009.

-Member of the international review panel in charge of the evaluation of Economics and Management research centers in Portugal, Portuguese Fundation for Science and Technology, Portugal, 2009.
-Member of the French national committee in charge of nomination of full-professors (premier concours d'agrégation du supérieur en Sciences Economiques), France, 2006.