

LUDOVIC CALÈS

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PROFILE

- Coordination of international R&D projects for European institutions.
- 10+ years of experience in Econometrics applied to Finance and Economics.
- 3+ years of IT experience, mainly developing high frequency trading infrastructure.
- Track record of innovative ideas published in refereed journals: allocation score, cross-sectional modeling.
- Teaching at universities and institutions, presentations at international conferences.
- Fluent in French, English and Italian.

SKILLS

- **Finance:**
 - Asset Management: short/medium term, long term.
 - Risk Management: VaR computations, risk exposure.
 - Hedge Fund: long/short equity, risk exposure and teaching on the hedge fund industry.
- **Economics:** Macro-Economics, Growth and Business cycles.
- **Mathematics:** Econometrics, Statistics, Operations Research, Graph Theory.
- **I.T.:** Matlab (8 yrs.), C/C++ (4 yrs.), Stata (3 yrs.), Gauss (2 yrs.), EVIEWS (2 yrs.), Ox (1 yr.), R (<1 yr.).
- **Languages:** French (Native), English and Italian (Fluent), Spanish (Basic, used at work).

EXPERIENCE

Principal in Econometrics, Hendyplan, Luxembourg

07/2013 - Now

Hendyplan is a technology transfer company specialized in Statistics and Economics.

Coordinate and participate to international R&D and production projects, teach econometrics and reply to call for tenders.

- For **Eurostat**: Research, development and production of business cycle and GDP coincident indicators. Operational production (updates of Eurostat's production and vintage databases, revision analysis, redaction and edition of Eurostatistics¹). Coordination of a team of 14 persons (11 experts and 3 software engineers).
- For **Cedefop** (European agency for vocational training): Development of a software for the production of short term forecasts of labor demand. Coordination of a team of 5 persons (3 experts and 2 software engineers).
- For **ArRiyadh Development Authority** and the **United Nations**: Analysis and proposal for improvements of Riyadh city's production of urban indicators.
- For **Eurostat**: Supervised the development of an econometric library for JDemetra. Team of 2 software engineers.
- For **Eurostat** and the **United Nations**: Edition of 2 handbooks.
- For the **ECB** and the **OECD**: Punctual advisory on new features of the econometric software TROLL.
- Replied to 2 calls for tenders: **ECB** (technical mark 43.12/50), **Eurostat** (accepted).
- Taught econometrics and statistics at **Eurostat**.

Post-doctoral Researcher in Finance, HEC - University of Lausanne, Lausanne, Switzerland

03/2011 - 04/2013

- Developed a dynamic long-term strategy based on a macro-financial model (Dynamic Stochastic General Equilibrium) investing in US short and long term bonds and stock index. Outperforms VAR model by 0.3 to 0.5 in Sharpe ratio. Implemented using DYNARE. Research sponsored by **Amundi Asset Management**.
- Taught Matlab programming in the Master in Finance program.

Research Fellow in Finance, University of Padova, Padova, Italy

01/2009 - 12/2010

- In parallel with my PhD studies, studied the impact of control benefits on the public risk-return trade-offs. Developed micro-economic equilibrium models. Analyzed a large data set (CRSP/Compustat) with panel data models.

Quantitative Analyst, GRETA Associati, Venice, Italy

08/2005 - 12/2008

GRETA Associati is a consultancy company specialized in Finance and Economics and managed by Ca'Foscari professors. Various contracts alternating/overlapping with research activities at Ca'Foscari University.

- Member of the financial committee, assessing the outcomes of the MEFIM model which produces monthly forecasts of the term structure of interest rates in USA, Japan and the main European countries. Forecasts sold to **Allianz**, **Generali**, etc.

¹<http://ec.europa.eu/eurostat/web/euro-indicators/publications/official-publications>

- For **Quantitative Investment Research SA**, Long/Short Equity Hedge Fund (*2 yrs. and 6 mths.*): Designed and developed, in Matlab, the fund's allocation models investing in sectoral DJ Stoxx 600 indices. Analyzed and presented the models' results on a monthly basis to determine the asset allocation. Supervised 1 software engineer and 2 interns, and presented the software and models to investors.
- For **Eurostat** (*10 mths.*): Developed, in Ox, and delivered monthly business and growth cycle indicators for the euro-zone and the main member states.

Research Associate in Econometrics, **Ca'Foscari University**, Venice, Italy

11/2005 - 12/2008

- Studied the risk exposure of hedge funds using regime switching models, VaR computations.
- Studied contagion and interdependence among financial markets.
- Studied the retirement choice of Italian workers based on retirement policies (real option valuation).

Software Engineer, **Aptus**, Paris, France

05/2001 - 09/2004

- For **Société Générale** (*2 yrs. and 7 mths.*): Developed market access servers (order passing and feed handling) for high frequency trading. Worked on most European markets: EUREX, Euronext-LIFFE, MTA-MCW, SIBE, etc.

Software Engineer, **Crédit Agricole Indosuez**, Luxembourg

12/2000 - 03/2001

EDUCATION

University Paris-1 Panthéon-Sorbonne and Paris School of Economics, Paris, France

PhD in Financial Mathematics, March 2011

- Dissertation: Rank-based models for the study of momentum and other cross-sectional effects in financial markets
- Supervisors: Prof. Dominique Guégan (University Paris-1) and Prof. Monica Billio (Ca'Foscari University)

Ca'Foscari University, Venice, Italy

Master's degree in Economics and Finance, with honors (GPA: 8.5/10), July 2005

Polytech' Clermont, French Engineering School, Clermont-Ferrand, France

Master's degree in Applied Mathematics, September 2000

- Thesis in Operations Research at **CIRRELT**, **University of Montréal**, Canada

COMMUNICATION

Research papers (available at <http://ssrn.com/author=1217488>):

- *Portfolio Symmetry and Momentum*, with M. Billio and D. Guégan, **EJOR** (CNRS rank 1) 2011.
- *A Cross-Sectional Score for the Relative Performance of an Allocation*, with M. Billio and D. Guégan, **IRAFIE** 2011.
- *Long-Term Portfolio Management with a Structural Macroeconomic Model*, with E. Jondeau and M. Rockinger, **Swiss Finance Institute Research Papers**. Listed on **SSRN's Top Ten download** lists for Model Construction & Selection, Dynamic Stochastic General Equilibrium Models and Computable General Equilibrium Models.
- *A new graphical tool for business cycle monitoring*, with J. Anas and G.L. Mazzi, in **Proceedings of New Techniques and Technologies for Statistics**, 2015.
- *Cross-Sectional Analysis through Rank-based Dynamic Portfolios*, with M. Billio and D. Guégan, working paper.
- *Study of the dependencies among the European economies, before and during the crisis*, with J. Anas, working paper.
- *Risk and Performance in the Choice of Allocations*, working paper.

Teaching:

- **Eurostat**: *Linear Regression and Time Series Analysis with R*, with Prof. Kapetanios, 2014 ($\times 2$) and 2015; *Seasonal Adjustment and Temporal Disaggregation*, with D. Ladiray, 2013 and 2014; *Balancing, Benchmarking, Temporal Disaggregation and Reconciliation*, with Prof. Di Fonzo, 2015; *Advanced Linear and Non-Linear Econometrics*, with Prof. Kapetanios, 2015.
- **Univ. of Lausanne**: *Matlab Programming and Programming in Finance*, MSc in Finance 2011-12 and 2012-13; Masters' thesis supervision: Ruojin Jiang, 'VaR computation based on GARCH-GH model', 2013.
- **Ca'Foscari Univ.**: *Matlab Programming*, MSc in Economics and Finance 2009; *The Hedge Fund Industry*, BSc in Economics and Finance 2008
- **Univ. of Padova**: *The Hedge Fund Industry*, MSc 2008 and BSc 2009

Public talks: 10 presentations at top conferences and universities (5 invited talks), Durham University (2013), Vrije University Amsterdam (2013), EURO (2012, 2009), Computational and Financial Econometrics (2011, 2010, 2009), XI workshop on Quantitative Finance (2010), University Paris 1 (2009), Mathematics Applied to Finance (2008).