PhD Finance Programme
The PhD Finance at LSE is a well-established and internationally respected doctoral programme, which equips students to produce financial economics research of the highest quality by providing a broad-based training in theoretical and empirical research methods. The Programme is structured around two initial years of formal coursework, followed by two or more years of research. In addition, students are encouraged to participate from an early stage of their research in appropriate international workshops and colloquia, and are also offered the opportunity to gain teaching experience. The Programme seeks to enable students to develop the technical and intellectual skills required to pursue doctoral research across a broad range of areas in Finance.

Given the intellectually demanding and intensive nature of the course, entry to the PhD Finance is highly selective, with around 7-10 new entrants each year and approximately 30 research students enrolled across all years at any one time. The Programme attracts a very high calibre of candidate and the success of the training provided is evidenced by graduates having achieved excellent academic placements over the years. Recently, these include tenure-track faculty positions at the University of Chicago, the University of British Columbia, Washington University in St. Louis, HEC Paris, McGill University, HEC Montreal, Copenhagen Business School, and ESSEC Business School, amongst others. Additionally, in 2009, a graduate of the Programme was awarded the prestigious Smith Breeden Prize (best asset pricing paper in the Journal of Finance) for a paper first drafted as part of his PhD thesis – a further indication of the quality of students and the research training. Graduates have also taken up roles in central banks (e.g. the Federal Reserve Bank of New York), international organizations (e.g. the IMF) and in industry (e.g. BlackRock).
LSE

Located in Central London, the London School of Economics and Political Science is a world-class social science institution, attracting some of the best researchers and teachers in their respective fields, and providing a challenging environment for highly capable students. The dynamic intellectual environment of LSE facilitates a constant interchange of ideas between the School and major financial institutions, leading multinational organisations and key regulatory bodies. LSE also houses the British Library of Political and Economic Science, the largest social sciences library in the world.

The Department of Finance

The LSE Department of Finance enjoys a pre-eminent reputation for the excellence of its teaching and research in finance, which is grounded in economics and based on a rigorous approach to the discipline. Finance faculty members are recognised as experts in their field, with interests including the areas of corporate finance, asset pricing theory, risk management, empirical analysis of capital markets, behavioural finance, portfolio analysis, derivatives pricing, microstructure, and financial econometrics. Our diverse faculty and student body come from across the globe, providing a rich environment in which to research and study finance. We work with the purpose of maintaining and enhancing the Department’s excellent academic reputation and carrying out cutting-edge research in finance, thus ensuring that we continue to rank alongside the most highly-rated departments in finance in the world.

The FMG

The Financial Markets Group Research Centre was established at LSE in 1987. FMG is now one of the leading centres in Europe for academic research into financial markets. It is the focal point of LSE’s research communication with the business, policy making and academic finance communities. The FMG brings together a core team of senior academics and young researchers to undertake cutting edge theoretical and empirical research. Through its Visitors’ Programme the FMG attracts some of the world’s renowned finance academics and outstanding young researchers. The FMG has also developed strong links with the user community, in particular investment banks, commercial banks and regulatory bodies, and attracts support from a large number of City institutions, both private and public. It stands at the forefront of understanding problems in financial markets and in the decision-making of corporations, banks and regulators.

For further information go to http://fmg.lse.ac.uk

Why LSE Finance?

Our programme is unique in its integration of Finance and Economics. Our students take first-year micro and macro courses together with PhD students in Economics. But they differentiate themselves by taking advanced courses in financial econometrics, asset pricing and corporate finance during the first two years of the programme. In the end, students leave with a broad understanding of Finance and its relations to other fields in Economics. The size of our faculty is another advantage. As one of the largest finance departments in the world, we are able to offer opportunities for research in virtually any field in Finance. We are strong in both theory and empirics, asset pricing and corporate finance, as well as financial econometrics, behavioural finance, macro-finance, and microeconomic analysis of financial markets and institutions.

LSE is a challenging yet rewarding research environment. By offering a comprehensive coursework programme in the first years and through weekly world class research seminars, the Department of Finance offers the tools its PhD students need to build the necessary state-of-art research skills. We are lucky to have first class faculty in the Department across all Finance subfields and they are always happy to meet and discuss research ideas with PhD Students. It is important to be pro-active, but after all, this is yet another skill a researcher should develop during their PhD.

Nelson Costa-Neto (PhD Student)

MA in Economics at PUC-Rio, Brazil and Double Diploma in Engineering at Ecole Centrale de Lyon, France and at PUC-Rio, Brazil
Programme Structure
All research students are initially admitted into the MRes Finance, and follow one of two pathways – Route 1 or Route 2 – depending on their existing training. Both routes have an initial formal coursework and examination element lasting one or two years; upon successful completion of the coursework and examinations, students prepare to defend their thesis proposal to a small Thesis Committee. Subject to successful completion of these elements, students are awarded the MRes and are then upgraded to the status of PhD candidate.

ROUTE ONE STRUCTURE

**Year One – Compulsory Courses**

- Microeconomics for MRes Students
- Macroeconomics for MRes Students
- Financial Econometrics for Research Students
- Financial Economics and Applied Corporate Finance

**Year Two – Compulsory Courses**

- Asset Pricing for Research Students
- Corporate Finance for Research Students
- Research Paper in Finance (5,000 – 10,000 words in length)
- PhD Seminar in Finance

Route 1 students are typically those who have not graduated from the MSc Finance and Economics programme at LSE; these students complete the formal MRes coursework element over two years. In the first year, this comprises a number of year long compulsory core courses. In the second year, Route 1 students take further courses and also attend research-in-progress seminars, at which students across all years of the Programme present their research, and discuss and critique the work of others. These seminars are also attended by supervisors and other members of academic staff.
Route two students are primarily those who have successfully completed the MSc Finance and Economics at the LSE (though a small number of highly-qualified students from other comparable backgrounds may also be admitted). These students complete the MRes in one year.

**ROUTE TWO STRUCTURE**

**Year One – Compulsory Courses**

- Microeconomics for MRes Students
- Asset Pricing for Research Students
- Corporate Finance for Research Students
- Research Paper in Finance (5,000 – 10,000 words in length)
- Financial Economics and Applied Corporate Finance (if not taken before).
- PhD Seminar in Finance

Additionally, all students are required, throughout their tenure at LSE, to attend the weekly research seminar in financial economics, where speakers of international repute present their work.
PhD Courses

**Microeconomics for MRes Students**

The aim of the course is to:

i. Introduce the basic analytical tools that are necessary to conduct research in any field in economics.

ii. Give the students a full understanding of the classic Microeconomic Theory and of the modern developments of Microeconomic Theory

iii. Enable students to address a microeconomic problem by structuring it as a mathematical model and to obtain useful economic predictions through the use of mathematical tools.

**Topics include:** Consumer theory, producer theory, general equilibrium, welfare, choice under uncertainty, game theory, economics of information, agency theory, contracts, topics in mechanism design.

**Teachers:** Andrea Prat and Michele Piccione (both from Economics).

**Macroeconomics for MRes Students**

The course will cover topics in advanced macroeconomics with emphasis on fundamentals and applications to recent theoretical advances:


ii. Search and Matching: The Matching Model, Efficiency Wages, Growth and Unemployment.


iv. Monetary Economics: models with credit frictions, sticky prices, search.

**Teachers:** Francesco Caselli, Wouter den Haan, and Silvana Tenreyro (all from Economics).

**Financial Econometrics for Research Students**

The course has three parts. The first part of the course, covering probability, mathematical statistics, and asymptotic theory, provides students with an understanding of basic concepts in probability and statistics with a view of eventual use for econometric analysis of financial data. Topics include Basic Probability Concepts, Random Variables, Selected Probability Distributions, Modes of Convergence, Properties of Estimators, Frequentist Hypothesis Testing and Bayesian Inference. The second part, on theory and application of regression analysis, covers estimation and inference theory for regression models. The topics covered are least squares estimation, maximum likelihood estimation, instrumental variable estimation, and generalized method of moments estimation, with applications to linear models, many and weak instrument problems, limited dependent variable models, and panel data models. The third part, on financial time series, provides estimation and inference tools for financial time series that are primarily used in empirical asset pricing. The topics cover basic time-series models and their extensions with stochastic volatility, regime-switches and jumps.

**Teacher:** Mikhail Chernov.

**Financial Economics and Applied Corporate Finance**

This course is an introduction to financial economics and corporate finance. In the financial economics half, the focus is on investors’ behaviour, market equilibrium, and asset pricing. Topics include choice under uncertainty, complete and incomplete asset markets, mean-variance portfolio theory and equilibrium asset pricing. In the corporate finance half, the course will examine topics such as valuation techniques, capital structure and payout policy, raising capital, going public, financial risk management by firms, corporate governance, takeovers and insolvency.

**Teachers:** Ian Martin and Moqi Xu.
Corporate Finance for Research Students

The first half of this course focuses on the theory of corporate finance. The theory half of the course can, in turn, be subdivided into two parts. The first part reviews some of the classical concepts in corporate finance, using tools from game and contract theory to study incentive and information problems at the level of the firm, examining how financial contracts can be designed to mitigate these problems. This part of the course also considers how takeovers and ownership concentration can help to mitigate conflict of interests among insiders and investors in firms. The second part focuses on the theory of financial intermediation. This component reviews the classical theories for the existence of financial intermediaries, focusing on the key inter-linkage between financial intermediation and financial fragility. This component of the course also examines the role of financial intermediaries in engendering financial market imperfections. The second half of the course will consider empirical methods in corporate finance and its applications to capital structure, investments, financial distress, corporate governance, and financial intermediation.

Teachers: Mikhail Burkart, Amil Dasgupta, and Daniel Paravisini.

Asset Pricing for Research Students

The course is divided into two parts relating to asset pricing theory and empirical asset pricing. The asset pricing theory half of the course will cover static models of frictionless markets, dynamic discrete-time models, dynamic continuous-time models, and models with frictions. The second half of the course is dedicated to empirical evaluation of asset-pricing models. Representative agent models (with power, habit and recursive preferences) and their application to valuation of equities are covered. Next, no-arbitrage term-structure and option-pricing models are discussed. The class concludes with both equilibrium and reduced-from models of currencies.

Teachers: Georgy Chabakauri, Mike Chernov, Dimitri Vayanos, and Kathy Yuan.

PhD Seminar in Finance (full unit)

This is a seminar course for PhD students in the early stages of their research to present their work in progress. Outside speakers may also be invited from time to time.

Teacher: Daniel Ferreira (PhD Programme Director).

Supervision and Progress Monitoring

Throughout their tenure on the Programme, students are supervised by academic members of staff whose research interests are a close fit with their own. Each student has a principal and a secondary advisor and progress is reviewed by the Department’s Postgraduate Research Assessment and Review Committee, which meets twice per year. Throughout the programme, students are required to make presentations of their work at the research-in-progress seminars. This allows students to receive academic feedback on their work and also helps them to develop their skills in presentation and discussion. These seminars are attended by supervisors and other members of academic staff.

Teaching

Starting in their second year, the vast majority of Finance PhD students are involved in undergraduate class teaching. The Department very much believes that this teaching experience offers crucial added value, by helping to develop students’ communication and presentational skills and preparing them for the academic job market. In the later years of their PhD, some students are offered Teaching Fellow positions within the Department, allowing them to teach graduate level classes.

The Research Environment

Doctoral students joining the Department become members of an integrated community of researchers, interacting and working with some of the leading academics in Finance. All students are allocated offices within the Department, with each student having their own PC and access to a printer in each room. Students also benefit, through shared teaching and research interaction, from the high level of connection between the PhD Finance programme and the LSE PhD programme in Economics, as well as from contact with visiting research students and scholars in financial economics through the Financial Markets Group (FMG).

Funding Your Studies

All students are fully funded on admission to the Programme. This includes a tuition fee waiver and generous stipend. Funding is guaranteed for four years, subject to satisfactory academic performance and other conditions. There are also numerous opportunities for teaching; compensation for teaching is in addition to stipends.
Recent PhD Titles of LSE Students Supervised by Finance Faculty and First Placements

Thomas Maurer, PhD 2012
Assistant Professor of Finance at the Olin Business School, Washington University in St. Louis
“Is Consumption Growth merely a Sideshow in Asset Pricing? – Asset Pricing Implications of Demographic Change and Shocks to Time Preferences”

Qi Shang, PhD 2012
Assistant Professor at the Hanqing Advanced Institute of Economics and Finance, Renmin University of China
“Essays in Asset Pricing and Institutional Investors”

Yu-Min Yen, PhD 2012
Postdoctoral Fellow, Academia Sinica, Taiwan
“Three Essays in Financial Econometrics”

Aytek Malkhozov, PhD 2011
Assistant Professor of Finance, McGill University
“Essays in Asset Pricing”

Miguel Anton, PhD 2011
Assistant Professor of Finance
IESE Business School, Barcelona
“Three Essays on Comovement of Financial Assets”

Dragana Cvijanovic, PhD 2011
Assistant Professor of Finance, HEC Paris
“Essays in Real Estate Finance”

Vincent Fardeau, PhD 2011
Economist – Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington DC
“Essays in Financial Intermediation”

Zijun Liu, PhD 2011
Economist, Financial Services Authority
“Essays in Financial Intermediation”

Daniel Metzger, PhD 2011
Assistant Professor of Finance, Stockholm School of Economics

Sitikantha Parida, PhD 2011
Assistant Professor of Finance, Graduate School of Management, Clark University

Zhigang Qiu, PhD 2011
Assistant Professor of Finance, Hanqin Advanced Institute of Economics and Finance, Renmin University of China, Beijing
“Essays on Delegated Portfolio Management”

Yuki Sato, PhD 2011
Assistant Professor of Finance, University of Lausanne
“Essays on Delegated Portfolio Management and Asset Prices”

Gyuri Venter, PhD 2011
Assistant Professor of Finance, Copenhagen Business School
“Essays on Asymmetric Information and Trading Constraints”

Claudia Custodio, PhD 2010
Assistant Professor of Finance, Arizona State University
“Essays in Corporate Finance”

Jan Bena, PhD 2009
Assistant Professor of Finance,
Sauder School of Business, University of British Columbia
“Essays on the Interaction between Financial Development and Real Economy”

Alexander Bleck, PhD 2009
Assistant Professor of Accounting, Chicago Booth
“Disclosure and Trading Games in Financial Markets”

Pierre Chaigneau, PhD 2009
Assistant Professor of Finance, HEC Montreal
“Essays on CEO Compensation”

Anisha Ghosh, PhD 2009
Assistant Professor of Finance, Carnegie Mellon, Tepper School of Business
“Essays in Asset Pricing”

Christian Reusch, PhD 2009
Quantitative Analyst, Wadhwani Asset Management
“On the non-linear dynamics of financial market risk and liquidity”

Gara Minguez Afonso, PhD 2008
Economist, Federal Reserve Bank of New York
“Liquidity, information and coordination in financial markets”

Sridhar Arcot, PhD 2007
Assistant Professor of Finance, ESSEC Business School, Paris
“Essays in Corporate Finance”

Valentina Bruno, PhD 2007
Assistant Professor of Finance, Finance and Real Estate Department, American University
“Three Essays in Corporate Governance”
For me LSE has become the most exciting place in Europe to study finance. Our Faculty has grown to become the biggest finance group in Europe and has very strong academic credentials. When you combine that with LSE’s incredibly strong institutional history, especially the Department of Economics, which is one of the best in the world, this really contributes to making our PhD Finance Programme one of the strongest in the world.

— Dr Ulf Axelson
Abraaj Capital Reader in Private Equity
Finance Faculty

The Department of Finance faculty has expertise in a number of discrete yet complementary research areas, such as the pricing and valuation of assets, the behaviour of financial markets, and the structure and financial decision making of firms and financial intermediaries.

The following are some recent notable publications by our faculty:


“Can Rare Events Explain the Equity Premium Puzzle?” C. Julliard and A. Ghosh, Forthcoming in the *Review of Financial Studies*.


<table>
<thead>
<tr>
<th>Name</th>
<th>Research Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ronald Anderson</strong></td>
<td>Dynamic corporate finance; contingent claims analysis; credit risk; financial market structure and regulation; structuring financial contracts and institutions.</td>
</tr>
<tr>
<td><strong>Ulf Axelson</strong></td>
<td>Private equity; financial innovation and security design; corporate finance; auction theory; and financial intermediation.</td>
</tr>
<tr>
<td><strong>Elisabetta Bertero</strong></td>
<td>Sub-sovereign debt; the financial role of the state – the interaction between governments and financial markets; budget constraints and state-owned firms; international finance.</td>
</tr>
<tr>
<td><strong>Mike Burkart</strong></td>
<td>Corporate governance; financial contracting.</td>
</tr>
<tr>
<td><strong>Maria Cecilia Bustamante</strong></td>
<td>Dynamic corporate finance; asset pricing implications of corporate decisions; real options; game theory.</td>
</tr>
<tr>
<td><strong>Georgy Chabakauri</strong></td>
<td>Asset pricing; portfolio choice; risk management.</td>
</tr>
<tr>
<td><strong>Mikhail Chernov</strong></td>
<td>Empirical asset pricing; options; fixed-income and credit models; applications of econometric methods.</td>
</tr>
<tr>
<td><strong>Vicente Cuñat</strong></td>
<td>Corporate finance; applied theory; applied econometrics; industrial organisation; labour and personnel economics.</td>
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<tr>
<td><strong>Jon Danielsson</strong></td>
<td>Financial risk analysis; value at risk; volatility modelling and forecasting; extreme value theory.</td>
</tr>
<tr>
<td><strong>Amil Dasgupta</strong></td>
<td>Information economics and game theory with applications to finance; the theory of delegated portfolio management and consequences for financial markets; the theory of financial crises.</td>
</tr>
<tr>
<td><strong>Jack Favilukis</strong></td>
<td>Consumption based asset pricing, incomplete markets; heterogeneity and inequality; limited participation and participation costs.</td>
</tr>
<tr>
<td><strong>Daniel Ferreira</strong></td>
<td>Corporate finance and governance; organizational economics.</td>
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<tr>
<td><strong>Stephane Guibaud</strong></td>
<td>International macro and finance; asset pricing; yield curve; optimal debt management; recursive contracts.</td>
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<tr>
<td><strong>Christian Julliard</strong></td>
<td>Macroeconomics; finance; applied econometrics; international economics and finance; real estate finance.</td>
</tr>
<tr>
<td><strong>Dong Lou</strong></td>
<td>Empirical asset pricing; behavioral finance; empirical corporate finance.</td>
</tr>
<tr>
<td><strong>Antonio Mele</strong></td>
<td>Asset prices and the business cycle; information networks in financial markets; statistical inference for dynamic models in finance.</td>
</tr>
<tr>
<td><strong>Ian Martin</strong></td>
<td>Theoretical and empirical asset pricing.</td>
</tr>
<tr>
<td><strong>Philippe Mueller</strong></td>
<td>Macro-finance; empirical asset pricing; fixed income; financial econometrics.</td>
</tr>
<tr>
<td>Name</td>
<td>Research Interest</td>
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<tr>
<td>Yves Nosbusch</td>
<td>Sovereign debt; intergenerational risksharing; asset pricing and macroeconomics; empirical asset pricing.</td>
</tr>
<tr>
<td>Stavros Panageas</td>
<td>Asset pricing, macroeconomics.</td>
</tr>
<tr>
<td>Daniel Paravisini</td>
<td>Corporate finance; credit and banking; development economics.</td>
</tr>
<tr>
<td>Christopher Polk</td>
<td>Asset pricing; corporate finance; behavioural finance; hedge funds; private equity; macroeconomics.</td>
</tr>
<tr>
<td>Rohit Rahi</td>
<td>Arbitrage in segmented markets; financial innovation and security design; asset pricing with asymmetric information; general equilibrium theory; incomplete markets.</td>
</tr>
<tr>
<td>Andrea Tamoni</td>
<td>Theoretical and empirical asset pricing, and financial econometrics.</td>
</tr>
<tr>
<td>Dimitri Vayanos</td>
<td>Liquidity and asset pricing; information in asset markets; delegated portfolio management; behavioural finance.</td>
</tr>
<tr>
<td>Andrea Vedolin</td>
<td>Asset pricing; derivatives pricing; financial econometrics; portfolio theory.</td>
</tr>
<tr>
<td>Michela Verardo</td>
<td>Empirical asset pricing; market efficiency and investment anomalies; trading behaviour of institutional investors; behavioural finance.</td>
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<tr>
<td>David Webb</td>
<td>Financial economics and insurance economics; economics of information; corporate finance and financial markets.</td>
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<tr>
<td>Moqi Xu</td>
<td>Empirical corporate finance/governance.</td>
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<tr>
<td>Kathy Yuan</td>
<td>Bubbles and crises; liquidity; heterogeneous information; mutual funds; hedge funds; network theory; short-sale and margin constraints; global games; asset pricing.</td>
</tr>
<tr>
<td>Konstantinos Zachariadis</td>
<td>Market microstructure and design; information economics and game theory with applications to finance; corporate governance as related to economic efficiency.</td>
</tr>
<tr>
<td>Jean-Pierre Zigrand</td>
<td>General equilibrium asset pricing; financial intermediation and delegation; continuous time asset pricing; herding; market crashes; foundations of arbitrage.</td>
</tr>
</tbody>
</table>
LSE offers a highly stimulating and thriving research environment. The opportunities to brainstorm are endless: from discussing one’s ideas with faculty members in both formal and informal setting, to being constantly probed by one’s fellow PhD students. Since most of the PhD students sit in the FMG and spend most of their days in the same room, by design we are bound to work together. Even more so, most of my co-authors are faculty members at LSE. There is a certain “academic buzz” about LSE: there is something in the air that pushes you to work harder and soak up the positive atmosphere. Going on the job market was quite stressful, intensive and concentrated. However, LSE faculty members made sure that we are well prepared in every sense of that word. I received lots of training and support from my official and unofficial supervisors, who prepared me to deal with different kinds of interviews, presentations and other ways of advertising my research. Consequently, although the 2011 job market was quite tough, I had plenty of offers to choose from and I opted for HEC Paris.

Dragana Cvijanovic (PhD 2011)
Assistant Professor of Finance
U. of North Carolina at Chapel Hill.

Useful Links for Further Information

Online applications and further information about studying at LSE
Graduate School
www.lse.ac.uk/collections/graduateadmissions

Information on scholarships and applying for financial support
Financial Support Office
www.lse.ac.uk/financialsupport

Contact Us:
For further information on this programme, contact:
PhD Programme Manager
Department of Finance
Houghton Street
London WC2A 2AE
Tel: +44 (0)20 7955 7736
Fax: +44 (0)20 7849 4647
Email: finance.admissionsenquiries@lse.ac.uk
The information in this handbook can be made available in alternative formats, on request. Please contact the Department of Finance.

The School seeks to ensure that people are treated equitably, regardless of age, disability, race, nationality, ethnic or national origin, gender, religion, sexual orientation or personal circumstances. Freedom of thought and expression is essential to the pursuit, advancement and dissemination of knowledge. LSE seeks to ensure that intellectual freedom and freedom of expression within the law is secured for all our members and those we invite to the School.

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Photography: Nigel Stead, LSE Photographer
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