Qatar Centre for Global Banking & Finance

2021–22

The Qatar Centre for Global Banking & Finance

ANNUAL REPORT 2021–22

For more information, please contact:

Professor David Aikman
Director of the Qatar Centre
for Global Banking & Finance
King's College London
david.aikman@kcl.ac.uk

Matthew Gorman
Director of Development
King's College London
matthew.gorman@kcl.ac.uk

Contents

Welcome from the Chairman of Council

The Rt Hon the Lord Geidt

It has been an honour to witness the continued growth and success of the Qatar Centre for Global Banking & Finance, the global reach of its work and the strengthening of our partnership with Qatar Central Bank, in what has been a challenging year.

With students and staff from over 150 countries, King's College London is a truly global university with a global problem-solving mindset at the heart of our vision. This is important because the challenges we face in our societies more than ever are overwhelmingly global – be it recovering from the pandemic, addressing the implications of the ongoing war in Ukraine on the economy and food security, or tackling the climate emergency. Facing up to these challenges will require international cooperation.

I have been particularly impressed to see the Centre's expanding global reach and presence. It continues to attract international expertise to its team, to strengthen its networks and to share its research worldwide through publications, virtual seminars and the new *Macroprudential Matters* blog.

It was a privilege to welcome a diverse and international audience to the Centre's first in-person Annual Conference in July. Participants attended from several continents; from central banks, from other public and private sector financial institutions and from many of the world's leading universities. It is precisely through events such as this, where we can share fresh ideas, that we can work to address the financial challenges we face and help improve the lives of people around the world.

We are also proud of the bank's partnership in progressing the Centre's educational programmes; developing the executive education offering and shaping the new MSc. These will empower our students and the financial community to develop the vital real-world skills needed to tackle the economic challenges of the future.

King's College London remains enormously grateful to Qatar Central Bank and its Governor, His Excellency Sheikh Bandar Bin Mohammed Bin Saoud Al-Thani, for the vision to support the Centre and for its continued guidance and counsel. We look forward to our continued work together over the coming years.

Thank you.

The Rt Hon the Lord Geidt GCB GCVO OBE QSO FKC
Chairman of Council
King's College London

King's College London remains enormously grateful to Qatar Central Bank and its Governor, His Excellency Sheikh Bandar Bin Mohammed Bin Saoud Al-Thani, for the vision to support the Centre and for its continued guidance and counsel.

Introduction from the President & Principal

Professor Shitij Kapur

Qatar Central Bank's significant support in helping us to establish the Qatar Centre for Global Banking & Finance is greatly valued by King's Business School and the wider university. We thank you for your generosity, vision and partnership. We have made superb progress, and I am pleased to update you on the Centre's activities over the last year.

I returned to King's in summer 2021 after a period at the University of Melbourne. It is a privilege to be back at an institution that is making such an impact. And it is remarkable to see the advances and partnerships that King's has made since I have been away including with Qatar Central Bank, in our flourishing and newly accredited Business School.

The strength of our partnership and the quality of research and education produced by the Centre in a short space of time has been impressive. The Centre brings together students and academics with the international central banking community to inform debate, policy-making, financial stability and regulation. Whether through research groups, published papers, or the Centre's policy forums, blogs, virtual seminars and annual conference, together our work embodies King's mission of knowledge with real purpose, for the service of society.

'We thank you for your generosity, vision and partnership. We have made superb progress, and I am pleased to update you on the Centre's activities over the last year.'

It is inspiring to see our academics and the global financial community collaborate, debate and share insights which have impact beyond the walls of King's. As a researcher myself, I understand the drive to translate research into action. Economic resilience will be key to society's recovery from the challenges it faces. By equipping central banks with practical tools and the latest knowledge to deal with these challenges, they will be better able to steer us towards a more stable financial future.

I am excited by the progress the Centre is making and what we can achieve together. On behalf of King's College London, I would like to thank Qatar Central Bank for its advice, guidance and support.

We are pleased to have the opportunity to regularly meet with your team in Doha and we look forward to welcoming you to London to show you first hand the work of the Qatar Centre for Global Banking & Finance.

Thank you for your support.

Kapur

Professor Shitij Kapur
President & Principal
King's College London

Our researchers were at the forefront of understanding the impact of COVID-19 on business and consumers and developing solutions that can make a difference to economic and societal wellbeing.

A message from the Executive Dean

Professor Stephen Bach

I am pleased to provide an update on the activities of the Qatar Centre for Global Banking & Finance and King's Business School.

King's Business School recently received accreditation from the Association to Advance Collegiate Schools of Business (AACSB) and European Quality Improvement System (EQUIS). These accreditations are the most comprehensive institutional accreditation systems for business and management schools. They indicate that we have become a world-leading business school, since our launch in 2017.

We are looking forward to the opportunities they bring to innovate, learn from and share ideas with peer schools all over the world.

'King's Business School is now one of the top 10 business schools for research in the UK, with more than 90 per cent of our research rated as world-leading or internationally excellent.'

We also continue to undertake ground-breaking research to improve the way people do business, and we engage with organisations around the world to create real value for society. Our researchers were at the forefront of understanding the impact of COVID-19 on business and consumers and developing solutions that can make a difference to economic and societal wellbeing. We were very proud to see our research and impact recognised in the UK's latest REF (Research Education Framework) results. King's Business School is now one of the top 10 business schools for research in the UK, with more than 90 per cent of our research rated as world-leading or internationally excellent.

With your generous support, the School continues to deliver our widening participation initiatives. We held our first in-person event for the cohort of 60 K+ students who joined the programme in January 2022. The K+ initiative is a two-year programme designed to support students who are disadvantaged in their university applications. 92 per cent of the students would be the first generation in their family to go to university and 85 per cent are from the most deprived areas of London. Our ambition is to make a King's education available for all those who could benefit from it.

This year, the Centre welcomed it's new Deputy Director Dr Rhys Bidder, and new researchers and PhD students. The activities of the Centre continue to reach a wide audience and we were delighted to showcase our work at the Centre's annual conference in July.

Thank you for your generous support with these developments. It has truly been an excellent year for the Centre and for the Business School. I look forward to updating you again soon.

Stephen Bach

Professor Stephen Bach
Executive Dean
King's Business School

Introduction from the Director of the Qatar Centre for Global Banking & Finance

Professor David Aikman

It is my great privilege to update you on the activities of the Qatar Centre for Global Banking & Finance since the previous Annual Report. This has been another strong year for the Centre. Through our teaching, our research, and our policy-focused events programme, we have made significant progress against our objective of building a research centre with global presence, which addresses pressing issues facing central banks and the global financial community.

A key objective for the Centre is to build our capacity to provide practical, policy-relevant training programmes for central bank staff, both in Qatar and around the globe. Following extensive discussions with the Training and Management Centre at Qatar Central Bank, I am very pleased with the progress we have made in identifying a set of training courses that meet the needs of the bank's staff. Building on the successful courses we ran on econometric modelling and on fintech in May, we have nine exciting new programmes scheduled for delivery through the end of 2022. These courses will be taught by internationally renowned experts in each field and will provide participants with state-of-the-art knowledge drawn from understanding best practice internationally.

In March, we ran a training school on Monetary and Financial Policy Analysis, which attracted participants from a variety of central banks including the Bank of England, the Central Bank of Ireland, and the Reserve Bank of South Africa. This six-week training programme featured courses in monetary policy, financial stability, data analytics, climate finance and decentralised finance, and will serve as a springboard for launching the new MSc in Financial Regulation & Policy in October 2023.

The research activities of the Centre have continued to thrive. In early July, we held the Centre's second annual research conference, at our Bush House Campus in London. The programme for this highly successful event boasted prominent speakers from the world's leading central banks and universities, and included keynote speeches by Raghuram Rajan (University of Chicago), Huw Pill (Bank of England), and Nellie Liang (US Treasury). We also benefitted from hearing world-leading experts discuss Central Bank Digital Currencies and monetary-fiscal policy interactions in our panel sessions. But the real highlight was being able to bring together again researchers and practitioners, experienced and junior, for in-person discussions at this critical juncture.

'Through our teaching, our research, and our policy-focused events programme, we have made significant progress against our objective of building a research centre with global presence, which addresses pressing issues facing central banks and the global financial community.'

At the end of last year we initiated a new blog entitled *Macroprudential Matters*, which hosts articles by global experts on financial stability policy. To date, the website has included pieces by Sir Paul Tucker (ex-Deputy Governor Bank of England), Don Kohn (ex-Vice Chair Federal Reserve), and Vitor Constancio (ex-Vice President ECB). We now have over 90 subscribers to the site, including prominent journalists and senior central bankers.

Our virtual seminar series is attracting excellent speakers and a global audience. The forthcoming autumn 2022 programme features speakers from the Bank of England, Imperial College London, and the University of California Davis – to name but a few. Since its inception in June 2020, we have had a total of 30 seminars, attracting over 1200 attendees from over 30 different countries.

'A key objective for the Centre is to build our capacity to provide practical, policy-relevant training programmes for central bank staff, both in Qatar and around the globe… These courses will be taught by internationally renowned experts in each field and will provide participants with state-of-the-art knowledge drawn from understanding best practice internationally.'

An important aspect of our work at the Centre is to use our convening power to bring together academics, financial market practitioners and policymakers to discuss topical issues and key challenges facing central banks at this juncture. In March, we organised a very successful policy forum on the role that sovereign green bonds can play in the transition to net zero. This event, inspired by the UK Treasury's first "green gilt" issuance in the autumn, featured speakers from the UK Treasury, BlackRock, the CDC Group and King's. The discussion centred on novel aspects of the UK's scheme, including the verification and assurance process, the rationale for elevated investor demand for these assets compared to conventional bonds, the extent of "additionality" created by the programme, and the outlook for this market in the years ahead.

Finally, I am delighted to say we have attracted excellent new researchers to the group. Dr Rhys Bidder has joined us as the Centre's new Deputy Director, having previously been an economist at the Federal Reserve Bank of San Francisco and at the University of Cambridge.

The continued support and guidance provided by Qatar Central Bank has been key in enabling us to deliver these successes. I look forward to working in partnership with colleagues at Qatar Central Bank in developing the Centre's activities in the year ahead.

Professor David Aikman
Director
Qatar Centre for Global Banking & Finance

People: Executive board

We are proud to have built a team with such a strong mix of academic credentials and practical banking experience. Over the last year we have welcomed our new Deputy Director, Dr Rhys Bidder and new researchers and visiting fellows.

Professor David Aikman

Director of the Qatar Centre for Global Banking & Finance; Professor of Finance

David Aikman joined King's Business School in April 2020 as Director of the Centre. He leads the Centre's education and research programmes across areas such as monetary policy, prudential regulation and the use of new data sources alongside traditional financial forecasting techniques.

David joined from the Bank of England, where he spent 17 years working as an economist – most recently as Technical Head of Division in the Financial Stability Strategy and Risk Directorate, leading work on macroprudential policy. During his time there, David gained considerable international experience and insight: he spent two years on secondment at the Board of Governors of the Federal Reserve System in Washington, DC, and served as a visiting scholar at the Bank of Japan's Institute for Monetary and Economic Studies. He also represented the Bank of England at international meetings including the Financial Stability Board, the Basel Committee and the European Systemic Risk Board. He has written research papers on financial stability and macroprudential policy and has a PhD in Economics from the University of Warwick.

Dr Rhys Bidder

Deputy Director of the Qatar Centre for Global Banking & Finance; Senior Lecturer in Finance

Rhys Bidder joined King's as Deputy Director of the Centre in Spring 2022. He has a BA, MA and MPhil in Economics from the University of Cambridge and holds a PhD from New York University. His research interests are both applied and theoretical, focusing on macroeconomic policy, banking and financial regulation. Rhys is interested in distressed debt and stress testing – both timely and important topics as the effects of COVID-19 play out, and as climate risks are gradually incorporated into stress scenario modelling. He will be Co-Deputy Director of the Centre's new MSc in Financial Policy & Regulation.

Rhys' research focuses on bank lending, stress testing, monetary policy, asset pricing and ambiguity.

Dr Francesca Monti

Advisor and former Deputy Director of the Qatar Centre for Global Banking & Finance; Senior Lecturer in Economics

Francesca Monti joined King's from the Bank of England where she worked for 10 years with a focus on macroeconomic modelling and monetary policy strategy issues. Most recently, she was Head of Modelling in the Monetary Policy Outlook Division. Francesca holds a PhD in Economics and Statistics from the Université Libre de Bruxelles and her research interests are in the fields of macroeconometrics and empirical macroeconomics.

Professor George Kapetanios

Chair of the Qatar Centre for Global Banking & Finance; Professor of Finance & Econometrics; Head of Banking & Finance Research Group. Director of Data Analytics for Finance and Macro (DAFM) Research Centre

George Kapetanios is Chair of the Centre. He holds an MSc from the London School of Economics and Political Science and a PhD from the University of Cambridge. Prior to joining King's, he worked at the National Institute of Economic and Social Research, the Bank of England and was Head of the School of Economics and Finance at Queen Mary, University of London.

George is Head of the Banking & Finance Research Group. His main research focuses are on the econometrics of structural change, the analysis of large datasets and the application of these to empirical finance and macroeconomics and he is widely published.

Professor Georgios Chortareas

Professor of Economics; Director of the Data Analytics for Finance and Macro (DAFM) Research Centre and Co-Deputy Director of Qatar Centre for Global Banking & Finance's MSc Programme

Georgios Chortareas' main research interests are in monetary policy and international finance. He has published on topics including monetary policy delegation, central banking, real exchange rates, current accounts, exchange rate fluctuations, fiscal and monetary policy and banking. Georgios is a member of the Money Macro and Finance Research Group (MMF) Committee.

Professor Gulcin Ozkan

Professor of Finance; Vice-Dean (Staffing)

Prior to joining King's Gulcin Ozkan held academic positions at METU, Durham University and the University of York where she held a Chair from 2011–19. She has also been the Managing Editor of the *Bulletin of Economic Research* since 2013. She holds an MSc in Economics from the University of Warwick and a PhD from the University of York.

Gulcin's main research focuses on the intersection of macroeconomics and finance covering issues such as financial crises, financial stability, monetary and macroprudential policies, emerging markets, public debt and financial development, fiscal policy and financial constraints and the economics of constitutions. Her recent work is on supply chain networks, Brexit, climate risk and fiscal policy in recessions.

Professor Martin Weale CBE

Professor of Economics

Martin Weale is an applied economist with an interest in macroeconomic and microeconomic problems and measurement. He graduated in Economics from Clare College, Cambridge, later returning to lecture and become a Fellow. In 1986–87 he held a Houblon-Norman Fellowship at the Bank of England. He became Director of the National Institute of Economic and Social Research in 1995, holding the post until he joined the Bank of England's Monetary Policy Committee where he was a member from 2010 to 2016. On leaving the Bank of England he joined King's Business School. From 2016 to 2022 he was a member of the Office for National Statistics Panel of Economics Experts, where he is now Chair of NSCASE, the National Statistician's Committee for Advice on Standards in Economic Statistics.

Recent work includes exploring the effects of the Bank of England's asset purchase programme. He is currently working on democratic measures of economic performance.

Dr Daniele Massacci

Senior Lecturer in Data Analytics for Finance, King's Business School; Programme Director of the Financial Policy & Regulation MSc Programme

Daniele Massacci joined King's in August 2019 and will be leading the Centre's new Global Banking & Finance MSc. He works in econometrics and finance, with interests in empirical asset pricing, financial econometrics, high dimensional statistics and portfolio risk analysis. Daniele holds an MSc from the University of Warwick and a PhD from the University of Cambridge.

Prior to joining King's, he held academic positions at the University of Warwick, the University of Surrey and the Einaudi Institute for the Economics and Finance (EIEF); he also worked as a Senior Research Economist at the Bank of England.

Dr Suzanne Marcuzzi

Director of Operations, King's Business School

Suzanne Marcuzzi is the senior leader for professional services in King's Business School and a member of the School's Senior Leadership Team. With the Executive Dean, she leads on the development and implementation of the school's strategy and planning and manages the delivery of professional support services.

She gained her first degree in Political Science and Philosophy at McGill University and has a PhD in Political Thought from the University of Cambridge.

Sylwia Baginska

Senior Global Partnerships Manager – Strategic Projects

Sylwia Baginska is responsible for the delivery of our partnership with Qatar Central Bank and the implementation of the Centre.

She has previously lead education teams at King's Business School and School of Security Studies. Prior to joining King's in 2017, Sylwia supported the MSc Central Banking & Financial Regulation and MBA programmes at Warwick Business School.

Matthew Gorman

Director of Development, King's College London

Matthew Gorman is responsible for fundraising for King's College London and the strategic initiatives of King's Health Partners. Prior to joining King's in 2018, Matt held senior roles at Cancer Research UK, SOAS University of London and The Open University.

People: Research staff

Postdoctoral research associates

Dr Timothy Foreman

Tim Foreman joined the Centre in March 2021. Before this, he was a Postdoc at the RFF-CMCC European Institute on Economics and the Environment (EIEE) in Milan and Adjunct Professor at IE University in Madrid. Tim completed a PhD in Sustainable Development at the School of International and Public Affairs at Columbia University in 2019. Tim's research focuses on public policy issues connected to climate change and the environment. His work has studied the macroeconomic consequences of dust storms in West Africa, climate change impacts on labour supply, and the causes and consequences of environmental migration. His current projects explain how climate shocks can propagate through the economy and how regulators can manage these risks.

Dr Roland Gemeyal

Dr Roland Gemeyal is a senior quantitative analyst with over 12 years of international finance experience with a focus on cryptocurrencies, DeFi and Fintech. He holds a MSc in Finance from Cass Business School, City University and a PhD in Finance from King's.

His expertise includes data analytics, trading and market making, risk management, financial modelling, product development and business operations. His research interests include crypto markets, sentiment analysis and market microstructure, among other areas related to behavioural finance and market manipulation. Roland's current research focuses on price discovery and market manipulation in the Bitcoin market.

Dr Aristeidis Raftapostolos

Aristeidis Raftapostolos joined the Centre in July 2022. He holds a PhD in Economics from the University of Strathclyde and postgraduate degrees in Finance and Economics from Queen Mary, University of London and Athens University of Economics and Business, respectively. Before joining the Centre, he was working as a senior consultant at ICAP Advisory and as a supervision analyst at the European Central Bank. His research interests are in the areas of machine learning, monetary policy and Bayesian econometrics methods focusing on forecasting macroeconomic and financial data.

Research assistants

Swarali Deepack Havaldar

Swarali Havaldar joined the Centre in September 2021 after completing an MSc in Economics at the University of Warwick. Her research interests are in monetary policy, global finance and financial stability and she is currently working on projects relating to macroprudential policies.

Mattias Nilsson

Mattias Nilsson joined the Centre in October 2021. He holds an MSc in Economics from the University College London and a BSc in Economics and Econometrics from the University of Nottingham. Before joining King's, Mattias completed traineeships at the European Central Bank in Frankfurt and the European Commission Joint Research Centre in Ispra.

His main research interests are in monetary policy, international economics and productivity. His current research is related to environmental economics that assess the quality of company's emission disclosures and the effect of floodings on the mortgage market.

Aditya Polisetty

Aditya Polisetty joined the Centre in October 2021. Before this, he was a research assistant at the University of Edinburgh, London Business School and the University of Warwick. Aditya completed his MSc in Economics from the University of Warwick and MSc in Applied Mathematics from Heriot-Watt University.

His research focuses on quantitative and empirical macroeconomics and macroeconomic forecasting with interests in monetary policy, fiscal policy, productivity, effects of automation and financial stability.

PhD students

Yao Dong

Yao's research focuses on climate stress-testing. His findings will help understand the potential impact of climate risk on the financial system and provide implications for policymakers.

Charalampos Karagiannakis

Charalampos is researching predictive modelling techniques developed to handle big data (ie datasets of high frequency, large-cross-section dimension, unstructured form, and mixed frequency) and the applications of these to finance and macroeconomics.

Louisa Kontoghiorghes

Louisa's research is on hypothesis testing procedures for text data. This target is achieved using text mining tools in combination with statistical methods. The new techniques can assist in analysing the evolution of economic indicators and improve forecasting in business analytics.

Xuetong Niu

Xuetong's research focuses on the application of big data, machine learning and text analysis for forecasting and nowcasting macroeconomic and financial variables of interest. The project will contribute directly to the Centre's research theme 'Developing new techniques for understanding the economic environment and forecasting'.

Chetun Patel

Chetun's research analyses the decision to grant operational independence over the setting of interest rates to the Monetary Policy Committee of the Bank of England in 1997. The thesis will offer a detailed narrative on the changing machinery of central government following the decision, and what this implied about the way New Labour was to run government. It will also consider the international context of central banking and the influence of financial markets on UK economic policymaking.

Abhinaba Saha

Abhinaba's research is in the applications of advanced level econometrics. He is trying to build an early warning model to assess the impact of some particular macro-financial indicators for predicting systemic banking crises for the Eurozone.

Sameedh Sharma

Sameedh's research is on the global dimensions of macroprudential policy frameworks – in particular, cross-border spillovers for bank risk and the real economy. The findings will contribute to the growing literature on macroprudential policy transmission and will offer insights into policy design and co-ordination.

Yanqing Wang

Yanqin's research interest is in financial technology, digital currency, behavioural finance and risk management. She is passionate about applying research-based learning to solving real business problems.

Stylianos Zlatanos

Stylianos' research will focus on regime-switching models in a high-dimensional setting. He will develop a framework to capture the non-linear behaviour of time series, while studying the potential drivers of such behaviour.

People: Visiting Fellows

Dr Alanoud Ali Al-Maadeed

Assistant Professor of Economics, Qatar University

Alanoud Al-Maadeed is an Assistant Professor of Economics at Qatar University and served as Qatar University Fellow in the Center of International and Regional Studies, Georgetown University from 2018–19. She received a PhD in Economics and Finance from Brunel University London in 2016 with a thesis entitled 'Effects of oil prices, food prices and macroeconomic news on Gulf Cooperation Council (GCC) stock markets.' She was selected to join the Rising Leaders programme at the Qatar Leadership Center, completing the programme in 2018.

Alanoud's research focuses on economies of time series, the Gulf Cooperation Council (GCC) stock market and behavioural finance.

Dr Anastasia Allayioti

Anastasia is an Economist (PhD) Graduate at the European Central Bank. She holds a PhD in Finance and Econometrics from the University of Warwick and degrees in Mathematics/Statistics from the University of Manchester and Financial Engineering from Imperial College London. Before joining she interned at the International Monetary Fund and was a trainee at the European Central Bank. Anastasia's research interests are in the broad area of time-series econometric methods, focusing on modelling and forecasting macroeconomic and financial variables.

Dr Carlos Cañon

Central Bank of Mexico

Carlos Cañon has several years' experience co-ordinating a team that supervises Mexican asset managers, international asset managers with Mexican and emerging market economy holdings, and commercial banks' short-term funding in different money markets. His research agenda focuses on short-term money markets, asset managers and banking.

Dr Sudipto Karmakar

Bank of England

Sudipto Karmakar is an experienced research economist in the Bank of England's Financial Stability Strategy and Risk Directorate. He is a macroeconomist with an interest in macroprudential policy, real–financial sector linkages and misallocation of resources. He has extensive experience in working with dynamic stochastic general equilibrium models and large-scale micro datasets.

Dr Alessandro Lin

Research Fellow, Directorate General for Economics, Statistics and Research, Bank of Italy and Winner of the Centre's 2021 'Young Economist Award'

Alessandro Lin's research focuses on macroeconomics and monetary economics, and he specialises in the Zero Lower Bound. In 2021 his published paper 'Monetary Policy and Payment-to-Income Limits in Liquidity Traps' received the Young Economist Award from the Qatar Centre for Global Banking & Finance.

Alessandro studied Economics at Brown University (PhD and MA) and LUISS University (BSc and MSc).

Dr Maryam Mirfatah

Lecturer in Economics Education, Department of Political Economy, King's College London

Prior to joining King's as Assistant Professor, Maryam Mirfatah was a post-doctoral researcher at the University of Surrey School of Economics. She holds a PhD in Economics from Yazd University, a BSc in Statistics from Isfahan University of Technology and an MSc in Economics from Azad University in Iran.

Maryam is an open economy macroeconomist, specialising in monetary policies with expertise in DSGE macroeconomic, multi-country modelling. Her current areas of interest include currency pricing issues and their implications for optimal monetary policy rules, optimal unconventional monetary policy and macro-prudential policies in open-economy NK models with financial frictions.

Arshadur Rahman

Manager, Sterling Markets Operational Policy Team, Bank of England

Arshadur Rahman has worked for the Bank of England since 2013. He is the Bank's expert on Islamic Finance, leading several projects and acting as the liaison to the Islamic Financial Services Board and expert to the UK government's Cross-Whitehall Working Group on Islamic Finance. Since 2015, he has managed the Sterling Marketing Operational Policy Team, authoring the revised Bank of England Market Operations Guide, and recently co-managing the Bank's COVID-19 related scheme, Term Funding Scheme with additional incentives for SMEs (TMSME) and COVID-19 Corporate Financing Facility (CCFF).

Arshadur is undertaking a PhD in Law at King's and graduated from London Business School with an MSc in Finance in 2011.

Coskun Tarkocin

Global Liquidity Manager, HSBC Group Treasury

Coskun Tarkocin has over 15 years' experience in risk, liquidity and funding management gained mostly at HSBC bank in Turkey and the UK. He is a Chartered CFA holder and certified Financial Risk Manager and holds an MSc and a PhD in Economics from Yildiz Technical University in Istanbul.

His areas of interest include risk management, market liquidity, machine learning models and stress testing. His blog on 'Turkey's Central Bank's controversial experiment to support the Lira' was recently published by the Centre.

Professor Anthony Yates

Economist and consultant

Tony Yates is a key figure in UK macroeconomics. He is an independent economist currently doing consulting work for clients including Resolution Foundation and Fathom Consulting.

Tony held several senior positions at the Bank of England over twenty-one years, including Head of monetary policy strategy. Since leaving the bank in 2013, he has spent time in academia, most recently at the University of Birmingham, where he was Professor of Economics. Prior to that he was a Reader in Economics at Bristol University.

His research and study interests span monetary economics, macroeconomics, applied time series econometrics, computational economics, public finance, public policy and the state of economics. His research is widely published, he frequently writes media articles, and he authors the influential blog 'long and variable.'

Spotlight interview

Introducing the new Deputy Director of the Centre and Senior Lecturer in Finance

Dr Rhys Bidder

Tell us a little about your background and career to date

I am excited to have joined the Centre and King's Business School more broadly. I'm really enjoying myself – it's a lot of work and a lot of fun. I came to King's from Cambridge University, where I have been lecturing over the past couple of years. I have also been a visiting lecturer at Oxford University and the University of Warwick as well as a consultant at the Bank of England. Although I grew up in the UK and did my first two degrees at Cambridge, most of my career has been in the USA. I did my PhD at New York University (under the supervision of Professor Thomas Sargent) and then worked for the Federal Reserve Bank of San Francisco. I'm delighted to be back in the UK and to be part of an institution and a centre that has global ambitions.

What research expertise do you bring to King's?

My work and interests are quite broad. Ever since I joined King's College Cambridge as an undergraduate, I've had an interest in macroeconomics – indeed Keynes was at my old college. My PhD work was fairly theoretical. It was focused on how people behave in environments of pervasive uncertainty and 'unknown unknowns,' with applications to boom-and-bust, asset pricing and risk assessment. My first published paper was entitled 'Robust Animal Spirits' – the title of which was influenced by the famous phenomenon of sentiment driving actions that Keynes first articulated.

After completing my PhD, I started moving more towards applied topics, especially in the areas of banking and stress testing. I have several projects that relate to bank behaviour in times of distress – as well as related issues such as corporate bankruptcy, firesales and debt renegotiation. COVID-19 has made this work even more timely.

Right now, with the support of the Centre, I am starting some interesting work on climate finance/risks, private equity/venture capital and on digital currencies. The breadth of the topics central banks now must face means that it's a great time to be working at a central bank-focused institution like ours. With our pre-doctoral researchers, I'm really getting to the frontier of debates on climate risk data and we're even building our own digital currency!

'The breadth of the topics central banks now must face means that it's a great time to be working at a central bank-focused institution like ours.'

'My hope is that we are a trusted source of insight and a host for important forums among the central bank community and the academic-financial nexus more broadly.'

Tell us about your role at the Centre

My role spans a wide range of activities and duties. It's something different every day. I work as the Deputy Director to David Aikman. It's great to be able to learn from him. Working with David and the team was a huge attraction when I was considering joining the Centre.

My activities include running seminars on cutting edge topics, organising conferences (including an innovative PhD job market event for PhD students from all over the UK), applying for grants to fund acquisition of important textual and climate emissions data and more. I taught on our Spring School and am closely involved with our pre and postdoctoral researchers. I am also Co Deputy Director of the Centre's new MSc programme.

Why is the Centre so well placed to address the financial challenges facing banks, and wider society, today?

My hope is that we are a trusted source of insight and a host for important forums among the central bank community and the academic-financial nexus more broadly. I think we are especially well placed as an honest broker, able to 'speak our minds' on important topics, where policymakers might otherwise be reluctant to speak so unambiguously on delicate topics or where, because of day-to-day pressures, they might not be able to take a step back and evaluate things from a more academic perspective. This is especially important right now as central banks are involved in various 'unconventional' debates, from what to do about large balance sheets, climate regulation (how or even if they should be involved) and digital currencies (private and also Central Bank Digital Currency). We derive a lot of benefit from our support from Qatar Central Bank and our global viewpoint, which is in our DNA, is really valuable in these debates.

Spotlight interview

Introducing new postdoctoral Research Associate Dr Aristeidis Raftapostolos

Dr Aristeidis Raftapostolos

Tell us a bit about yourself, your background and what attracted you to economics?

I am delighted to join King's College London and the Qatar Centre for Global Banking & Finance. I hold a PhD in Economics from the University of Strathclyde. Further, I hold a MSc in Finance from Queen Mary, University of London, a MSc in Economics and a BSc in Economics from the Athens University of Economics and Business. Since high school I have been fascinated by trends and patterns in the economy and how economic modelling can be used to assist policymakers in formulating monetary policy.

What is the achievement you are most proud of in your academic career?

The work I have done as a supervision analyst at the European Central Bank. I was a member of the project management team responsible for the Stress Test Accounts Reporting (STAR) project; an end-to-end application, which aims to assist Stress Test experts on performing stress tests in a more smooth and flexible manner.

What attracted you to King's and, in particular, the Qatar Centre for Global Banking & Finance?

King's is an internationally renowned institution that offers an excellent environment to young researchers to grow professionally and expand their research agenda. Moreover, at the Centre, there is a plethora of diverse and talented scholars who specialise in the study of monetary policy and the other roles of central banks.

What will you be working on?

At the Centre, my work will focus on nowcasting financial variables using Big Data econometric techniques. Specifically, I will use Machine Learning methods to forecast Value-at-Risk and examine whether a Feed Forward Neural Network or a Mixed Data Sampling (MIDAS) Neural Network have significant gains over traditional forecasting methods.

What are you hoping will be the implications/ impact of your work?

My research interests are in the areas of machine learning, monetary policy and Bayesian econometrics methods focusing on forecasting macroeconomic and financial variables. I hope to develop new techniques for tracking and forecasting, as well as assessing Central Bank policy mandates.

'King's offers an excellent environment to young researchers to grow professionally and expand their research agenda. Moreover at the Centre, there is a plethora of diverse and talented scholars.'

Executive Education

We have significantly expanded our educational offering this year. This remains a key objective as we continue to provide practical, policy-relevant training programmes for central bank staff, including staff at Qatar Central Bank in the year ahead.

Working alongside the Qatar Central Bank Training and Management Centre, we have scheduled a series of training programmes that will take place between September and November. There are nine programmes in total, covering: risk management, digital currencies, principles of central banking, climate finance, macroprudential policy, modern monetary policy, stress testing, international regulatory architecture, and Basel III. These courses will be taught by internationally renowned experts in each field, drawing on best practice internationally.

Looking further ahead, the Centre will be launching a new two-year part-time Masters programme for professionals working in central banks and regulatory policy agencies. This programme will be marketed this academic year, with the first intake arriving in autumn 2023.

Training courses provided for Qatar Central Bank

Islamic Finance and market operations

Arshadur Rahman, Bank of England Islamic Finance Specialist
November 2021

120 professionals from the Qatar Central Bank, Qatar National Bank, Qatar Financial Centre Regulatory Authority, Qatar Financial Markets Authority and other leading financial institutions attended our new programme on Islamic Finance and market operations developed by the Centre.

The course was delivered by Arshadur Rahman, a specialist in the area and visiting research fellow. His programme covered topics related to Islamic finance including capital markets, asset management, and Shari'ah-compliant risk management, as well as crowdfunding, cryptocurrencies and more.

Staff from Qatar's financial institutions were joined by academics, teachers and researchers from Qatar University, Hamad Bin Khalifa University as well as the Community College of Qatar.

120 professionals from the Qatar Central Bank, Qatar National Bank, Qatar Financial Centre Regulatory Authority, Qatar Financial Markets Authority … attended our new programme on Islamic Finance and market operations developed by the Centre.

Introduction to financial technology companies (FinTechs)

Dr Giles Spungin, Global Head of Regulation and Risk Analytics at HSBC
April 2022

Dr Giles Spungin delivered an overview of developments in the FinTech landscape. This two-day course was attended by 17 Qatar Central Bank staff members and covered:

- Recent developments in technology, regulatory and business environments, from the rapid digitisation of financial services, the growth of data generation and new trends such as Cloud technology to regulatory matters including financial stability, data privacy and risk management.
- FinTech business models, analytics techniques and product offerings in retail, commercial and capital markets. This included an overview of the most successful business models through a discussion of FinTech Unicorns and the customer behavior trends behind the popularity of digital banking platforms.
- The challenges associated with FinTech valuation and the role of venture capitalists in FinTech financing, studied through relevant case studies.

'The econometric models were explained with actual examples using real data .... overall the course was very engaging'
Course participant

Econometrics Theory and Applications to Central Banking

Professor Leone Leonida, Professor in Economics & Finance at King's Business School

Dr Dario Maimone, Associate Professor of Public Economics at the University of Messina and Visiting lecturer at King's College London
May 2022

Economic researchers at Qatar Central Bank attended this four-session course in modern econometric techniques. With a focus on both methodology and the empirical analyses the methodology makes possible, sessions included quantitative techniques, exercises using the statistical software STATA and examples to help illustrate and apply the theory in practice and covered:

- Regression models
- Time series models and forecasting
- Models for changing volatility and models for probability
- Panel data models, causality and simultaneous equations models

Spring School in Monetary and Financial Policy Analysis

March & April 2022

Providing the tools to tackle today's economic challenges

The global economy is undergoing profound change, from the impact of climate change to the growth of digital currencies. At the same time, we are seeing rapid advances in tools for understanding the economy, particularly new data analytics.

In Spring 2022, the Centre launched a new short executive course to introduce central bankers, financial regulators and PhD students to the skills, knowledge and tools needed to tackle these new economic challenges.

'This course provided a way to think about bridging the gap between textbook knowledge and the practicality of policy formulation and implementation.'
Course participant

Practical hands-on training

Over six days, participants studied a range of topics such as financial stability, macroprudential policy analysis, data analytics, climate finance, digital currencies and FinTech. Designed to provide practical experience, participants were able to use and implement their ideas in their own contexts using real examples.

Real-world insights

The course was taught by leading academics from the Centre, with insights from expert guest speakers and thought leaders from central banks and from the City of London. Together they were able to give a 'real world' perspective on the challenges facing the global economy.

Convening wide expertise

Nineteen participants from banks and academia across the UK, Ireland, Qatar, South Africa, India and Ukraine attended, with Qatar Central Bank and the Bank of England also represented. Together they brought a range of professional and academic expertise, as economists, macroprudential specialists, analysts, policy advisors, researchers and predoctoral students. The course will serve as a springboard for launching the new MSc in Financial Regulation & Policy in October 2023.

Making global connections

The course was taught online, providing valuable networking opportunities for the global cohort. Many were able to meet at an exclusive Spring School in-person session and dinner at the Centre's Annual Conference in London in July.

Course Programme

Monetary Policy Analysis
Rhys Bidder, Deputy Director of the Qatar Centre for Global Banking & Finance and a Senior Lecturer in Finance at King's Business School.

Guest speaker: Richard Barwell, Head of Macro Research & Investment Strategy at BNP Paribas Asset Management.

Financial Stability & Macroprudential Policy Analysis
Professor David Aikman, Director of the Qatar Centre for Global Banking & Finance.

Guest speaker: Niki Anderson, Senior Advisor to the Executive Director, Bank of England.

Data Analytics I
George Kapetanios, Professor of Finance and Econometrics at King's Business School.

Guest speaker: Professor Martin Weale, Professor of Economics at King's Business School.

Data Analytics II
George Kapetanios, Professor of Finance and Econometrics at King's Business School.

Guest speaker: Clare Macallan: Senior Adviser, Bank of England.

'The idea to focus on the hot topics discussed by economists kept the programme extremely relevant and current. This differentiates the course from any other traditional course.'
Course participant

Climate Finance
Dr Paul Fisher, Economist and former Executive Director, Bank of England.

Guest speaker: Dimitri Demekas, Visiting Senior Fellow at the School of Public Policy at the London School of Economics, a special adviser on financial stability at the Bank of England and independent consultant for various international organisations, including the World Bank Group.

Digital currencies & FinTech
Michael Schillig, Professor of Law, King's College London

Guest speaker: Christoph Kletzer, Reader in Law, King's College London and Anthony Yates, economist, former Professor of Economics at Birmingham University and former Senior Advisor, Bank of England.

Financial Policy & Regulation MSc

Programme Director: Dr Daniele Massacci
Co-Director: Professor David Aikman
Deputy Director: Professor Georgios Chortareas
Co-Deputy Director: Dr Rhys Bidder

The economic and financial challenges facing the economy are evolving rapidly, and so are the theories to understand these phenomena and the tools to address them.

The economic and financial challenges facing the economy are evolving rapidly, so are the theories to understand these phenomena and the tools to address them.

The new Financial Policy & Regulation MSc will introduce students and future financial services professionals to the latest findings from research and 'real-world' policy making. Most importantly, the programme aims to equip students with the analytical tools they need to adapt to this ever-changing landscape of policy and regulation.

A new kind of programme with a focus on research and data analytics

The MSc will introduce students to cutting-edge theoretical and applied research in financial regulation and monetary policy. The programme will be multidisciplinary but with a focus on data analytics. Students will gain an in-depth understanding of the tools of central bank policy and financial regulation, and the skills to effectively analyse data for evidence-based decision making.

Programme topics

The course will cover monetary and macroprudential policy, financial regulation and supervision, data analytics, financial econometrics, macroeconometrics and more.

Practical training for the real world

The theory will be complemented by a broad practical training. The programme will use real-life cases, simulation exercises (including Python coding), and a trading floor with Bloomberg and Reuters terminals, where students will be able to apply the knowledge they acquire during lectures.

Developed by experts and practitioners

The programme has been developed in collaboration with leading policy experts and financial regulation practitioners. It will be taught by academic and professional leaders in the field. All material will be informed by the latest research and based on the most recent practical applications.

Market

The programme is for people who want to pursue a career in finance, with an emphasis on the policymaking and regulatory angle. The course will be ideal for those who wish to work in central banks and financial supervision authorities. It will attract students with an economics or finance background and some work experience in banking or financial regulation industries.

The MSc will launch in September 2023.

The programme aims to equip students with the analytical tools they need to adapt to the ever-changing landscape of policy and regulation.

Spotlight interview

Introducing the Centre's MSc Programme Director

Dr Daniele Massacci

Tell us about your role at the Centre and King's Business School

I joined King's Business School (KBS) from the Bank of England in August 2019. I am currently a Senior Lecturer in Data Analytics for Finance in the Banking and Finance Group of KBS. This is an exciting role which puts a great deal of emphasis on developing new tools for the analysis of financial big data. Within KBS, I am also affiliated to and am an Executive Board member of the Qatar Centre for Global Banking & Finance. In addition, I am the Director of the Centre's MSc Programme in Financial Policy and Regulation, which we will be launching in the academic year 2023–24.

'I work at the intersection between econometrics and finance. My work combines economic theory, data analytics and econometric techniques to understand and predict the dynamics of financial asset returns.'

What is your area of research expertise? What impact do you hope your work will have?

I work at the intersection between econometrics and finance. My work combines economic theory, data analytics and econometric techniques to understand and predict the dynamics of financial asset returns. This is an exciting research area. My ideas always come from empirically relevant problems, such as those I encountered when I was a Senior Research Economist at the Bank of England. I, therefore, hope my work will impact the academic community, as well as policymakers and industry practitioners.

Tell us about the MSc. Who is it for and how will students benefit?

The MSc in Financial Policy and Regulation is a two-year part time programme. It is specifically targeted to mid-career policymakers such as central bankers, or more generally to professionals interested in policymaking. Students will benefit from the high level of knowledge that KBS, and in particular the Banking and Finance Group, have in relation to financial policy and regulation. They will receive training that combines both academic and policy relevant expertise.

What will be different about this MSc? What is its USP?

The MSc in Financial Policy and Regulation differs from analogous programmes offered in other institutions in that it is focused on data analytics. This is the strength of the Banking and Finance Group at KBS, for which it is internationally renowned. The unique selling point of our programme is the importance we give to rigorous training on data analytics as an essential tool to conduct policy work in the era of big data.

Events

An important aspect of our work at the Centre is to use our convening power to bring together academics, practitioners and policymakers for debate and discussion.

Our events programme includes research focused seminars and conferences, workshops and roundtables which help enhance our profile as a Centre of thought leadership and bring our work to a global audience.

Annual Conference 2022

The Role of Central Banks in a Transforming World
5-6 July 2022

The Annual Conference is the Centre's flagship event, and is an opportunity to showcase our work, ambition and impact with the central banking community.

The Conference focused on new directions in central bank research and policymaking. It provided a platform for experts from across the globe to present and discuss new research that can help central banks deal with the fundamental shifts in the globaleconomy and financial system occurring at this time. Over 180 delegates attended including researchers and policymakers from central banks, think tanks and leading universities.

Here, Dr Rhys Bidder provides a summary of some of the key themes discussed at the Conference.

The Conference focused on new directions in central bank research and policymaking. It will provide a platform for experts from across the globe to present and discuss new research that can help central banks deal with the fundamental shifts in the global economy...

Keynote addresses

Dr Nellie Liang
Under Secretary of the Treasury for Domestic Finance, U.S. Treasury Department

Dr Nellie Liang gave a wide-ranging speech on the topic of macroprudential policy. As well as discussing the issues arising from rapid innovation in digital assets/currencies, she analysed developments since the Global Financial Crisis (GFC) and how the regulatory and financial systems had performed under the recent pressures of COVID-19 and war in Ukraine.

Dr Liang's assessment was that the reforms instituted after the GFC have genuinely enhanced the core of the financial system. During the COVID-19 period, she explained, "banks faced a real-life stress test with more capital and liquidity put in place after the GFC, and had stronger risk management capabilities," although she noted that extraordinary governmental and regulatory actions also played a role in mitigating the impact of the pandemic. While some aspects of bank-focused regulation perhaps can be improved further – notably in the operation of Counter-Cyclical Capital Buffers – Dr Liang suggested that the overall performance in the crisis was encouraging.

'Fascinating speech'
Conference delegate

93%
of delegates rated the conference excellent or very good

Looking beyond banks, however, Dr Liang noted that the pandemic and normalisation of central bank balance sheets have revealed some ongoing and – in some cases – unexpected vulnerabilities. As the Fed reduced its footprint in core markets, liquidity problems have emerged and there were liquidity shortages and fire-sales during the "dash for cash" of March 2020. Some of these phenomena are thought to have been exacerbated by regulatory reforms limiting dealer balance sheet flexibility and protecting central clearing houses at the cost of intermediation.

On digital currencies and crypto-assets, Dr Liang noted that many digital assets are currently high-risk and extremely volatile, raising difficult questions over investor and consumer protection. These new asset classes are also likely to retain many of the vulnerabilities seen in traditional finance. Runs on certain types of stable-coins have been comparable to those on the more traditional prime money market funds, with similar implications for fire-sales of securities backing the stable-coins. The familiar issue of an institution becoming 'too big to fail' may also arise as major stable-coin issuers become even larger and more interconnected. Dr Liang noted that important work was taking place to examine these issues under the auspices of President Biden's recent Executive Order on digital assets.

Dr Huw Pill
Chief Economist at the Bank of England

Dr Pill used his keynote to emphasise the Bank of England's commitment to price stability – even in these times of unusually high inflation – and to explain the reasoning behind recent policy actions. The difficulties of responding in a timely way to supply

shocks to the economy was a particular focus, as was the debate over how price pressures might work their way through supply chains.

Above all, Dr Pill emphasised that the Monetary Policy Committee (MPC) is committed to returning inflation to its 2 per cent target even as the effects of COVID-19 and the Russian invasion of Ukraine (with associated energy price increases) continue to buffet the economy. Dr Pill emphasised that even under an ideal policy one would still expect there to be some inflation volatility.

Dr Pill also spoke in relation to the debate over the use of 'Forward Guidance'. While he acknowledged that such guidance might be thought necessary when policy is constrained by the zero lower bound, he expressed scepticism of its usefulness in more normal contexts. On that basis he then offered an interesting deconstruction of recent Bank of England communications and justification for the terminology used.

'Amazing conference'
Conference delegate

Fireside conversation

On the final day, Professor David Aikman sat down with the eminent Raghuram Rajan, professor at Chicago Booth, and previously Governor of the Reserve Bank of India and Chief Economist at the IMF. The discussion covered some of the main topics of our time, from inflation, to high public sector debt levels, to financial stability:

The discussion covered some of the main topics of our time, from inflation, to high public sector debt levels, to financial stability

The current surge in inflation
Professor Rajan emphasised that while some drivers of inflation, such as the war in Ukraine, were outside the control of central banks, they only had a limited window to get inflation back under control before de-anchoring might kick in (for example through wage price spirals), leading to a prolonged high inflationary spell.

He noted that the UK was in a difficult position as it faces drags on growth (from Brexit and other influences) which will make the tightening of monetary policy trickier. He was generally more positive about the US, where activity is stronger. However, he noted that even if inflation were brought back under control, there is no reason to expect US growth to exceed the mediocre pace seen prior to the COVID-19 crisis that had raised concerns of secular stagnation.

High debt levels and the fiscal position
Addressing David Aikman's question about the elevated debt levels faced by various countries at the moment, Professor Rajan noted there conceivably could be a silver lining of inflation eroding the real value of debt (subject to maintaining credibility, going forward). However, short maturities of government debt could limit these benefits and accelerate the impact of rising inflation and interest rates on the fiscal position.

He added that he agreed with Larry Summers' concerns that the later waves of US fiscal stimulus were inflationary, and was especially concerned that the stimulus had limited the fiscal space for the sort of public investments (eg in infrastructure or to deal with climate change) that he believes are necessary in the medium to long term. He felt that low rates had helped politicians to avoid tough decisions over how to target government spending and packages like the US COVID-19 stimulus. This theme was also picked up in the Monetary and Fiscal Policy Interactions panel.

…even if banks are relatively secure, problems may emerge in the non-bank sector where post-crisis regulatory reform has been relatively limited and where we understand risks much less well.

Financial stability
On financial stability, two concerns in particular emerged from Professor Rajan's comments. First, he felt that the limited fall-out from the pandemic in terms of bankruptcies and distress suggested that new financing may have been established at fairly low rates. As rates rise in response to the recent inflationary surge, he speculated that this lending may come back to haunt institutions or that such lending may be less forthcoming for the borrowers in the future. Second, he raised the possibility that even if banks are relatively secure, problems may emerge in the non-bank sector where post-crisis regulatory reform has been relatively limited and where we understand risks much less well.

Finally, Professor Rajan made interesting points about the difficulty of setting up regulation in the context of rapidly growing, yet novel industries – such as crypto. He suggested by the time regulators have learnt enough to design regulations, a novel industry may have grown to be too politically powerful for governments to implement these regulations. He awaits with interest what the effects of the rising rate environment will reveal about the quality of crypto firms' business models.

Enduring lessons for economic policy from the pandemic
Professor Rajan's closing remarks emphasised the need to establish better systems to respond quickly and directly to problems in the real economy as opposed to simply recapitalising banks or giving un-targeted handouts. He emphasised that these lessons will continue to be relevant if climate change increases the frequency of emergencies.

Panels

Monetary and Fiscal Policy Interactions
Professor Jagjit Chadha OBE, Director of the National Institute of Economic and Social Research, chaired a stimulating panel on Monetary and Fiscal Policy Interactions, covering active debates in policy circles about quantitative tightening, central bank balance sheets and strained public finances following COVID-19. The panellists were Silvana Tenreyro (Bank of England), Ricardo Reis (London School of Economics) and Hanno Lustig (Stanford University).

100% of delegates rated this panel excellent or very good

The panellists discussed factors that have led to high inflation. Professor Reis laid out three interpretations: one completely absolving central bankers and blaming an impossibly large negative supply shock, one claiming that the inflation targeting system of recent decades is fundamentally broken and one – perhaps more plausible – suggesting that myriad causes were at play, with central bankers sharing some, but not all, of the blame. Professor Tenreyro emphasised that central banks must tread a fine line: responding as drastically as some have demanded to unexpected shocks would have run the risk of a dramatic decline in activity and inflation undershooting in the medium term, given the lags before policy's full effects are felt.

While acknowledging the difficulty of policy in recent years, Professor Lustig suggested that, even without hindsight, the scale of fiscal stimulus in the US was excessive, given that the economy was emerging from COVID-19 and likely to experience inflationary pressure. Aligned with some of Professor Reis' comments he asked whether policymakers had misinterpreted the source and implications of an apparently declining r* over the past decades, suggesting that

...a stimulating panel on Monetary and Fiscal Policy Interactions, covering active debates in policy circles about quantitative tightening, central bank balance sheets and strained public finances following COVID-19.

they may have failed to recognise that unconventional policy was pushing r* down temporarily, rather than some unrelated factor pushing rates down permanently. This, he suggested, resulted in a relaxation of fiscal discipline on the assumption that cheap financing would continue indefinitely – an assumption that now seems questionable.

Following from this point, both Professor Reis and Lustig discussed some of the implications of the rising rate environment in the context of large Debt-to-GDP ratios in some countries (Italy and the US being mentioned in particular). They noted that rates paid on debt were likely to exceed these economies' growth rates for some time, causing further upward pressure on debt (though Professor Reis did note that the maturity structure of outstanding debt and the erosion of the debt burden from inflation may ameliorate the situation in Italy).

Central Bank Digital Currencies
Dr Jumana Saleheen, Chief Economist and Head of Investment Strategy Group, Europe at Vanguard, chaired an eagerly anticipated panel on Central Bank Digital Currencies (CBDCs). The panellists were Sir Jon Cunliffe (Bank of England), Cecilia Skingsley (Sveriges Riksbank, now Bank for International Settlements), George Selgin (Cato Institute) and Raphael Auer (BIS).

The panel began with a discussion of why CBDCs are such a hot topic. Cecilia Skingsley noted that given central banks' responsibility to provide safe and secure legal tender, the CBDC debate is a natural result of the increased digitalisation of society, including of our payment systems.

'I loved it.'
Conference delegate

Sir Jon Cunliffe noted that digital currencies offer the scope for integration with other digital activities and frameworks ('smart money' and 'DeFi') to enable the development of new types of services, as well as improving the efficiency of existing ones. However, Sir Jon Cunliffe emphasised the difficulty of forecasting the form that CBDC systems might take, in particular where the dividing line should be drawn between features managed by the central bank and those managed by private providers.

This dividing line was an issue emphasised by Dr Selgin who worried that publicly provided digital currencies may crowd out potentially more efficient and innovative cash substitutes provided by private payment providers or digital currency networks. He was also concerned that CBDCs could represent an undesirable extension of the state into private affairs and that interest-bearing CBDCs might lead to the interest rate being set as a 'plaything of politics'.

The panel also discussed other concerns that have been raised in relation to CBDCs. Specifically, whether its introduction may lead to disintermediation of banks, particularly in stressed periods where there may be the risks of runs. Both Cecilia Skingsley and Sir Jon Cunliffe suggested that changes to bank funding models should not automatically be viewed as a concern, as bank funding models have in any case evolved over history. Sir Jon pointed to some work by the Bank of England to attempt to model the shift which suggests that the ultimate knock-on effect on banks' lending rates may be modest – while acknowledging the great uncertainties around the precise eventual effect.

In terms of the risk of runs, it was emphasised that such phenomena are already at play and that the introduction of CBDC isn't necessary for rapid runs to occur digitally. Sir Jon Cunliffe made the point that there are many other regulatory and policy tools that can be applied to stop runs or make them less likely, regardless of the presence of

CBDC. He also noted that preventing people from converting bank deposits to a safe form of currency (which would traditionally have been cash but would now arguably be CBDC) would be a dramatic step to take, even if some have suggested it could help stop runs.

While imposing ad hoc limits on CBDC holdings to stop a run might be controversial, limits on holdings in normal times may be justified in other respects. Raphael Auer outlined how these frameworks might be implemented, with soft limits (implemented through tiered rates or by connecting 'top up' commercial deposit accounts) on holdings. Such restrictions on (retail) CBDC reflect a focus on providing it as a payment mechanism for the sort of small to medium value transactions that cash previously would have been used for. He noted that, as a by-product, these limits would restrict the impact of CBDC on the transmission of monetary policy, the zero lower bound and other systemic properties of the economy.

Beyond these comments, Dr Auer emphasised four main trends that he has perceived in his work with the BIS: 1) A planned role for the private sector in CBDC systems, 2) Coexistence with cash, 3) A move away from thinking only in terms of trustless distributed ledger technologies towards hybrid and partially centralised systems and 4) an increasing emphasis on developing international CBDC systems, or mCBDC.

In the case of mCBDC he emphasised that imminent technological feasibility – as evidenced by many successful trials – meant that it was time to have difficult but important debates about inter-governmental coordination, compatibility of legal systems and other political – rather than technical – matters.

In closing the panel, Dr Saleheen asked the panellists if they thought that an advanced economy would introduce a CBDC within the next three years. All thought not, in terms of retail CBDC, though Raphael Auer thought that in approximately three years' time, a close to production-version wholesale CBDC might be feasible.

Raphael Auer thought that in approximately three years' time, a close to production-version wholesale CBDC might be feasible.

'You have got an absolutely stellar line up … I am extremely pleased that the Centre has been able to attract such a range of high profile and interesting speakers for this important conference.'
Dame Colette Bowe,
Bank of England

Paper sessions

Session 1: Banking and Regulation
Alexander Haas (University of Oxford) presented work with Andrea Ferrero (Oxford) in which they develop a medium scale DSGE model that can speak to the separate but often correlated concepts of asset liquidity and asset safety/quality. In this paper, the authors provide a structurally informed decomposition of liquidity and safety premia to see how the two concepts have affected the US economy in recent decades.

Saleem Bahaj (University College London, BoE) presented joint work with Frederic Malherbe (UCL) examining the important – but under-researched – issue of international coordination of banking regulation. Instead of a non-reciprocal world in which it is assumed countries compete in a 'race to the bottom' resulting in regulatory capital ratios being set too low, the paper assumes a reciprocal setup, as promoted by the Basel regimes. In an environment where banks face capital requirements that are set in the jurisdiction in which they operate, rather than by their domestic regulator, the paper finds the incentive is for countries to compete for bank equity capital, conceivably resulting in capital ratios that are too high.

Shohini Kundu (UCLA Anderson – and one of the Centre's 2021 Young Economist Prize finalists) presented work in which she and co-authors document some dramatic stylised facts about the geographical concentration of bank deposits in the US. They explain how this concentration can make even apparently large and sophisticated banks vulnerable to shocks to a very small set of counties, which then are amplified within the banks' internal capital markets and thus are spread to other regions, to the extent that there is an aggregate impact.

Session 2: Monetary Theory
The first presenter, Maxi Guennewig (Bonn), discussed his model of currency competition in which different firms issue private currencies for use on their online platforms, from which they also gain valuable information about the users' transactions. The paper provides some insight into the implications of co-existing digital currencies: the baseline equilibrium of the model sees private firms implementing a Friedman rule (essentially implying a deflation), prompting the central bank to also institute a deflationary policy in order to avoid being dominated in return by the private currencies. The main point here is that the properties of private currencies may restrict what a central bank can achieve, in terms of its monetary goals.

…private currencies may restrict what a central bank can achieve, in terms of its monetary goals.

The other paper in the session, presented by Marco Pinchetti (Bank of England), examined the effects of introducing retail CBDC in an open economy context. In this context, countries' CBDCs can be held by residents of any country and - contrary to the assumption typical in current policy discussions – the currencies pay interest. This allows the authors to consider a possible countercyclical policy role for CBDCs.

Session 3: Monetary Policy
Andrea Ajello (Board of Governors) began the session with a paper that blends two recently developed and adopted techniques in the macroeconomics literature: factor analysis and quantile regressions/Growth-at-Risk. By Growth-at-Risk, the authors mean modelling the tails of the distribution of future growth rather than the conditional mean.

Using a large dataset with many variables capturing financial vulnerabilities, Ajello extracts a small set of factors, which he then relates to risks to key macroeconomic variables. In so doing, he identifies a trade-off facing policymakers whereby a monetary tightening may have opposite effects on risks in the short and long run – loose policy today to stave off a downturn may increase the risk of a crash in the future.

Vytautas Valaitis (EUI) then presented a paper on a very hot topic – government debt management and inflation. This was an ideal lead into the later panel on Monetary and Fiscal Policy Interactions and was followed by an excellent discussion by Sarah Mouabbi (Banque de France). The novelty to the paper was that the authors considered debt management in a context with both nominal and real bonds. This allows them to make statements about the optimal split of government debt between these two types of bonds. Relative to a model with only nominal bonds, they find that inflation on average is lower, but more volatile.

Taking a different perspective on monetary policy, Michael Bauer (Hamburg) presented a paper in which he and co-author gain an understanding of the private sector's perception of the Fed's monetary policy 'rule' based on cross-sectional survey data. The paper's findings suggest that the public understand that simple ad hoc rules are only approximations and policy may deviate in fairly systematic ways, around the central-case rule.

Session 4: Risks

Joris Tielens (National Bank of Belgium) began the session with a fascinating paper that suggests that the introduction of new technologies (such as green tech) may be delayed as financial intermediaries internalise the effects that disruptive innovators may have on 'legacy' businesses with which they have existing financing relationships. Using an impressive array of merged datasets, the authors estimate banks' 'asset overhang' and show that this overhang makes them less likely to provide credit to innovative borrowers, compared to non-disruptive counterparts.

Continuing the session, John Moore (Edinburgh) presented joint work with Nobuhiro Kiyotaki (Princeton) and Shengxing Zhang (LSE) about the apparent mismatch between long term investment horizons and the tendency of businesses to secure funds against short term revenues. They argue this hinges on how the negotiating power of a small group of 'business critical' staff varies in relation to their short and long-term payouts. The paper even suggests that reductions in interest rates can have a contractionary effect on economic growth, with interesting implications for productivity dynamics and the ongoing debate about secular stagnation.

Finally, Alexandr Kopytov (University of Hong Kong) presented a paper using the tools of network analysis to analyse the effects of shocks and uncertainty among firms connected via supply chains. As noted by Dr Pill in his keynote address, supply chain connections have become key in understanding the ongoing effects of COVID-19 and Ukraine-war disruptions. Formally, the authors provide a novel mechanism for how fluctuations in uncertainty can affect the economy, through reallocations of suppliers and demanders of goods.

'The speakers were the best in the field. All the participants were amazing. Everyone had different backgrounds and different nuances of similar research interests. I got to learn a lot, by attending the conference sessions, as well as by interacting with the participants.'
Swarali Deepak Havaldar, Research Assistant

Since the Global Financial Crisis and the extraordinary policy response, central banks have been heavily involved with financial markets.

Session 5: Markets

Since the Global Financial Crisis and the extraordinary policy response, central banks have been heavily involved with financial markets. As balance sheets are normalised and as regulatory constraints begin to bite, there have been suggestions that liquidity in markets has been impaired so that certain types of intermediaries are no longer able to provide the sort of immediate financing that allows arbitrageurs to operate fluently. In this session, we heard papers that spoke to these issues.

First, Anne-Caroline Huser (Bank of England) examined UK gilt repo data during times of stress (COVID-19) and found that firms traded increasingly with counterparties with whom they already had connections. Additionally, she found a tendency for trades with central clearing counterparties (rather than bilateral trades) to increase and that spreads appeared to increase less among the centrally cleared trades.

As yet, the paper is largely descriptive but given the interest in market functioning under stress and the role of central clearing counterparties it provides a useful set of stylised facts for regulators. These facts can be used in considering how to protect market functioning in adverse scenarios, and whether centralised clearing should be promoted.

Closing the session – and the conference – Aytek Malkhozov (Queen Mary, University of London) presented work in the spirit of the literature on limits to arbitrage arising from constrained dealer balance sheets. This literature has become prominent in the context of modelling the effects of unconventional policy and is also relevant for assessing the effect of post-crisis regulation on market functioning.

The authors explore the determinants of expected returns to arbitrage – which are related to how efficiently markets align prices with fundamentals. Mispricing emerges where the prices are not aligned – indicating that arbitrageurs and/or intermediaries may be somewhat constrained and unable to take advantage of – and thus eliminate – mispricing. Interestingly, they uncover relationships between the extent of mispricing across several markets (not just in the swaps market that is their main focus). This hints that there may be a common factor, which perhaps points to a role for those intermediaries that are active in multiple markets.

Young Economist Prize

As part of the conference, the Centre hosted its Young Economist Prize for PhD students studying economics, finance or a related subject. PhD students from all over the world were asked to submit a research paper on the theme of this year's Conference: The Role of Central Banks in a Transforming World.

The competition attracted many high-quality submissions that impressed the selection panel, comprising Professor Franck Portier (University College London), Dr Misa Tanaka (Bank of England) and Professor Martin Weale (King's College London). Seven finalists were shortlisted for the award and were given the opportunity to present their research paper at the conference. The winners were announced during the prize ceremony on 5 July 2022.

Niklas Schmitz from the University of Cambridge won the first place £5,000 cash prize with his paper 'The Downside Risk Channel of Monetary Policy.' Runner-up prizes of £1,000 each were awarded to Ghassane Benmir from London School of Economics for his paper 'Policy Interaction and the Transition to Clean Technology,' and Fabricius Somogyi from the University of St. Gallen with his paper titled 'Dollar Dominance in FX Trading.'

Policy Lab

The Centre provides a forum for practitioners and academics to debate the high-profile policy challenges facing central banks. Being part of a multidisciplinary research university means the Centre is uniquely placed to draw on expertise from a range of specialisms, including law and governance, bringing a fresh perspective to the debates.

Green Sovereign Bonds: What role can they play in the transition to net zero?

March 2022

Working with King's Climate Law and Governance Centre, we convened a policy forum of experts to discuss the role that sovereign green bonds can play in the transition to net zero.

Speakers from the UK Treasury, BlackRock, the CDC

Group and King's, discussed the UK's sovereign green bond programme, its benefits and limitations, and the role these green bonds can play for emerging markets. A concluding discussion and Q&A explored these themes further.

The event was recorded and is available to view on the King's Business School YouTube channel.

Working with King's Climate Law and Governance Centre, we convened a policy forum of experts to discuss the role that sovereign green bonds can play in the transition to net zero.

Other conferences and workshops

International Finance & Banking Society Conference

September 2021

Together with the Bank of England, the University of Oxford and the University of Nottingham, the Centre organised and co-chaired the International Finance & Banking Society's annual conference on the Financial Systems of Tomorrow.

Professor David Aikman joined Lawrence H. Summers, former U.S Treasury Secretary and Director of the National Economic Council for President Obama, for a keynote fireside chat discussion. They covered a range of global macroeconomic challenges, including the recent jump in inflation rates.

Other highlights included keynote talks by Andrew Hauser, Executive Director for Markets, Bank of England, and Professor Willem Buiter, Colombia University and panel discussions on big data and finance.

The event was held virtually and attended by researchers from leading central banks, including the Federal Reserve Board, the European Central Bank and the Bank of England.

A full recording of the event was published on the King's Business School YouTube page, and a news article was published on the Centre's webpage.

They covered a range of global macroeconomic challenges, including the recent jump in inflation rates.

Financial Stability Conference: New Challenges and Focuses

May 2022

Professor David Aikman gave a keynote talk at a session on 'Balance sheet evolution, regulatory complexity and financial stability' at the Annual Financial Stability Conference of the Central Bank of Hungary (Magyar Nemzeti Bank), organised jointly with the Official Monetary Financial Institutions Forum.

International Association of Applied Econometrics Annual Conference

June 2022

King's College London was delighted to host the annual conference of the International Association of Applied Econometrics (IAAE) at the iconic Bush House, home to the Centre and King's Business School. The IAAE is a renowned global association which aims to advance the education of econometrics amongst the public, including academics, policy makers and those working in the financial industry. The Centre played a key role in the conference as platinum sponsor and with colleagues involved in the organising committee.

The conference attracted 400 delegates from across the world, with more than 100 sessions covering theoretical and empirical contributions on current issues such as climate change, digital currencies, new tools for monetary policy and recent advances in forecasting methods as well as talks from six keynote speakers. The conference lecture was given by Professor Joshua Angrist from Massachusetts Institute of Technology, who was jointly awarded the 2021 Nobel Memorial Prize in Economics for his contributions on 'methodological contributions to the analysis of causal relationships.' The programme also featured two special sessions in honour of Professor M. Hashem Pesaran from the University of Southern California and founder of the IAAE. These were given by renowned speakers including Professor Robert Engle from New York University, who was awarded the 2003 Nobel Prize in Economics.

These workshops promote interdisciplinary discussions and collaborations on climate risks and energy transitions from a financial regulatory perspective.

Climate Energy Governance and Finance Workshops

December 2021, March and September 2022

The Climate Energy Governance and Finance Workshops are a collaboration with the Climate Law and Governance Centre at King's. These workshops promote interdisciplinary discussions and collaborations on climate risks and energy transitions from a financial regulatory perspective. Notable speakers to date have included:

- Mark Manning (UK Financial Conduct Authority) on the role of ESG transparency and trust in financial markets
- Dr Robyn Kingler-Vidra and Dr Adam Chalmers (King's College London) who highlighted their research in sustainability disclosure and corporate sustainability policy

- Dr Megan Bowman, Director of Climate Law and Governance Centre (King's College London) on the progress of COP26
- Dr Sujit Kapadia (European Central Bank) who discussed the central bank's research on climate risks and financial stability.

A further workshop was recently held in collaboration with King's Department of Mathematics and Informatics. Discussions covered energy and carbon market dynamics, the scope for using big data to underpin and robustify ESG scoring, and the role of financial regulation in the transition to net zero, including climate stress testing, disclosure requirements and how policymakers should respond to uncertainty.

PhD job market workshop: Everything you wanted to know about the PhD job market but were afraid to ask

July 2022

The Centre held its first event for students about to enter 'the PhD job market' - the process by which economics PhD students market themselves to institutions, and ultimately match with future employers. This process is very specific to Economics and is quite atypical, in comparison to how students in other subjects seek out jobs. Because of its quirks, students often find the job market mysterious and stressful – so this workshop was designed to provide much needed guidance. The event was marketed to students from all UK universities and attracted over 50 attendees.

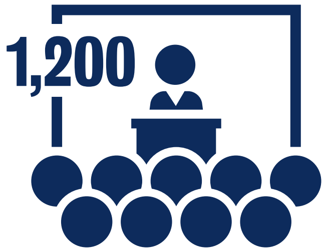
Students often find the job market mysterious and stressful – so this workshop was designed to provide much needed guidance

The day began with an introductory lecture from Dr Rhys Bidder introducing the Centre and outlining the timeline students should expect, from perfecting their job market paper to submitting their applications and from 1:1 interviews to the 'flyouts' in person to the institutions that are interested in hiring them.

Rhys Bidder then chaired a series of panel discussions. Representatives from the University of Oxford, the Institute of Fiscal Studies, the Bank of England and the Banque de France discussed what academic recruiters are looking for in candidates. Then, some recently hired students shared their experiences and the group did some interview roleplay so that the students about to hit the market could see what to do – and what not to do – when their time comes. This was followed by a panel of private sector employers of PhDs, with participants from Goldman Sachs, NERA Economic Consulting and Blackrock. They provided valuable advice for PhD level students who want to pursue non-academic jobs - a group who are often an afterthought.

The day closed with interviews with the Centre's Young Economist Prize finalists in which they presented a short summary of their 'job market papers'.

The event was a great success for both the students and the Centre and is likely to be repeated in the future.



Virtual Seminar attendees since June 2020

Virtual seminar series welcomed attendees from 30 countries

Virtual seminars

Our virtual seminar series provides a forum for researchers at central banks and academics working on central banking issues to present their research. The seminars help the Centre to showcase its research to a global audience, further enhancing its profile in the wider financial community. Since its inception in June 2020, the Centre has hosted a total of 30 seminars, attracting world-renowned speakers, researchers and experts from a range of institutions including: Bank for International Settlements, Federal Reserve Board, European Central Bank and Bank of England. Seminars are streamed fortnightly online and are available to view after the broadcast on the King's Business School YouTube page.

The seminars are actively publicised on social media and through our email mailing list of over 1,000 individuals interested in the Centre's activities. So far, there have been over 1200 attendees from 30 countries.

Summer Term 2021

- *Tarun Ramadorai* (Imperial College): Cross subsidies in the UK mortgage market
- *Adam Shapiro* (Federal Reserve Bank of San Francisco): Taking the Fed at its Word: A New Approach to Estimating Central Bank Objectives using Text Analysis

QATAR CENTRE FOR GLOBAL BANKING & FINANCE

Virtual Seminar Series

Autumn Term 2021

- *Ricardo Correa* (Board of Governors of the Federal Reserve System): The Rising Tide Lifts Some Interest Rates: Climate Change, Natural Disasters and Loan Pricing
- *Paul Levine* (University of Surrey): Mandates and Monetary Rules in a New Keynesian Framework
- *Tommaso Monacelli* (Bocconi University): Stabilisation vs. Redistribution: The Optimal Monetary-Fiscal Mix
- *Egon Zakrajšek* (Bank for International Settlements): The Fed Takes on Corporate Credit Risk: An Analysis of the Efficacy of the SMCCF
- *Caterina Mendicino* (European Central Bank): Twin Defaults and Bank Capital Requirements
- *Christina Matthes* (Indiana University): Extreme Weather and the Macroeconomy

Spring Term 2022

- *Dimitri Vayanos* (London School of Economics): A Preferred-Habitat Model of Term Premia, Exchange Rates and Monetary Policy Spill Overs
- *Haroon Mumtaz* (Queen Mary University of London & Piergiorgio Alessandri (Bank of Italy): The Macroeconomic Cost of Climate Volatility
- *Margherita Giuzio* (European Central Bank): The Low-Carbon Transition, Climate Commitments and Firm Credit Risk
- *Chiara Scotti* (Federal Reserve Board): Interconnectedness in the Corporate Bond Market
- *Andreas Schrimpf* (Bank for International Settlements): Constrained Dealers and Market Efficiency

Our virtual seminar series provides a forum for researchers at central banks and academics working on central banking issues to present their research.

Communications: Blog

Engaging with a wider audience

Our research activities continue to thrive. We publish articles and blogs to stimulate debate, engage our community and showcase the impact of work.

Macroprudential Matters website

In September 2021, the Centre initiated a new blog: *Macroprudential Matters*, hosting articles by global experts on financial stability policy.

In 2010, there was a consensus that building the intellectual foundations of a fit for purpose financial stability policy regime was a top priority. A decade on, the term has unfortunately retreated to the periphery of the policy debate. *Macroprudential Matters* was developed to improve this.

Launched by Professor David Aikman and Dr Richard Barwell (BNP Paribas Asset Management) the blog publishes experts' opinion pieces on aspects of the macroprudential policy debate. Topics covered include conjunctural risks and financial stability and critiques of regulators' analyses and policy decisions. A key feature of the blog is that there is no 'house view' – authors write solely in their own capacity and are not responsible for any views published by others.

As of April 2022, 12 experts have written 14 opinion pieces for the website, covering a range of topics. Notable authors include Vítor Constâncio (Former Vice-President of the European Central Bank), Paul Tucker (ex-Deputy Governor Bank of England) and Don Kohn (former Vice Chairman of the Federal Reserve).

Topics covered include conjunctural risks and financial stability and critiques of regulators' analyses and policy decisions.

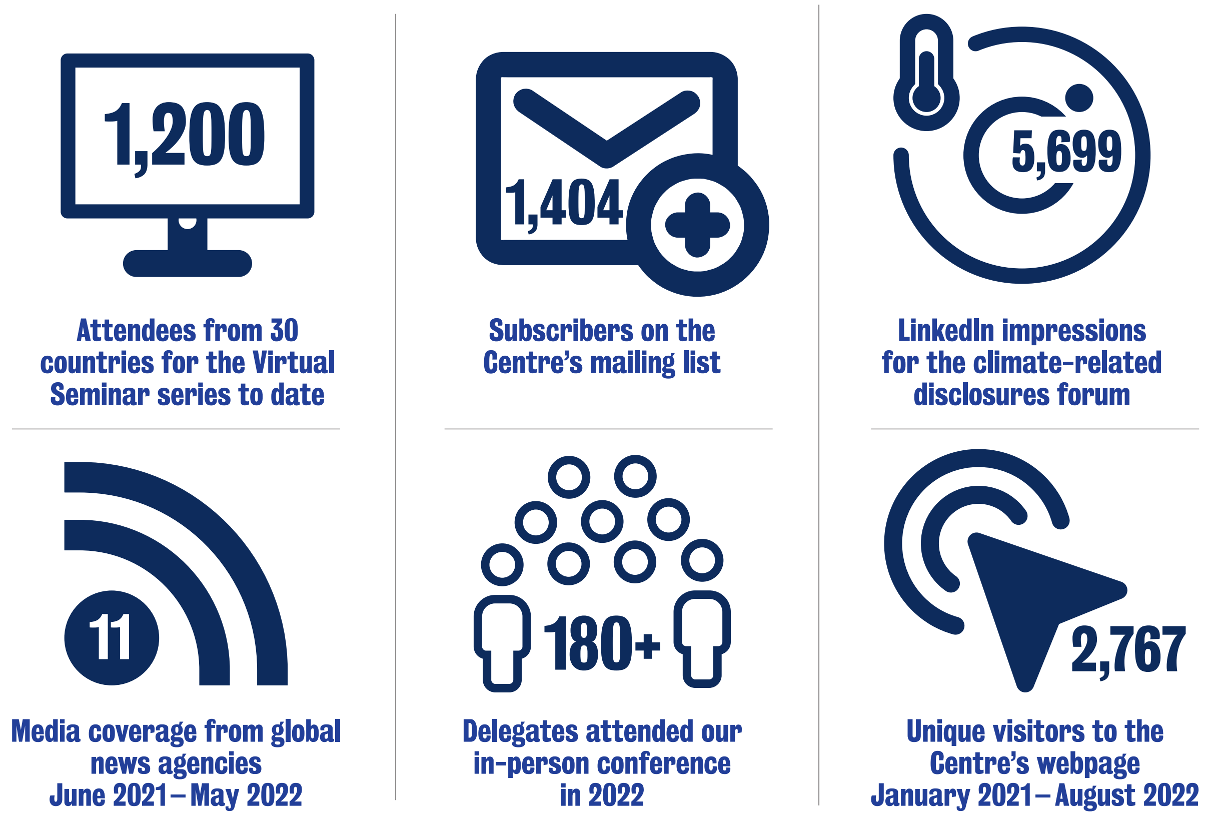
'The research and policy agenda more generally behind 'Macroprudential Matters' are most welcome additions.'
Donald Kohn, Robert V Roosa Chair in International Economics, Brookings

- The *Macroprudential Matters* mailing list has **98 subscribers**, including prominent *Financial Times* journalists and senior central bankers
- The website was recently quoted in a hearing of the **Treasury Select Committee**
- There have been **1,677 page views** and **999 unique visitors** since its launch in December 2021
- The top 6 countries viewing the page are: UK, Uganda, USA, China, Ireland, Switzerland

To read the blog, please visit macroprudentialmatters.com.

The Centre's engagement in numbers

- **1,200 attendees** from **30 countries** for the Virtual Seminar Series to date
- **1,404 subscribers** on the Centre's mailing list
- **98 subscribers** including prominent *Financial Times* journalists and senior central bankers on the new *Macroprudential Matters* mailing list
- **5,699 LinkedIn impressions** for the climate-related disclosures forum
- Over **11 pieces of media coverage** from *Gulf Times, Qatar Tribune, Reuters* centralbanking.com, and more between June 2021 and May 2022
- Over **180 attendees** at our in-person conference in 2022
- **7,717 page views** and **2,767 unique visitors** to the Centre's webpage between January 2021 and August 2022



Research

The Qatar Centre for Global Banking & Finance is dedicated to developing cutting-edge research and contributing to debates on *all* aspects of central banking and financial regulation.

Two strands, however, are receiving a particular emphasis given their policy discussions across the globe: climate risks and digital assets, putting the Centre at the heart of the main debates of our times.

Research Focus: Climate risks

Policy labs and workshops

The Centre has organised several events that have brought together elite experts and thought leaders. Examples include a Policy Lab on Green Bonds (see page 45) and the recent Climate Finance Workshop on 'Energy Markets, ESG and Financial regulation and the transition to net zero'. The latter event aimed to synergise the Centre's expertise with complementary expertise across King's in mathematics, sciences and law and was organised by Professor David Aikman, Teemu Pennanen, Professor of Financial Mathematics and postdoctoral researcher Dr Tim Foreman. There have also been various cross departmental meetings, promoted by the university, in which the Centre has been represented.

New Research Projects joint-funded by King's Business School's (KBS) Innovation Fund

Professor David Aikman and Dr Rhys Bidder have secured additional funding from the School's Innovation Award:

Public Policy on Sustainable Finance
David Aikman is collaborating with Dr Robyn Klingler-Vidra (Associate Dean in Global Engagement at KBS) and other business school colleagues, to explore public policy in relation to sustainable finance. In particular, the project uses state-of-the-art big data text analytic techniques to mine data collected from over 86 countries and 11 international organisations over a 65-year period. Some of the questions considered are explicitly about the language used by policymakers and how it has changed over time, depending on what policies and industries have been targeted. Additionally, they hope to be able to map what actions regulators have taken – or are taking – the lead in green policy and associated financial regulation. As a tangible output, the project aims to establish a publicly available resource, in the form of an interactive website, of global policies pertaining to sustainable finance.

Two strands of research are receiving a particular emphasis given their policy discussions across the globe: climate risks and digital assets, putting the Centre at the heart of the main debates of our times.

Climate Risks and Asset Prices
Rhys Bidder is collaborating with business school and Maths department colleagues to formalise the concept of 'stranded assets'. Stranded assets are frequently referred to by central bankers as a possible source of financial risk. Supposedly the risk arises from investors not taking into account disruptive asset price movements in response to regulatory changes that render previously productive assets, such as coal seams, suddenly less profitable. However, while concern over such risks makes some sense, there is a notable lack of evidence on them. If 'stranded asset risk' is to be incorporated into stress testing exercises, for example, one would need a quantitative metric on which to base the tests. Bringing some formal and quantitative insight to the debate is the aim of this project.

In support of this project, data on carbon emissions permits prices, firm-level emissions and coverage of financial issues in the press have been acquired. These data will be merged with more standard financial data (bonds, stocks and – especially – dividend futures) to assess the extent to which financial markets are pricing this risk appropriately. Using these data, the project will tease apart the reasons for asset price volatility – decomposing it into the effects of news about short and long-run transition risks (regulatory change, for example) and physical risks (flooding, say). The methods used will also involve modern text-analytic techniques in mining large datasets of news articles obtained from the Factiva database.

Research Focus: Digital assets

Digital assets, decentralised finance and Central Bank Digital Currency (CBDC) are currently prominent in central bankers' and financial regulators' thoughts. The Centre has already devoted significant resources and focus to these areas. This year's Annual Conference included an eminent panel on CBDCs and a session devoted to academic papers on the topic of digital currencies.

In addition, Centre colleagues, including Dr Roland Gemeyal are collaborating with Rhys Bidder in developing a lecture course and associated materials on the topic of digital currencies and smart contracts. One aspect of this work entails implementing a bitcoin library in Python. The hope is to gain some hands-on experience and a deeper understanding of digital currencies, to help inform our interactions with central banks and regulators on these topics. These materials will feed into the development of the Centre's MSc due to launch next academic year.

In hiring Roland Gemeyal, the Centre has been able to expand its expertise in crypto assets. Roland received his PhD from King's and has also been involved in some of the main private sector players in the crypto world – including 21shares and Binance. Apart from bringing practical insights, the hope is that his presence will enable access to proprietary data on which novel and impactful research can be based.

Rhys Bidder recently gave a guest lecture on the topic of CBDC to a group of Chevening Scholars from India – including some from the Reserve Bank of India and large investment banks. David Aikman recently organised a workshop jointly with the Bank of England on decentralised finance and its associated financial stability risks. Finally, a key aspect of the Centre's work on digital currencies is the production of a report to guide Qatar Central Bank in its own CBDC research and exploration. Collaborating with Professor Tony Yates (Resolution Foundation), this report is likely to be delivered later this year.

Research spotlight

Professor Alanoud Ali S A Al-Maadid, Professor of Economics at Qatar University

The Centre has organised or collaborated on several international research events in the past year. Here we spotlight the work of visiting professor Alanoud Ali S A Al-Maadid, Professor of Economics at Qatar University.

Project 1: Inflation in Qatar: Causes, Effects and Remedies
As the global economy strives to recover from the impact of the COVID-19 pandemic, the unforeseen Russian/Ukraine war has put tremendous pressure on consumers' confidence by driving the already inflated COVID-19 prices higher. Amid such conflict, it may seem that having the world's third natural gas reserves makes Qatar a winner. However, as with the rest of the world, the considerably higher prices for energy are expected to feed into the inflation of other (non-energy) commodities. This would in turn negatively impact the profitability of banks in Qatar, disrupt its financial market and reduce the real return on investors' financial assets. By empirically evaluating the causes, consequences, and remedies of inflation in Qatar, this study offers a timely perspective into a prominent phenomenon in Qatari society. The project will adopt a multi-strategy design that integrates qualitative (ie semi-structured interviews) and quantitative research (ie questionnaires). An online survey will be conducted with Qataris and expatriates to measure consumer expectations towards inflation and the factors that consumers perceive lead to inflation in Qatar and evaluate policies that mitigate the burden of price rises and increased cost of living.

Project 2: The Effect of Climate Change Policies on GCC stock markets
The countries of the Gulf Cooperation Council (GCC) have adopted serious policies to counter the short and long-term effects of climate change (Qatar National Vision 2030; Saudi Vision 2030). The GCC have adopted various policies to diversify their economies by investing oil and gas revenues in other sectors such as education, research and development, innovation and the ICT sector. They have also invested in green and blue sources of energy such as natural gas and renewable energy. This project attempts to investigate the impact of climate change on the economy of the GCC countries in the short and long term. The study will also assess the government's response to climate change in the GCC countries.

Project 3: The Effect of Sporting Events on Emerging Economies
This study attempts to investigate the effects of positive and –negative news on returns and volatility in the days before and after the announcement of FIFA World Cup and the Olympics. The research will contribute to a better understanding of the effects of mega sport events on the host country's stock markets – which has been a hot topic in recent years.

Selected publications

Ahmad, A., McManus, R. & Ozkan, F. (2021). 'Fiscal space and the procyclicality of fiscal policy: The case for making hay while the sun shines' *Economic Inquiry*.

Aikman, D., Galesic, M., Gigerenzer, G., Kapadia, S., Katsikopoulos, K., Kothiyal, A., Murphy, E. & Neumann, T. (2021). 'Taking uncertainty seriously: simplicity versus complexity in financial regulation' *Industrial and Corporate Change*.

Aikman, D., Giese, J., Kapadia, S., Mcleay, M. (2022). 'Targeting financial stability: macroprudential or monetary policy?' International Journal of Central Banking (forthcoming).

Bailey, N., Kapetanios, G. & Pesaran, M. (2021). 'Measurement of factor strength: Theory and practice' *Journal of Applied Econometrics*.

Borri, N., Massacci, D., Rubin, M. & Ruzzi, D. (2022). 'Crypto Risk Premia' *SSRN Electronic Journal*.

Calonaci, F., Kapetanios, G. & Price, S. (2022). 'Stock Returns Predictability with Unstable Predictors' *SSRN Electronic Journal*.

Chortareas, G. & Mavrodimitrakis, C. (2021). 'Policy conflict, coordination, and leadership in a monetary union under imperfect instrument substitutability' *Journal of Economic Behavior & Organization*.

Chortareas, G. & Noikokyris, E. (2021). 'Investment, firm-specific uncertainty, and financial flexibility' *Journal of Economic Behavior & Organization*.

Garcia-Lazaro, A., Mistak, J. & Ozkan, G. (2021). 'Supply chain networks, trade and the Brexit deal: a general equilibrium analysis' *Journal of Economic Dynamics and Control*.

Giovannelli, A., Massacci, D. & Soccorsi, S. (2021). 'Forecasting Stock Returns with Large Dimensional Factor Models' *Journal of Empirical Finance*.

Joseph, A., Kalamara, E., Kapetanios, G. & Potjagailo, G. (2021). 'Forecasting UK inflation bottom up' *SSRN Electronic Journal*.

Kapetanios, G. & Papailias, F. (2021). 'Investigating the predictive ability of ONS big data-based indicators' *Journal of Forecasting*.

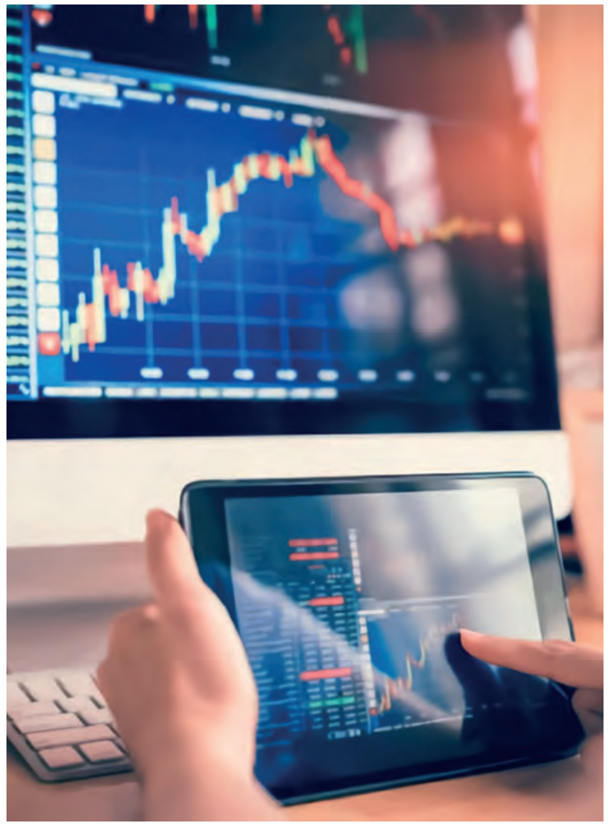
Massacci, D. (2021). 'Instability of Factor Strength in Asset Returns' *SSRN Electronic Journal*.

Massacci, D. & Kapetanios, G. (2021). 'Forecasting in Factor Augmented Regressions under Structural Change' *SSRN Electronic Journal*.

Massacci, D., Rubin, M. & Ruzzi, D. (2021). 'Systematic Comovement in Threshold Group-Factor Models' *SSRN Electronic Journal*.

Massacci, D., Sarno, L. & Trapani, L. (2021). 'Factor Models with Downside Risk' *SSRN Electronic Journal*.

Monti, F., Cimadomo, J., Giannone, D., Lenza, M. & Sokol, A. (2022). 'Fiscal Nowcasting.'



Monti, F. & Masolo, R. (2022). 'The Inflation Expectations of Savers and Borrowers.'

Monti, F., Allayioti, A. & Piffer, M. (2022) 'The transmission of monetary policy when agents fear inflation or deflation.'

Ozkan, A., Ozkan, G., Yalaman, A., & Yildiz, Y. (2021), 'Climate risk, culture and the Covid-19 mortality: A cross-country analysis' *World Development*.

Weale, M., & Wieladek, T. (2022). 'Financial Effects of QE and Conventional Monetary Policy Compared' *Journal of International Money and Finance*.

Work in progress

Aikman, D., Bluwstein, K., Karmakar, S. (2021), 'A tail of three occasionally-binding constraints: a modelling approach to GDP-at-Risk' Bank of England Staff Working Paper No. 931.

Aikman, D., Chalmers, A., Foreman, T., Kuralbayeva, K., Klingler-Vidra, R. (2022), 'Sustainable finance: what is it and how is it regulated', Invitation to submit to the *Stanford Social Innovation Review*.

Aikman, D., Drehmann, M., Juselius M., Xiaochuan Xing. (2022). 'Large recessions have permanent effects.'

Aikman, D. (2022). 'A stocktake of progress in developing the macroprudential framework.'

Allayioti, A., Monti, F., & Piffer, M. (2022). 'The transmission of monetary policy when agents fear inflation or deflation.'

Allayioti, A., Venditti, F. (2022). 'Forecasting commodity prices in a data-rich unstable environment.'

Allayioti, A., (2022). 'Entropic tilting for macroeconomicforecasting: The role of asymetrically distributed survey forecasts.'

Andrikogiannopoulou, A., Krueger, P., Mitali, S. & Papakonstantinou, F. 'Discretionary Information in ESG Investing: A Text Analysis of Mutual Fund Prospectuses.'

Barigozzi, M., & Massacci, D. (2022). 'Modelling Macroeconomic and Financial Variables with Large Dimensional Markov Switching Factor Models.'

Bianchi, D., Borri N. & Massacci, D. (2022). 'Liquidity Risk in Cryptocurrency Markets.'

Bidder, R., Crouzet, N., Jacobsen, M., Mahrotra, N., Siemer. M. (2022). 'Debt flexibility and renegotiation.'

Bidder, R., Coen, J., Lepore, C., Silvestri, L. (2022). 'Smoke without fire? Reassessing empirical evidence of firesales.'

Cattaneo, C., Foreman, T. (2021). 'Climate Change, International Migration, and Interstate Conflict', Centre for Research and Analysis of Migration Discussion Paper.

Foreman, T., Varela, A., Wong, J. (2022). 'Estimating Flood Damages with the National Water Model.'

Massacci, D. (2022). 'State Dependent Factor Models with Weaker Loadings.'

Massacci, D. & Trapani, L. (2022). 'High Dimensional Threshold Regression with Common Stochastic Trends.'

News

King's work extends across all disciplines and impacts on all areas of society, from public health to policy making and mental health to economics. Here is a small selection of recent highlights.

Double accreditation for King's Business School

King's Business School has earned accreditation from the Association to Advance Collegiate Schools of Business (AACSB). Founded in 1916, the AACSB is the longest-serving global accrediting body for business schools, and the largest business education network. Fewer than six per cent of the world's schools offering business degree programs hold AACSB business accreditation.

Speaking about the accolade Professor Shitij Kapur, President & Principal, King's College London said:

'I am proud that the Business School has achieved this accreditation. It is a reflection of how quickly it has matured to provide distinctive education and research across a full spectrum of disciplines in management, entrepreneurship, finance and economics. By fostering the next generation of business leaders, King's Business School is poised to have a remarkably positive impact on the world.'

King's Business School has also earned accreditation from EQUIS, the prestigious business school accreditation system run by the European Foundation for Management Development.

EQUIS accreditation benchmarks institutions against rigorous international standards covering the quality of their governance, education programmes, students, staff and research. It assesses the extent of an institution's internationalisation and engagement with the world of practice, as well as how it demonstrates commitment to ethics, responsibility, and sustainability through its activities. King'sBusiness School joins a peer group of 206 EQUIS accredited schools across 46 countries globally.

Speaking about the recognition, Executive Dean of King's Business School Stephen Bach said:

'We are very proud to join the EQUIS community within just five years of becoming a business school; it is a mark of the rigour of our education and research and of our commitment to continuous improvement.'

'I am proud that the Business School has achieved this accreditation. It is a reflection of how quickly it has matured to provide distinctive education and research .... By fostering the next generation of business leaders, it is poised to have a remarkably positive impact on the world.'

We are working with Citizen's UK and partners to lead the UK higher education sector's response to hosting students and academics affected by the War in Ukraine.

King's expertise on the war in Ukraine shared around the world

Researchers and academics from King's have been using their expertise to inform discussion and debate around the war in Ukraine and its far-reaching consequences.

Our Ukraine Explained series now contains almost 40 individual commentary pieces looking at everything from what the EU and international community should do, to how the war is being perceived in Russia, the role of cyber operations, the nuclear risks posed by the war, China's reaction and if the economic consequences could trigger a Third World War.

Our academics from the School of Security Studies and King's Russia Institute, both within the Faculty of Social Science & Public Policy, have also been speaking directly to journalists around the world and since the start of February 2022 their contributions and views have been included in more than 11,000 media articles and broadcasts.

King's works with Citizens UK to support the 'Homes for Ukraine' scheme

King's believes in equality of opportunity. The university already has a reputation for dealing with migration issues through its academic research and scholarships. The Sanctuary Scholarship programme has been supporting students from forced migrant backgrounds across the globe since 2016. This is a crucial part of our widening participation work to bring access to education to all. In 2020 our work was recognised when charity Citizens UK announced King's as the UK's first 'Refugees Welcome University'.

King's experience and expertise is now being shared across the sector. We are working with Citizen's UK and partners to lead the UK higher education sector's response to hosting students and academics affected by the War in Ukraine.

'At King's, we believe it's our our deeds that define us, and we're delighted to see this recognised by a position amongst the top 25 universities in the world in the 2022 Times Higher Education Impact Rankings.'

King's impact on society

We are delighted King's has placed 5th in the UK and 24th in the world in the 2022 Times Higher Education Impact Rankings - the only global league table that measures universities' contributions to the United Nation's Sustainable Development Goals (SDGs). King's also retained 1st position in this ranking among London universities for the fourth consecutive year.

'At King's, we believe it's our deeds that define us, and we're delighted to see this recognised by a position amongst the top 25 universities in the world in the 2022 Times Higher Education Impact Rankings. This achievement would not be possible without the dedication of the King's community who fulfil this commitment in a number of inspirational ways,' said Professor Evelyn Welch, Senior Vice President (Service, People & Planning)

Impact is at the heart of what we do at King's. Our research extends across all disciplines and impacts on all areas of society: from public health to policymaking, mental health to economics. These rankings recognise, amongst other areas, our economic impact. It is through our education, our research, our people and our partnerships that we can make a positive difference.

The ambition and vision of our partnership with Qatar Central Bank further supports us in achieving our mission. The people, the collaborations and the research produced by the Qatar Centre for Global Banking & Finance will make a vital and timely contribution to society, by helping us address the profound economic challenges the world now faces.

Together our work embodies King's mission of knowledge with real purpose, for the service of society.

Thank you

On behalf of King's College London and King's Business School, I would like to thank you for the generous support you have provided in helping us develop the Qatar Centre for Global Banking & Finance since its inception. Your commitment has enabled the Centre to cement its role as an emerging centre of excellence in central banking research.

We are particularly looking forward to working with you to deliver a training and development programme that will equip your staff with the knowledge they require to address the myriad challenges central banks around the world currently face.

As ever, none of this would be possible without your support.

Thank you.

Professor David Aikman
Director
Qatar Centre for Global Banking & Finance