RESEARCH REVIEW
2020-21

CLIMATE ACTIVISM
Exploring the emotions and motivations of climate strikers

PROTECTING THE WEAKEST
Managing modern slavery risks in supply chains during COVID-19

THE ECONOMICS OF CRIME
How an economist can disrupt criminal operations
CONTENTS

INTRODUCTION
Welcome 2
Our vision 3
Introduction 4–5

IN REVIEW
New projects 6–7
Major research centres 8–9
Publications 18–19
Events 28–29
Guest speakers 30–31
Media coverage 33

IN DEPTH
Supply chains 10–11
Economics of crime 12–13
Hope and fears 14–15
Autonomy at work 20–21
Climate finance 22–23
Entrepreneurs and ADHD 24–25
Research strategy 26–27

IN NUMBERS
Research in numbers 16–17
In the media 32

Editorial
George Meredith
Research Communications and Events Assistant
Charlotte Humma
Research Communications Manager

Editorial enquiries
c.humma@sussex.ac.uk
+44 (0)1273 873202

Feature writers
Charlotte Humma, Kia Jernas, George Meredith, Texas Russell

With thanks to
Vasiliki Bamiatzi, Constantin Blome, Steven Bright, Rocio d’Este, Mari Martiskainen, Martin Schleper, Richard Taylor, Radu Tunaru and Panagiotis Tzouvanas for their contributions.

Cover
www.shutterstock.com
Design
Louise Harvey and Emma Wilkington, Chimney Design Limited
Photography
Stuart Robinson, University of Sussex

© The University of Sussex Business School 2021
The opinions expressed in this publication are those of the contributors and not necessarily those of the University of Sussex Business School. While all reasonable efforts have been made to ensure the information in this publication is correct, matters covered by this publication are subject to change.
In this edition of our annual Research Review, we provide a selection of articles about the innovative research being undertaken here at the University of Sussex Business School and share with you our successes, recent activities and outputs, and plans for the year ahead.

We have all faced multiple crises over the past year: health, economic, and social. Here, at the University of Sussex Business School, despite these significant challenges, we have shown adaptive agility in our teaching provision as well as the continuing relevance of our research to the world we live in. Our research portfolio includes core disciplines in business, economics and innovation studies, with a highly applied focus. As the feature articles in this edition illustrate, these strengths place us at the forefront of research into some of the key challenges facing modern government, industry and civil society: from climate change mitigation, through sustainable supply chains to secured top levels of research grant funding, now ranked second in the UK and best-performing.

Furthermore, over the past year, we have produced some of the world’s most cited research, with six of our faculty appearing in the top 1% of researchers globally – across all disciplines – according to citation metrics (source: Clarivate Analytics). We are also immensely proud to have received more than £1 million over the last three years. As a Business School, we embrace the University of Sussex’s institutional mission and overarching ambition to be ‘a better university for a better world’ and we are committed to making a positive impact on policy, business and society. This review gives a taste of our work over the past year.

Professor Steven McGuire
Dean of the Business School

Our vision is to be a School that collaborates across disciplines to shape global issues in business, management, and society, making an impact on policy, practice, and people.

Our Approach
Pioneering both innovation studies and development studies several decades ago, the School has a distinctive intellectual research profile. While we possess strengths across the traditional business disciplines – including accounting, finance, international business, management, marketing and strategy – we are world-renowned for our expertise in three interdisciplinary, policy-focused areas: energy, innovation and sustainability.

We aim to gain a broader understanding of the world than can be afforded by any single discipline in isolation. We believe that problems faced by business and management often cannot be fully addressed without taking account of broader socio-political, regulatory, technological and environmental issues. Across the School, we have world-leading economists, political scientists and management scholars working to understand the interactions between business, policy, and social and economic development.

We aim to contribute to the development of a better world through research into issues of significance to policy debate and decision-making. To effect change, members of faculty work with external organisations, providing expert knowledge and rigorous analysis to help inform policy development and implementation.

Energy
Our current energy systems must radically change if the world is to avoid exacerbating climate change further. Creating sustainable energy systems will be a defining challenge for humanity in the 21st century and one that requires an understanding of the technological, economic and political dimensions of sustainable energy. We have a long history of academic research with practical application in the critical area of energy policy with our Sussex Energy Group, established in the 1970s and now one of the largest research groups in the country. Our research focuses on understanding and fostering transitions towards sustainable, low-carbon energy systems and helping organisations, industries and policymakers to ensure that appropriate investment, policies, technologies and innovations are developed and deployed with positive effects.

Innovation
Innovation is often viewed as the application of better solutions to meet new requirements, unarticulated needs, or existing market demands, but the creation of new products and services is not merely about technological advances. Understanding how innovations arise requires an appreciation of the supporting economic and regulatory environment, as well as an understanding of the role of organisational design and the social context of users. At the Business School, we look both outside and inside the organisation for a deeper understanding of innovation processes. Our work focuses on understanding innovation in all types of organisations, across all sectors. This involves developing and delivering tools to improve the management of innovation both within and between organisations and their suppliers and customers, as well as at national and international policy levels.

Sustainability
The current way of provisioning our basic needs is not sustainable and is already causing climate change, insecurity and inequality on an unprecedented scale. As recognised in the international Sustainable Development Goals, no policy imperatives are more compelling or expansive than the need for global actions to end poverty and inequality. There exists a diversity of ways in which these challenges can be met. But the complexities, uncertainties and political obstacles are formidable. Science and technology – and knowledge and innovation of all kinds – are as fundamental to these problems as to their solutions. Across the Business School, our academics study the economic, social acceptance and broader socio-technical implications of different policy options and mixes – from firm to international level – for a sustainable future.

Professor Steven McGuire
Dean of the Business School
INTRODUCTION

As COVID-19 restrictions ease and the world emerges from lockdown, we look back at what has been another turbulent and troublesome year for UK research.

What we see, despite last year’s radical pivot to an entirely virtual mode of working, is not a lost year of falttering effort and vanishing opportunity but a period of increased success and rebuelded enthusiasm for our research; research that has proved to be more urgently required and globally relevant than ever before.

Our research responding to the pandemic has continued apace, with several new Covid-related projects commencing in 2020-21, and several others coming to fruition with a slew of influential publications and policy engagements. For example, Prof Michael Hopkins led a widely publicised study comparing the UK’s Coronavirus testing systems with those of seven other countries in order to determine their efficacy and inform international efforts to better diagnose and track the virus.

Our strengths in the fields of energy, innovation and sustainability have enabled us to contribute significantly to the global dialogue around climate change, informing policy making, regulation and business practice in the run up to what is widely considered to be a vital watershed moment for the global climate crisis: COP26, held here in the UK in November. Research by colleagues in all five departments has – along with work undertaken in several of our research projects, programmes and centres – helped consolidate our reputation as one of the country’s most prominent centres for sustainability expertise. The Social, Technological, and Environmental Pathways to Sustainability (STEPs) Centre entered its 15th and final year, and continues to produce impactful research of the highest calibre; while the Sussex Sustainability Research Programme (SSRP), which has its administrative home in the School, succeeded in bringing together a host of international stakeholders to address the urgent need to better align the overlapping agendas of climate change and the SDGs (the UN Sustainable Development Goals) at its virtual international symposium in July.

Eleven of our energy policy experts are involved in a new research and innovation centre for UK industrial decarbonisation – the Industrial Decarbonisation Research and Innovation Centre (IDRIC) – which has received £20m from UK Research & Innovation (UKRI). Under the direction of Prof Benjamin K. Sovacool, Business School academics are leading on three key research topics focusing on smart policy and governance around industrial decarbonisation, just transitions for industrial decarbonisation in the UK, and the politics of industrial decarbonisation policy. The aim is to place the UK at the forefront of the global shift to Clean Growth, by driving the technologies, services and markets to produce low-carbon industrial products. It will support delivery of the Clean Growth Grand Challenge and the Industrial Clusters Mission, which has set an ambition to establish at least one low-carbon industrial cluster by 2030 and the world’s first net-zero industrial cluster by 2040. And finally, our finance researchers are investigating how climate change is creating new opportunities in modern finance and economics – particularly the economics of green finance, environmental finance, climate risk, and the impact of weather changes on the economy.

Our work in other of the so-called ‘grand challenge’ areas has proved similarly influential. Research by the UK Trade Policy Observatory, for instance, has been picked up by media outlets the world over, reaching a total audience of millions and making it some of the University’s most widely reported research. This includes groundbreaking research into the consequences of post-Brexit trade for equality and inclusivity, coming at a time when inequalities in the UK and around the world are at an all-time high, and when many of the country’s international trade relations remain as complicated and uncertain as they did on the day the UK officially exited the EU.

That Sussex once again ranked first in the world for Development Studies (QS World University Rankings 2021) is due in no small part to the outstanding interdisciplinary research conducted here in the Business School. Our outlook continues to be highly international, despite the pandemic. Indeed, if anything, Covid has thrown into sharper relief many of the global challenges and deep social inequalities that have long been the focus of our research.

The Transformative Innovation Policy Consortium (TIPC), for example, continues to lead thinking in how to redirect economies and societies, post-Covid, towards more equitable, sustainable and resilient futures. The Organisation for Economic Co-operation and Development cited Transformative Innovation Policy (TIP) as a novel and emerging approach that can help governments looking to address global societal challenges in its new Science, Technology & Innovation Outlook 2021, a biennial publication that aims to inform policy makers and analysts about changes in global Science Technology and Innovation patterns and their potential implications for national and international policies.

Closer to home, and whilst many of us transition to ‘hybrid working’, Dr Emma Russell, a member of the Digital Futures at Work Research Centre (Digit) has produced a groundbreaking book on agile working and working from home. Agile Working and Well-Being in the Digital Age provides an in-depth understanding of the growing phenomena of agile working, flexible working enabled by new technologies, and working, to meet market needs as well as individual and organisational goals.

When it comes to funding, government priorities for research remain largely unclear. The Industrial Strategy was summarily scrapped; vital research supporting overseas development was abruptly closed down as ODA funding was clawed back; and while the total funding allocated to UK R&D has ostensibly increased, it is clear the portion attributed to university-based research has decreased dramatically. However, despite this bleak outlook, the School’s research base has continued to flourish. Our project portfolio now ranks as one of the largest of any business school in the country, having again grown in both quantity and value. According to the Chartered Association of Business Schools’ (CABS) annual rankings, we are now second in the country for research income (having ranked 3rd for the past 3 years). By this measure and several others, including citation and impact metrics, we continue to outperform our Russell Group competitors. We are also a partner member of the Responsible Research in Business and Management (RIBM) network, who recognise us as a pioneering institution.

These achievements are testament to the resilience, dedication and diligence – not to mention the phenomenal talent – of our research community. The following pages provide just a small snapshot of the important work we have continued to produce over the 2020-21 academic year.
NEW PROJECTS

Responsive organising for low emission societies

With funding from the Economic and Social Research Council (ESRC), this study aims to identify how European city-regions can accelerate decarbonisation of energy systems through digitalisation of energy infrastructure in ways that create societal benefits. The research focuses on three cities – Bergen, Brighton and Trento – to identify how to enable socially inclusive digitisation of energy transitions.

Brexit uncertainty and the Northern Ireland Protocol

This project examines the consequences of Brexit and the Northern Ireland Protocol for Northern Ireland firms and their trade within the UK’s Internal Market. It assesses the impact of this uncertainty on the sales and purchasing activity of firms based in Northern Ireland, and the impact of trade barriers and regulatory controls arising from the implementation of the Protocol. The researchers will also examine the impact of Brexit uncertainty on the labour market from which firms draw their workforce. It is funded by the ESRC.

Collaborating with communities to transform our food system

Part of a £24m UK Research and Innovation Transforming Food Systems Programme, this project brings together researchers, food industry representatives, charities and communities to transform our food system. In collaboration with communities, the Women’s Environmental Network in Tower Hamlets (London) and the Brighton and Hove Food Partnership (East Sussex), the Sussex team of researchers aim to map local food environments, community food experiences and co-produce food system and food policy recommendations for health and sustainability.

Unlocking the potential for future India-UK trade and development

A substantial part of goods trade between the UK and India is based on a Generalised System of Preferences (GSP) scheme, which allows Indian exporters to trade with the UK (and the EU) on more favourable terms to those established under the agreements with the World Trade Organisation. Funded by the ESRC and the Indian Council of Social Science Research, this research will provide the first detailed analysis of how firms respond to the challenges created by the GSP, particularly the removal of preferential treatment. It will then examine the impacts on development outcomes of the switch from the GSP to a UK-India Free Trade Agreement.

Pathways to inclusive labour markets

How will emerging automation and digital technologies affect the future of work, including changes in the demand for skills? And which policies can be put in place now to reap the maximum benefits of these changes, while reducing inequalities? With funding from the European Commission, this collaborative study investigates these questions by focusing on three key drivers shaping labour markets in Europe, China and Latin America over recent decades and in the future: technological change, the reconfigurations of Global Value Chains, and regional industrial transformation.

Optimising coronavirus testing systems

Successful diagnostic testing systems have been, and remain, essential to responding to the COVID-19 pandemic. Optimising Coronavirus Testing Systems (OCTS) aims to understand how these systems are established, function and could be improved, providing lessons for the future. The project’s objective is to enable policy and practices that could reduce mortality rates, improve the targeting of healthcare resources, and reduce the impact of the current pandemic and future epidemics on lives and livelihoods. The research is funded by the ESRC.

Net-zero neighbourhoods

This project seeks to develop energy solutions that can leverage the billions of pounds that people already spend on home improvements to achieve energy efficiency. With researchers embedded in three communities developing new retrofit proposals – Leeds, Brighton & Hove, and Glasgow City – they will seek to understand how this change can be achieved through coordinated action at both local and national levels. The project aims to provide the foundations for new models of energy transition for low-carbon heat and energy efficiency that can be adopted UK-wide.

Fostering positive linkages between trade and sustainable development

Trade can produce positive outcomes when policies promote access to markets, fair prices and standards of living for farmers, as well as alleviating rural poverty and ensuring sustainable farming practices. This European Commission funded project aims to identify policy solutions that will enhance the positive, and mitigate negative impacts of trade, while supporting the long-term sustainability of agri-food chains, in order to help to achieve the Sustainable Development Goals and the European Union’s ecological transition.

Sustainability, inclusiveness and governance of mini-grids in Africa

This project explores the complex dynamics behind the challenges of installing mini-grids for electricity generation. Focusing on Nigeria, Senegal, Kenya and Tanzania, the project aims to analyse the regulatory frameworks in each country; the political economy drivers behind differences in the speed and nature of the deployment of mini-grids in each country; and the extent to which mini-grid deployment is sustainable and inclusive, as well as low-carbon.
The Centre for Research into Energy Demand Solutions (CREDS) was established in 2018 with a vision to make the UK a leader in understanding the changes in energy demand needed for the transition to a secure and affordable, low-carbon energy system. The Centre has several different strands of research, with SPRU academics leading the ‘Digital Society’ strand. This involves researching the effects that information and communication technologies have on energy consumption and carbon emissions.

Deep Transitions

Deep Transitions is an innovative interdisciplinary research project that strives to help us understand how the unsustainable systems we live in need to be transformed and how we can avoid the worst outcomes. The project consists of two phases: Deep Transitions History, and Deep Transitions Futures. The latter commencing this year. It combines an unprecedented historical analysis of how fundamental changes unfolded in the past with looking into the future to help redirect those crucial drivers of change into a sustainable direction. It is supported by James Anderson and Baillie Gifford & Co.

Industrial Decarbonisation Research and Innovation Centre

This Centre (IDRIC) supports the UK Industrial Decarbonisation Challenge through multidisciplinary research and innovation to accelerate decarbonisation of industrial clusters. The Centre includes research organisations, industry, civil society organisations and policy actors. It supports delivery of the Clean Growth Grand Challenge and the Industrial Clusters Mission, which has set an ambition to establish at least one low-carbon industrial cluster by 2030 and the world’s first net-zero carbon industrial cluster by 2040.

Digital Futures at Work Research Centre

The Digital Futures at Work Research Centre (DIGIT) – aims to advance our understanding of how digital technologies are reshaping the workplace. It impacts on employers, employees, job seekers and governments. It is led by both University of Sussex Business School and Leeds University Business School with partners from Aberdeen, Cambridge, Manchester and Monash Universities, and funded by the Economic and Social Research Council (ESRC). The Centre aims to produce new evidence for policymakers, businesses, and unions on the benefits, risks and challenges of the impact and effective adoption of new technologies in the workplace.

Energy Systems Integration

The National Centre for Energy Systems Integration (CESI) brings together energy experts from around the world to help unravel the energy network and understand future supply and demand, paving the way to a flexible smart infrastructure, empowering consumers and giving them greater control of their energy use. It allows industry to meet tough new low-carbon targets.

Sussex Energy Group

The Sussex Energy Group (SEG) aims to understand and foster transitions towards sustainable, low-carbon energy systems. Drawing on SPRU’s tradition, the group undertakes academically rigorous, interdisciplinary and world-leading research that is relevant to contemporary policy challenges. They also educate the next generation of energy policy professionals through MSc and PhD programmes.

Sussex Sustainability Research Programme

The Sussex Sustainability Research Programme (SSRP) – a partnership between the University of Sussex and the Institute for Development Studies – was launched in 2016 to address complex overlapping socio-economic, technical and environmental challenges to achieve the Sustainable Development Goals. The programme has funded 20 interdisciplinary research projects across four key areas: trade, debt and the environment; biodiversity and food production; climate and food insecurity; and global health and the environment. These projects are carried out with partners in low- and middle-income countries (primarily in sub-Saharan Africa and Asia) and in the UK.

Transformative Innovation Policy Consortium

The Transformative Innovation Policy Consortium (TIPC) is a group of policy makers and funding agencies working together to give substance to a new framing for Science, Technology and Innovation policy that aims to contribute to addressing global societal challenges, as encapsulated in the United Nations’ Sustainable Development Goals, including climate change, inequality, employment and pathways to economic growth and development. TIPC involves building new platforms for a mutual learning process between the Global North and South and between research and policy. It comprises academics, policymakers and funders across 30 countries.

UK Trade Policy Observatory

The UK Trade Policy Observatory (UKTPO) was established just days after the EU referendum result as a partnership between the University of Sussex and Chatham House. It is an independent expert group that conducts objective and rigorous interdisciplinary research on international trade and integration and in-depth analysis of current and future UK trade policy. The UKTPO provides timely, detailed and informed analysis of the impact of future possible trading arrangements and trading developments in world trade on the UK, in response to the new national need for trade expertise to inform and shape UK trade policy.
HOW DO WE PROTECT THE WEAKEST?

Managing modern slavery risks in supply chains during COVID-19

When the COVID-19 pandemic hit the world in early 2020, it had a massive impact on supply chains, known as ‘a global supply and demand shock’. Changes in consumer behaviour, from panic buying toilet roll to no longer eating out, and a surge in demand for personal protective equipment (PPE), meant that supply chains had to change, and rapidly.

Research by Dr Martin C. Schleper and colleagues has revealed that the shifts in demand patterns, disrupted supply flows and weakened risk management caused by COVID-19 had implications for workers’ vulnerability to exploitation – modern slavery being the most extreme form of exploitation.

Demand and supply

For some businesses and institutions – including the UK’s National Health Service – the urgent new or increased need for certain products, such as PPE, required rapid new suppliers to be found. This urgent new or increased need for personal protective equipment (PPE) allows firms to indirectly manage lower-tier suppliers – the urgent new or increased need for a global supply chain management necessary for sustainability proves beneficial in the sense that it is the case that the COVID-19 pandemic has impacted on working conditions and workers’ rights in upstream supply chains, this crisis has certainly also disrupted the “common wisdom” of doing business and human interaction in general, and may thus represent a window of opportunity to rethink current supply chain designs and trade relationships, explains Dr Schleper.

With physical distancing and other lockdown measures in place, it also became much more difficult for victims of modern slavery to access support and disguise their situation.

Time for change: leading the way

‘Whilst the COVID-19 pandemic has impacted on working conditions and workers’ rights in upstream supply chains, this crisis has certainly also disrupted the “common wisdom” of doing business and human interaction in general, and may thus represent a window of opportunity to rethink current supply chain designs and trade relationships,’ explains Dr Schleper.

For example, consumer power, if purchasing behaviour is permanently orientated towards ethical values, could act as a means to reduce and even avoid labour exploitation. But, it remains an ideal.

However, existing sustainable supply chain management approaches do demonstrate their benefits, argues Dr Schleper. Firstly, the value-oriented and long-term supply chain management necessary for sustainability proves beneficial in the response to volatile and extreme events, such as COVID-19 and reducing modern slavery. Collaboration with external stakeholders is crucial for sustainable supply chain management. Finding and working with new suppliers at short notice can be more safely achieved if these are already supplying other businesses (e.g., competitors or supply chain actors in your own network).

Secondly, participation in sustainability initiatives and industry consortia (e.g., Responsible Business Alliance, Roundtable for Sustainable Palm Oil) allows firms to indirectly manage lower-tier suppliers through the implementation of industry-wide standards and guidelines, or even to directly exchange auditing and assessment information. Thirdly, information exchange and collaboration involved in sustainable supply chain management with stakeholders, such as with unions, NGOs, and other expert stakeholders increases supply chain transparency and allow for a proactive detection of early warning signals on deteriorating conditions even when physical audits are disrupted.

And finally, in risk management in general, studies conducted after the 2008 financial crisis have shown that strategically formulated social and environmental practices that are based on long-term relationships and commitments – rather than mere tick-box compliance exercises – can significantly increase organisational resilience and thus better prepare for these exceptional states.

“So far, supply chain resilience has taken a largely supply continuity view, but COVID-19 may show that supply chain resilience goes hand in hand with environmental and social sustainability. The time to prove that proactive, value-oriented, and long-term supply chain management is a superior risk management approach than traditional approaches is now!” Dr Schleper concludes.

Modern slavery and disruption of usual mitigation mechanisms

Prior to the pandemic, despite policy and law advancement over the past few years, the 620 countries alone imported products at risk of being made by slave labour worth $354 billion annually (Global Slavery Index (GSI) 2018) and it was estimated that 40 million people worldwide were living in modern slavery. Whilst there is no globally agreed definition of modern slavery, it includes servitude, forced labour, and human trafficking from which victims are unable to leave their situation of exploitation, controlled by threats, punishment, violence, coercion, and deception.

Detecting, preventing, and mitigating modern slavery in supply chains has always been a challenge for businesses and it is recognised that modern slavery may be present in every supply chain: from the clothes we wear, to the food we eat and the digital devices we use every day.

Traditionally, given the widespread prevalence of modern slavery in supply chains, businesses have taken a risk-based approach, identifying where they are more exposed to modern slavery in their supply chains and where they have opportunities to reduce and mitigate this risk.

Due to travel restrictions during the pandemic, physical audits of suppliers and their workforces were impossible and, in many businesses, staff across the organisation were moved to other activities focused on business continuity, thus reducing organisational capacity to detect and remediate instances of labour exploitation.

This led some supply chains to become less transparent altogether, and tracing risky supplier behaviour, such as unauthorised subcontracting of orders, became more difficult due to resource constraints and policy-induced mobility restrictions.

“COVID-19 may represent a window of opportunity to rethink current supply chain designs and trade relationships.”

About the researcher

Martin Schleper is Senior Lecturer in Operations & Supply Chain Management at the University of Huddersfield.

Read the paper

While many economists spend their time analysing the economic activities of legitimate businesses and consumers, Dr Rocco d’Este is more interested in the illegitimate and the illegal.

“Criminals are subject to market forces just like regular businesses,” says Dr d’Este, who is Lecturer in Economics at the University of Sussex Business School. “Fees, demand, and access to markets are all key factors in criminal operations and have an impact on the profitability of criminal activity.”

Dr d’Este’s research is not designed for criminals looking to balance their books or boost profits, however. Instead, his research provides insights to lawmakers seeking to disrupt criminal operations.

“Understanding the economic impacts of certain interventions by the authorities, and how criminals respond to them, are vital in order to design laws that are effective in deterring crime.”

Thefts, Pawnshops and Stolen Goods

Dr d’Este’s recent research into the availability of markets for stolen goods is a good example of this.

Thieves who steal personal property need a market to convert their acquisitions into cash. Pawnshops provide one such market, offering quick cash payments for personal items such as jewellery, mobile phones, and laptops.

Pawnshops have long been associated with criminal activity, but there has been little empirical research into the relationship between these markets and the rate of theft crimes in a given area.

“Since pawnshops are such an attractive market for thieves, we might expect that a prevalence of pawnshops in a particular region would incentivise crime and lead to an increased rate of thefts,” argues Dr d’Este.

“Junkyards, flea markets, eBay, Craigslist – all of these are possible markets for stolen goods,” says d’Este, “policymakers, law enforcement officers and researchers should pay more attention to them and the role they might play in incentivising crime.”

Supply Side Interventions: The case of crystal meth

Dr d’Este has also examined the impact of government responses to the crystal methamphetamine (meth) economy. The US government has sought to disrupt the market for crystal meth by implementing supply-side interventions that restrict access to key inputs in the manufacture of the drug.

For example, pseudoephedrine-based medications, which are widely sold as a treatment for flu symptoms, can also be used to manufacture meth in smallscale domestic laboratories. Between 2004 and 2006, the US government introduced strict over-the-counter (OTC) laws to restrict access to the medication, such as regulating the placement of the product in shops to reduce the likelihood of theft, and requiring that retailers maintain a logbook of clients to prevent repeat purchases.

“A study published in the Journal of Public Economics in 2014 found that the introduction of these regulations had reduced the number of operating meth labs in those areas by around 36%, but that there was no change in possession or sale of drugs, suggesting that users found supplies of meth elsewhere. What the study did not investigate, however, was the impact of the laws on property and violent crimes.”

“New laws intended to deter one form of crime (i.e. drug production) can have unintended effects on other illegal activities, as criminals respond and adapt to the new circumstances,” says d’Este, “Understanding the unintended consequences of new regulations is vital in order to measure the success of anti-crime measures, and improve future policy.”

To analyse the effect of the OTC laws on other crimes, Dr d’Este collected monthly FBI crime data between 2002 and 2006 and measured the crime rate relative to the introduction of an OTC regulation in a given county or state.

“The spike in crimes can be plausibly attributed to increased [illicit] methamphetamine production, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equated to an average economic cost of $3.5 billion in those states.

“The crime in spikes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equated to an average economic cost of $3.5 billion in those states.

“The spike in crimes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equated to an average economic cost of $3.5 billion in those states.

“The spike in crimes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equated to an average economic cost of $3.5 billion in those states.

“The spike in crimes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equated to an average economic cost of $3.5 billion in those states.

“The spike in crimes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equated to an average economic cost of $3.5 billion in those states.

“The spike in crimes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equaled to an average economic cost of $3.5 billion in those states.

“The spike in crimes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equaled to an average economic cost of $3.5 billion in those states.

“The spike in crimes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”

Dr d’Este found that the OTC reforms led to a 3.2% increase in larcenies, a 3% increase in burglaries and a 2.8% increase in aggravated assaults, lasting up to seven months after the implementation of the regulations. This equaled to an average economic cost of $3.5 billion in those states.

“The spike in crimes can be plausibly attributed to increased violent competition between unaffected criminal groups fighting to take control of the vacated drug markets, and thefts carried out by drug users looking to maintain their usage in the absence of the cheap meth previously produced domestically.”

These results provide important lessons for policymakers.

“My findings suggest that policy interventions that restrict access to key inputs in the methamphetamine precursors, while having no impact on demand, could lead to an increase in criminal activity,” says d’Este.

“Policymakers should consider implementing any supply-side interventions in conjunction with other crime-prevention strategies, harm-reduction programmes, and social programmes that can tackle the demand for drugs.”
HOPES AND FEARS

Exploring the emotions and motivations of climate strikers

Over the course of one week in September 2019, more than seven million people across 185 countries took to the streets in a series of climate strikes. Their actions made front-page news across the globe, but what do we know about the protesters themselves?

Research by Dr Mari Martikainen, together with colleagues in the US, Canada and Norway, attempted to find out – digging deep into what motivates the strikers, their feelings about climate change and the actions they take as individuals to address the climate crisis.

Mari explains how the project was sparked by a Twitter exchange. “Dr Stephen Axon [Assistant Professor of Sustainability Science at Southern Connecticut State University] tagged me in a tweet about his academic heroes. From there, we began a conversation about our shared interests. And, with the global climate strike on the horizon, we decided it was the ideal time to do some research on climate activism.”

From there, Mari enlisted Benjamin Sowood from SPRU, who then recruited Dylan Furszyfer Del Rio (SPRU) and Siddharth Sareen (Imperial College) and Sovacool from SPRU, who then recruited Stephen Axon (Imperial College and University of New Haven) to interview climate strikers in six cities across four countries: Brighton (UK), London (UK), New York (USA), New Haven (USA), Montreal (Canada), and Stavanger (Norway).

“Our attitude was very much ‘let’s go and find out,’” explains Mari. “There was no predefined large project behind us, so we were free to be quite innovative and proactive.” In the midst of preparations for the REF exercise and the academic research funding applications cycle, Mari found this bottom-up, explorative approach refreshing. “The team members effectively gave their spare time and were passionate about exploring the issue,” she says. “To me, that’s what research is all about, finding what you are passionate about, and then really giving your spare time to it.”

Getting the project off the ground

While there was no official funding for the work, Mari was able to use funds from her Research Excellence Award, awarded by the Business School in 2019, to cover research expenses, such as the cost of transcribing interviews.

Walking and talking: research on the go

The study set out to discover what knowledge the protesters had about climate change; what their emotions were in relation to the climate crisis; what motivated them to take part in the climate strike; and what individual actions they were taking to tackle the climate crisis. “I was particularly interested in why people were taking part, and how this related to their emotions around the subject of climate change,” explains Mari. “This wasn’t something that had been explored much previously in relation to a global strike of this scale.”

The researchers chose to focus their attention on climate strikes taking place in highly industrialised countries that are responsible for both high consumption and emissions patterns. The particular locations were also influenced by the ability of the team to visit the cities on strike days.

On the day, researchers joined the strikers and approached individuals to ask whether they would spend 5 to 20 minutes answering questions. “We tried to ensure a diverse set of respondents, but are not claiming that this was a representative study. Instead, we used qualitative interviews to explore protesters’ views.”

Mari has a particular interest in this area, having led workshops on qualitative interviewing techniques for the Doctoral School at Sussex. “With action research such as this, you have to be prepared to walk alongside them while they talk, which in itself is actually a ‘mobile’ research method. You also have to accept that not everyone will want to take part. That just means being ready to move on to someone else.”

The interviews revealed varying degrees of knowledge about climate change, and a range of motivations for taking part, including concern for the planet, wanting to influence public opinion and policy, and concern for future generations and vulnerable groups.

The range of emotions connected with climate change was surprisingly large. “On the one hand, there was a lot of fear, anxiety, despair and anger,” recalls Mari. “But one of the nice things about the project was that we also uncovered a great deal of hope for the future. Many protesters told us they felt empowered or comforted by taking part in the action and enjoyed a sense of belonging and community – that they were not alone, and that, together, they could perhaps make a difference.”

Many respondents were keen to make lifestyle changes, such as changing their mode of transport or their diets, and many had already done so. But there were also many who found that structural and systemic factors limited their ability to make major changes such as avoiding car use, and who instead were focusing on smaller, more manageable actions, such as recycling and reducing consumption.

Future research on climate activism

The budgetary and time limitations of the project meant the researchers were not able to follow up any of the interviews. “In a future study, it would be interesting to go back to the respondents and find out whether taking part in the protest had affected them in any way, perhaps spurring them on to make more changes in their day to day lives,” says Mari. “We also need further research on who is, and is not, able to take part in climate change action and how issues such as social class or education, for example, may come into play.”

Uncovering motivations, emotions and actions

The interviews revealed varying degrees of knowledge about climate change, and a range of motivations for taking part, including, concern for the planet, wanting to influence public opinion and policy, and concern for future generations and vulnerable groups.

The range of emotions connected with climate change was surprising large. “On the one hand, there was a lot of fear, anxiety, despair and anger,” recalls Mari. “But one of the nice things about the project was that we also uncovered a great deal of hope for the future. Many protesters told us they felt empowered or comforted by taking part in the action and enjoyed a sense of belonging and community – that they were not alone, and that, together, they could perhaps make a difference.”

Many respondents were keen to make lifestyle changes, such as changing their mode of transport or their diets, and many had already done so. But there were also many who found that structural and systemic factors limited their ability to make major changes such as avoiding car use, and who instead were focusing on smaller, more manageable actions, such as recycling and reducing consumption.

Future research on climate activism

The budgetary and time limitations of the project meant the researchers were not able to follow up any of the interviews. “In a future study, it would be interesting to go back to the respondents and find out whether taking part in the protest had affected them in any way, perhaps spurring them on to make more changes in their day to day lives,” says Mari. “We also need further research on who is, and is not, able to take part in climate change action and how issues such as social class or education, for example, may come into play.”

About the researcher

Dr Mari Martikainen is a Senior Research Fellow and Co-Director at Sussex Energy Group (SEG) based at the Science Policy Research Unit (SPRU). She is also the theme lead for Equity and Justice at the UK-wide Centre for Research into Energy Demand Solutions (EREDS).

Read the paper

RESEARCH FUNDING

TOP 5 BUSINESS SCHOOLS BASED ON RESEARCH INCOME (2017-2020)

<table>
<thead>
<tr>
<th>Rank</th>
<th>University</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>University of Warwick</td>
<td>$7,300</td>
<td>$6,144</td>
<td>$5,144</td>
<td>$18,588</td>
</tr>
<tr>
<td>2nd</td>
<td>University of Sussex</td>
<td>$7,108</td>
<td>$6,427</td>
<td>$5,144</td>
<td>$18,679</td>
</tr>
<tr>
<td>3rd</td>
<td>Imperial College of Science, Technology and Medicine</td>
<td>$7,108</td>
<td>$6,144</td>
<td>$5,144</td>
<td>$18,679</td>
</tr>
<tr>
<td>4th</td>
<td>University of Oxford</td>
<td>$6,144</td>
<td>$5,144</td>
<td>$5,144</td>
<td>$16,432</td>
</tr>
<tr>
<td>5th</td>
<td>University of Manchester</td>
<td>$5,144</td>
<td>$5,144</td>
<td>$5,144</td>
<td>$15,432</td>
</tr>
</tbody>
</table>

FIELD-WEIGHTED CITATION IMPACT FOR BUSINESS, MANAGEMENT AND ACCOUNTING (2020) COMPARSED WITH:

<table>
<thead>
<tr>
<th>Entity</th>
<th>2020 Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Exeter</td>
<td>3.51</td>
</tr>
<tr>
<td>University of Bristol</td>
<td>2.72</td>
</tr>
<tr>
<td>University of Birmingham</td>
<td>2.55</td>
</tr>
<tr>
<td>Queen Mary University of London</td>
<td>2.46</td>
</tr>
<tr>
<td>University of Cambridge</td>
<td>2.46</td>
</tr>
<tr>
<td>University of Salford</td>
<td>2.40</td>
</tr>
<tr>
<td>University College London</td>
<td>2.33</td>
</tr>
<tr>
<td>Newcastle University</td>
<td>2.28</td>
</tr>
</tbody>
</table>

FIELD-WEIGHTED CITATION IMPACT ECONOMICS, ECONOMETRICS AND FINANCE (2020) COMPARSED WITH:

<table>
<thead>
<tr>
<th>Entity</th>
<th>2020 Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Southampton</td>
<td>2.92</td>
</tr>
<tr>
<td>University of Sussex</td>
<td>2.11</td>
</tr>
<tr>
<td>University of Glasgow</td>
<td>1.90</td>
</tr>
<tr>
<td>Imperial College London</td>
<td>1.73</td>
</tr>
<tr>
<td>University of Salford</td>
<td>1.73</td>
</tr>
<tr>
<td>University of Birmingham</td>
<td>1.69</td>
</tr>
<tr>
<td>University of Exeter</td>
<td>1.68</td>
</tr>
<tr>
<td>University of Manchester</td>
<td>1.65</td>
</tr>
</tbody>
</table>

INTERNATIONAL COLLABORATION (2020)

<table>
<thead>
<tr>
<th>Entity</th>
<th>2020 Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durham University</td>
<td>72.8</td>
</tr>
<tr>
<td>Imperial College London</td>
<td>70.2</td>
</tr>
<tr>
<td>University of Southampton</td>
<td>65.4</td>
</tr>
<tr>
<td>King's College London</td>
<td>65.1</td>
</tr>
<tr>
<td>University of Nottingham</td>
<td>65.8</td>
</tr>
<tr>
<td>Queen's University Belfast</td>
<td>66.0</td>
</tr>
<tr>
<td>University of Liverpool</td>
<td>62.8</td>
</tr>
<tr>
<td>University of Sheffield</td>
<td>60.4</td>
</tr>
<tr>
<td>University of Exeter</td>
<td>61.8</td>
</tr>
<tr>
<td>University of Salford</td>
<td>61.7</td>
</tr>
<tr>
<td>University of Leeds</td>
<td>61.3</td>
</tr>
<tr>
<td>University of Manchester</td>
<td>60.6</td>
</tr>
<tr>
<td>University of Cambridge</td>
<td>59.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Entity</th>
<th>2020 Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Sussex</td>
<td>61.7</td>
</tr>
<tr>
<td>University of Exeter</td>
<td>61.8</td>
</tr>
<tr>
<td>University of Salford</td>
<td>60.6</td>
</tr>
<tr>
<td>University of Cambridge</td>
<td>59.9</td>
</tr>
</tbody>
</table>
Disclaimer: The selection is based on academic journal rankings (AJG and OUP Bulletin) which provide a very general estimation of the individual work. Only top ranked publications are listed. Here we encourage the interested reader to explore the breadth and depth of the outputs of our school further, specifically impactful research might not appear in the highest ranked journals.

TOp JOURNAL PUBLICATIONS 2020-2021

ACCOUNTING & FINANCE

ECONOMICS

MANAGEMENT
Babaiyee, Mapena, Rien, Shuang, Ogbonnaya, Christopher, Rios, Kalvin, Swee, Gemmi, Desmet and Gok, Rubay (2020) Thriving at work but remaining at home: understanding the relationship between supervisor bottom-line mentality and employee functioning. Human Relations.
Lievre, Raltsa and Fison, Timothy J (2021) Beware the value gap: creating value for users and for the system through innovation in digital energy services businesses. Technological Forecasting and Social Change, 166.

SPRU
De Clerck, Dirk and Brieger, Steven A (2021) When discrimination is wrong, autonomy is key: how women entrepreneurs leverage job autonomy resources to find work-life balance. Journal of Business Ethics.
Sidik, Oktar, Milmun, Latycheva and Boukis, Adhikarita (2021) Authenticating brand activism: negotiating the boundaries of free speech to make a change. Psychology and Marketing.
Spicer, André, Cankurtaran, Piran and Beverland, Michael B (2021) Take a look at me now: conservation and the Phil Colman effect. Research in the Sociology of Organizations.
Hilena, Ralitsa and Fison, Timothy J (2021) Beware the value gap: creating value for users and for the system through innovation in digital energy services businesses. Technological Forecasting and Social Change, 166.
Hilena, Ralitsa and Fison, Timothy J (2021) Beware the value gap: creating value for users and for the system through innovation in digital energy services businesses. Technological Forecasting and Social Change, 166.
Is autonomy the key to balance?

The study found that autonomy is particularly important for work-life balance in women as they feel satisfied in their ability to manage both their personal and work lives. This subdues the challenge of excessive workload that can come with being an entrepreneur, as women are able to manage their own tasks in accordance with their own personal and professional needs. In line with COR theory, they can better manage their own resources by having freedom in their own jobs, which increases the amount of energy that they can leverage within their work and home lives.

In addition to investigating the role of autonomy in achieving a good work-life balance, Dr Brieger also explored how gender discrimination and perceptions of gender roles within different countries affect job autonomy and work-life balance. Being less able to access resources, such as financing and government support, in some countries contributes to unfaire conditions for female entrepreneurs.

Using this breadth analysis, the benefits of autonomy were found to be particularly prominent for women in discriminatory environments. “Female entrepreneurs’ job autonomy is not only positively associated with a healthier balance between their work and private lives. The positive association of autonomy and work-life balance was also stronger in discriminatory socio-economic and institutional environments, including that female entrepreneurs’ job autonomy may spur their work-life balance to a greater extent when they face gender discriminatory, macro-level environments that threaten their professional or personal activities.”

“The reality is that self-employment does not always provide the freedom that women desire.”

Finding the right work-life balance has been found previously to add to female entrepreneurs’ motivation, job satisfaction and overall performance. Discovering why some female entrepreneurs can achieve a healthy work-life balance is therefore an important challenge.

“Female entrepreneurs’ work and family roles can create incompatible demands, with subsequent adverse effects on female entrepreneurs’ wellbeing. We have also seen that during the COVID-19 pandemic, in the midst of the COVID-19 pandemic, female entrepreneurs perceived more significant work-life imbalances than male entrepreneurs, with negative consequences for their wellbeing. In the UK, female entrepreneurs reported stronger declines in happiness and enjoyment of daily activities during the lockdown. This indicates the importance of autonomy to balance work and life, and even more so in environments in which women are less empowered.”

TIPPING THE SCALES BETWEEN WORK AND HOME LIFE

About the researcher
Steven Brieger is Senior Lecturer in International Business in the Department of Strategy and Marketing.

Read the papers

Finance will play a crucial role in mitigating the impacts of climate change on the global population. Financial institutions and companies around the world are being urged to put the climate at the heart of their financial decisions, and mobilising international climate finance is one of the four stated goals of COP26, the United Nations’ climate change conference held in Glasgow under the presidency of the United Kingdom.

But what exactly is climate finance? What role can it play in the fight against climate change? And how can researchers help?

Professor Radu Tunaru and Dr Panagiotis Tzouvanas, researchers in the Department of Accounting and Finance, explain.

Q. What is climate finance?

PT: Climate finance describes the two-way interaction between climate change and finance. Climate change has a direct impact on finance as changes in weather patterns (e.g., heavy-storms, more frequent heatwaves, and increasing global temperature) can deplete labour productivity, reduce crop production and cause uncertainty for firms, leading to increased risk in the financial markets. At the same time, finance can play a role in mitigating climate change, through funding zero carbon projects or implementing regulations that limit carbon emissions, for example.

RT: Climate finance is not just about the future, however. It is about the present, and how we transition to the future using financial channels as a way of improving societal activities to change the way we do things and reduce carbon emissions.

Q. What role can climate finance play in mitigating climate change?

PT: The role of finance to mitigate climate change is multifaceted. For instance, green bonds are a different financial instrument that encourages sustainability and funds low-emission environmental projects. Another solution is the establishment of carbon trading. In some regions, such as in the EU, carbon emissions have been financialised as commodities and are exchanged in a cap and trade system. Through this system, firms are made properly aware of their maximum permitted carbon emission levels and urged to minimise polluting.

RT: Imposing constraints and ratings on cash-flows may help to reorganise economic activities in such a way that activities reducing carbon emission are encouraged while others are discouraged. Climate finance may also help to accelerate innovation that could offer solutions to CO2 problems. Innovation requires access to funding and risk dispersion. Climate finance is naturally suited to do that.

Q. What particular aspects of climate finance does your research explore?

PT: My research spans several fields within the climate finance literature, such as the systemic risk of climate change, carbon and financial performance, as well as the nexus between energy and the environment. In my most recent paper, published in the International Review of Financial Analysis, my co-author and I found that environmentally conscious firms offer seven percent better returns along with 30 percent less risk compared to their polluting counterparts. This breakthrough research is the very first to examine and prove that it is financially profitable to be green.

RT: My research is considering the role played by various top economies in the larger financial system, as well as looking at climate finance derivatives and how these can be used to hedge climate change risk. Dr Tzouvanas and I have also been involved in organising climate finance research events at the University of Sussex Business School that bring together policy makers, industry leaders and academics from top schools around the world. Academics have an important role to play working alongside specialists from financial institutions, firms and policy makers, to assess, implement and design solutions that will mitigate the effects of climate change.

Q. What is the future for climate finance?

RT: Climate finance is a growing phenomenon and it will emerge into a mainstream field of finance. As the globe gets warmer, it is almost certain that governments will impose stricter environmental regulations. What we don’t know is whether firms will be able to adhere to these new regulations and still be competitive. On another note, given that climate change is the defining crisis of our times, financial institutions have already issued weather derivatives, carbon credits, green bonds, green credit cards and even green cryptocurrencies to mitigate this crisis. It would be interesting to see if these green financial products are here to stay and, most importantly, if financial institutions intend to further expand the range of green financial products and services that they are offering.

RT: Climate finance represents the new way of doing business in financial markets, and I would say that the impact it will have on our lives will be similar to the effect of when banking was first introduced into societies a few centuries ago. There has been a global commitment to unprecedented levels of investment in climate finance, which will provide a strong incentive to all active and passive players to consider and be involved with the new instruments. There is also new regulation that is steering innovation and business in that direction. We all want the future to be rosy, but for that to happen, first, it must be green.

Q. What is the future for climate finance?

RT: Climate finance is not just about the future. It is about the present and how we transition to the future using financial channels as a way of improving societal activities.
ENTREPRENEURS AND ADHD: IS IT A HELP OR A HINDRANCE?

How childhood ADHD-like symptoms predict selection into entrepreneurship and implications on entrepreneurial performance

The study draws from the theory of person-environment (PE) fit, which states that individuals are attracted to vocations perceived to fit the same characteristics as their personality. In line with PE theory, it could be argued that ADHD individuals are drawn to entrepreneurship due to their impulsive nature. After all, a key component of being an entrepreneur is seeking the novelty of a new enterprise and taking a risk to start a new business venture.

It has been found that individuals—particularly males—diagnosed with symptoms of ADHD in childhood are drawn to an entrepreneurial lifestyle. However, by examining the different components of ADHD—impulsivity vs. inattention—it becomes clear that it is not the inherent impulsive nature of ADHD individuals that drives them to entrepreneurship, but rather their inattention. Inattention causes an inability to maintain interest with a particular task or venture for long periods of time. The perceptions of the entrepreneurial lifestyle enabling more flexibility and higher control, along with avoidance of anything competitive or mundane, may be the reason many individuals characterized with ADHD symptoms strive for this life choice.

It is further observed that, whereas childhood ADHD symptoms predict a positive propensity towards entrepreneurship, the same traits may also be the culprits for long-term underperformance. While starting a business can be new and exciting, growing a business is very competitive and demanding. This change can be difficult to handle while seeking new thrills and suspense. As Professor Bamiatzi points out, “resilience, resourcefulness and patience are pertinent attributes when growing a business, attributes that ADHD individuals may find hard to maintain for long.”

Implications

In addition to a greater understanding of mental health and psychological interventions, Professor Bamiatzi’s research aims to raise awareness of the variety of needs that people with mental health conditions face, specifically the often overlooked but highly influential symptoms of ADHD.

Self-employment can be a largely beneficial option for many “non-typical” individuals, however the diverse symptoms of ADHD may make it hard to fit into these environments, as well as within organisations. Therefore, a greater understanding of the needs of people with ADHD may lead to ways of adapting the workplace environment to cater for their needs and lead to greater success within their careers.

The lack of understanding surrounding ADHD in female business owners is also something that needs greater exploration. Women diagnosed with ADHD have been shown to have severe impairment within their day to day lives, which holds them back from pursuing the entrepreneurial lifestyle in the first place.

It starts at school

A final interesting and unexpected finding from the study is that education is pivotal in the relationship between entrepreneurship and ADHD. The role of educational settings in identifying ADHD-like symptoms in youth may have significant benefits in their adult lives.

Mush is said about the negative impacts of ADHD within schools, such as a link to levels of rule-breaking behaviours, often leading to suspension and detention. This could lead to long-term maladaptive behaviour, potentially even driving them towards crime. Early diagnosis of ADHD individuals, followed by career advice tailored to their needs, may have an instrumental effect in helping these people to reach their full potential and lead them to more successful careers in the future.

With an over-growing understanding of mental health issues and their impact on a person’s life and well-being, attention has naturally been placed on how mental health issues affect people’s employability and productivity as well. Yet how does mental health affect entrepreneurs?

Mental health issues are known to impair an individual’s daily functioning. As a result, the effects of mental health have previously been studied as either being a detriment to entrepreneurship or the entrepreneurial process overall. However, how mental health impacts on entrepreneurial performance remains a conundrum, especially when specific disorders are taken into consideration.

One of these disorders is Attention Deficit Hyperactivity Disorder, or ADHD, characterised by symptoms such as impulsiveness, inattentionfulness, being unorganised and an inability to stay still. With more than a quarter of entrepreneurs reportedly exhibiting higher levels of ADHD, a discussion of how this mental condition is affecting entrepreneurial propensity and performance is long overdue.

Professor Vasiliki Bamiatzi has been researching the effects of key ADHD symptoms, namely inattention and impulsivity, to bridge this gap in the literature. By monitoring those diagnosed with ADHD-like symptoms at age 10 and examining the employment implications of their symptoms in adulthood, the study aims at better understanding the long-term effects of childhood ADHD symptoms, while further examining the underlying causes of the ADHD-entrepreneurship relationship.

About the researcher

Vasiliki Bamiatzi is Professor of Strategy and International Business in the Department of Strategy and Marketing. She is currently acting as Director of Research for the International Business group, and Director of the International Business and Development research hub.

Read the paper

Launched in October 2018, the latest iteration of our Research Strategy – ‘Better Research for a Better World’ – sought to redefine our objectives and recalibrate our culture to better match our ambitions as a fully-fledged, globally competitive business school. Since its launch, Phase I of the strategy has facilitated improvements across all areas of the research ecosystem, as evidenced, for example, by publication metrics, citation counts, co-authorship and collaboration statistics, impact scores, bid success rates, and the number and value of research grants awarded over the past three years. Phase II will focus on consolidating and enhancing our areas of existing strength, and creating the conditions required for new areas of excellence to emerge and grow from the bottom up.

In preparing to launch the second phase, a good deal of effort has been invested in learning from Phase I – listening to colleagues, peers and stakeholders to understand their perspectives on what has worked, what is missing, and what might be done differently; and considering how we ought now to refocus and reposition ourselves in response to external pressures and new opportunities, adapting to shifting priorities and tackling emerging threats. The timing is apt: we have just closed one REF cycle and have yet to start ramping up to the next; lockdown has ended and the Covid research agenda has shifted accordingly; Brexit is done and its consequences are beginning to manifest; and the University is about to undertake the largest programme of change in its sixty-year history. In short, while our current strategy is only three years old and has proved more than fit for purpose, the rate and scale of changes on various fronts mean that it is already ripe for revision.

Phase II will focus on – among other things – the need to invest more time and resources into our PhD programmes, delivering higher quality student support and modernising our skills and training offer. It will also see the emergence of the newly established Research Methods Centre (RMC) as a key resource for the School. The RMC will be instrumental not only in supplying cutting-edge tools, techniques and training for our postgraduate researchers but in providing the whole School with the strongest methodological foundations across all our disciplines. Phase II will lay the groundwork for a substantive Postgraduate Research strategy and continue the current programme of continuous improvement across our research environment, introducing a raft of new measures and building on those already implemented in Phase I. These are challenging and difficult times, and our research strategy must evolve and adapt accordingly.
EVENTS

A selection of the Business School’s virtual research events during 2020-21

WORKSHOP

Mapping research related to the Sustainable Development Goals

This Steering Research & Innovation for Global Goals (STRINGs) project workshop featured 12 presentations from colleagues in academia, government, and the private sector. Different actors involved in research prioritisation in relation to the Sustainable Development Goals came together to share mapping methodologies, discuss technological challenges and explore different analytical approaches.

15-16 Sep

World trade policy: back to the future

Organised by the UK Trade Policy Observatory, this 2-day conference brought together speakers from around the world to address two of the most important issues in trade policy today: the UK trading regime after Brexit.

20 Oct

Modelling and the SDGs

In this STRINGs project webinar, Professor Joanna Chataway, Professor Geoff Muigai CBE and Dr Erica Thompson discussed the complexities of modelling, particularly those that concern science, technology and innovation to help achieve the Sustainable Development Goals (SDGs).

30 Oct

Imaging AI in business, the laboratory and fiction

This lecture, given by Professor Ed Steinmueller (SPRU), explored the consequences of the diverse imaginations surrounding artificial intelligence (AI) and their interactions in business, the laboratory and literature. The workshop that followed featured key insights on AI research trends and perspectives from a team of SPRU researchers working on AI and three scholars working in different AI-related research fields.

LECTURE AND WORKSHOP

Technology, policy and trajectories to possible worlds: Imagining 2050

Co-organised with the European Forum for Studies of Policies for Research and Innovation, this course featured six lectures by SPRU faculty. They explored how trends unfolding in different domains – such as the environment, policy, and the economy – might lead to alternative socio-technical futures. The contributors were Professor Ed Steinmueller, Dr Simone Vannucchi, Professor Adrian Smith, Dr Marie Claire Brisbois, Dr Frederique Bone, Professor Maria Savona and Dr Adrian Ely.

WEBINAR

New directions in climate finance and economics research

Organised by Professor Radu Tunaru, this workshop delved into the economics of green finance, environmental finance, climate risk, hedging climate change, climate finance assets, and the impact of weather changes on the economy. The principal aim was to enable academic discussions on how climate change is creating new opportunities in modern finance and economics by bringing together experts from around the world.

WEBINAR

Governing large inter-organizational projects

This webinar provided an opportunity for potential contributors to learn more about the aims and objectives of the Journal of Operations Management’s special issue on ‘Governing Large Inter-organizational Projects’, and how to shape a strong submission. Questions were addressed by the Editors: Elliot Bendoly – Ohio State University, USA; Andrew Davies – University of Sussex, UK; Anant Mishra – University of Minnesota, USA; Jana Roehrich – University of Bath, UK; Beverly Tyler – North Carolina State University, USA.

WEBINAR

Inclusive pathways for steering science, technology and innovation for the SDGs

This year’s Sussex Energy Group (SEG) Keynote Lecture was given by Professor Laura Diaz Anadon (University of Cambridge). In her talk, Professor Anadon shared key insights from research that explores the trade-offs across goals in policy design and the need to analyse technological change along the supply chain. She also examined the role of emerging economies, the importance of technology characteristics, and approaches to uncertainty.

WEBINAR

The atom: a love affair

A virtual screening of ‘The Atom: A Love Affair’ film, which explores the West’s relationship with nuclear power since the end of World War II. The screening was followed by a discussion with the director, Vicki Lesley, and Professor Andy Stirling and Dr Phil Johnstone about their research on nuclear policy, which has revealed a hidden link between civil-military nuclear capabilities.

CONFERENCES

Managing the ‘new normal’: The future of operations and supply chain management in unprecedented times

The 28th international annual EuroOMA conference was organised by Professor Constantin Bîlone (Cluj), Dr Sam Roscoe, Dr Martin Schleper, Dr Anthony Alexander, Professor Nachiapip Subramanian and Dr Maria Hoigado. For the first time, the conference was based on a flipped-classroom concept to create meaningful, deep discussion opportunities in the virtual environment and facilitate feedback to presenters on their papers. The conference brought together over 350 participants from 34 countries and featured a total of 311 paper presentations, as well as keynotes, special sessions and workshops.

17-18 June

Collaboration in context: advancing research and policy practices in science, technology, and innovation

Organised by SPRU PhD students, the annual PhD Forum aims to bring together novel research insights to deepen and broaden our understanding of Science, Technology, and Innovation. The forum provides a unique platform for doctoral researchers to present and discuss their work with scholars in their field and to extend their horizons past their own disciplines.

WEBINAR

inclusive pathways for steering science, technology and innovation for the SDGs

At this UN Science, Technology and Innovation Forum side event, members of the STRINGs project presented their research findings and recommendations. Together with guest speakers, they also discussed how policymakers, funders and international organisations can harness the power of science, technology and innovation to meet SDGs and achieve a sustainable and resilient COVID-19 recovery.

WEBINAR

Modelling and the SDGs

In this STRINGs project webinar, Professor Joanna Chataway, Professor Geoff Muigai CBE and Dr Erica Thompson discussed the complexities of modelling, particularly those that concern science, technology and innovation to help achieve the Sustainable Development Goals (SDGs).

WEBINAR

New directions in climate finance and economics research

Organised by Professor Radu Tunaru, this workshop delved into the economics of green finance, environmental finance, climate risk, hedging climate change, climate finance assets, and the impact of weather changes on the economy. The principal aim was to enable academic discussions on how climate change is creating new opportunities in modern finance and economics by bringing together experts from around the world.

WEBINAR

Governing large inter-organizational projects

This webinar provided an opportunity for potential contributors to learn more about the aims and objectives of the Journal of Operations Management’s special issue on ‘Governing Large Inter-organizational Projects’, and how to shape a strong submission. Questions were addressed by the Editors: Elliot Bendoly – Ohio State University, USA; Andrew Davies – University of Sussex, UK; Anant Mishra – University of Minnesota, USA; Jana Roehrich – University of Bath, UK; Beverly Tyler – North Carolina State University, USA.

WEBINAR

The atom: a love affair

A virtual screening of ‘The Atom: A Love Affair’ film, which explores the West’s relationship with nuclear power since the end of World War II. The screening was followed by a discussion with the director, Vicki Lesley, and Professor Andy Stirling and Dr Phil Johnstone about their research on nuclear policy, which has revealed a hidden link between civil-military nuclear capabilities.

CONFERENCES

Managing the ‘new normal’: The future of operations and supply chain management in unprecedented times

The 28th international annual EuroOMA conference was organised by Professor Constantin Bîlone (Cluj), Dr Sam Roscoe, Dr Martin Schleper, Dr Anthony Alexander, Professor Nachiapip Subramanian and Dr Maria Hoigado. For the first time, the conference was based on a flipped-classroom concept to create meaningful, deep discussion opportunities in the virtual environment and facilitate feedback to presenters on their papers. The conference brought together over 350 participants from 34 countries and featured a total of 311 paper presentations, as well as keynotes, special sessions and workshops.
The School has a vibrant seminar culture, with an array of some 130 internal and external speakers annually across a broad range of subject areas. In 2020-21, our guest speakers have included the following people.

Amir Grinstein  
Northeastern University

Helena Barnard  
University of Pretoria

Pierre-André Chiappori  
Columbia University

Tazeeb Rajwani  
University of Surrey

Werner Kunz  
University of Massachusetts Boston

Matthew Agarwala  
University of Cambridge

Ariel Dora Stern  
Harvard Business School

Juliet Schor  
Boston College

Franziska Gassmann  
Bonn-Rhein-Sieg University of Applied Science

Gabi Zedlmayer  
University of Bayreuth

Paul Thompson  
Stirling Management School
There were 1,116 items of coverage in the UK media with a total reach of 223 million. Coverage where staff or research were mentioned without the 'University of Sussex' affiliation is not included in these statistics.

**TOP 5 STORIES**
The top five news items based on research/press releases issued:

1. Environmentally-minded companies offer seven percent better returns study shows (August 2021)
   The Express
   Panagiotis Tzouvanas

2. Don’t be sniffy about the second cheapest bottle of wine – it’s not the rip-off you thought (May 2021)
   The Telegraph
   Vikram Pathania

3. ‘Big loss’ for Britain as EU trade deal exposes some UK cars to tariffs (January 2021)
   Yahoo! Finance
   Michael Gasiorek

4. UK failing to use its high Covid test capacity efficiently, study shows (September 2020)
   The Guardian
   Michael Hopkins

5. Sing when you’re winning? Home support doesn’t really help football teams (December 2020)
   The Guardian
   Peter Dolton