

# Boundless

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# FOREWORD

I'm delighted to write the first ever foreword for Boundless, our newly relaunched research magazine.



I really feel that Boundless is a fitting word to capture the Business School's research. As you leaf through these pages, you'll find almost no limit to our scope and ambition. We tackle the world's greatest challenges – climate change and environmental sustainability, trade and global development, innovation, and the key problems and opportunities faced by managers in the world of work, finance, education, and healthcare.

A hallmark of our research at Sussex is that it traverses traditional academic boundaries to bring together expertise from multiple disciplines, mirroring how

problems are solved outside academia. The central theme of our recent modern slavery research conference, "Alternative paths", illustrates the value we place on bringing together knowledge from diverse places to collectively make a difference to our society.

On a day-to-day basis, our researchers are imagining the future and striving to make it a place where we want to live. You'll see in the following pages that this is a place where women and men are paid equally for their work, and where international trade strengthens public health rather than weakens it.

Indeed, ensuring research is integrated into practice and policy is integral to our jobs. This means that we regularly engage with industry and government to carve out a better future locally, nationally and internationally. A key part of that involves providing world-leading training for the next generation so they can move into good jobs and progress quickly into positions of responsibility.

We adapt and integrate our extensive research into our teaching, which is something that sets studying at Sussex apart.

Our students are taught by passionate and enthusiastic lecturers: some are

world leaders in their fields, and many are at the cutting-edge of the new ideas and concepts they are teaching. You'll read about the power of storytelling for our students' learning in this magazine, and the great impact that research translated into relatable, emotionally touching stories can have on the world.

Whether at your desk, on the train, or in the comfort of a favourite armchair, I hope you are energised by our latest work. In the meantime, we will continue to achieve our research goals, as always, with collaboration, courage, inclusion, integrity, kindness, openness – and boundless enthusiasm.

**Professor Paul Nightingale**  
Associate Dean of Research

## 1ST IN UK FOR ANNUAL RESEARCH INCOME

2019-2022, according to latest report from Chartered Association of Business Schools, 2023



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# SCHOOL'S OUT FOR OFSTED INSPECTIONS?

The UK government has scrapped single-word Ofsted judgements, labelling schools across England as Outstanding, Inadequate or something in between. Dr Iftikhar Hussain is one of the few experts to offer an economic perspective on the efficacy of Ofsted's inspection system, with his insights helping to influence the government's decision.

## HOW EFFECTIVE IS OFSTED, DO ITS INSPECTIONS LEAD TO SCHOOL IMPROVEMENTS?

While Ofsted has a clear effect on parent decisions around school choices and even local house prices, there is in fact little evidence for or against Ofsted's impact on school improvement – its core remit. There is no quantitative evidence to suggest that children gain more from enrolling in schools with better Ofsted ratings. This is remarkable given that England arguably has the most stringent school inspection system in the world.

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We've been researching the impact of Ofsted in three key areas – parent decisions on school choices, teaching standards and school's abilities to attract skilled staff.

”

Yet we also know, as the Education Secretary Bridget Phillipson has acknowledged, that parents tend to value Ofsted reports and their simple topline judgements. Seeing that a school is Good or Requires Improvement has a powerful impact on their decision-making.

Ofsted inspections have also been a major determinant in the careers of headteachers and senior leaders. Until the recent changes, poor results had warranted automatic academisation and their dismissal. They also have wider economic effects. Our research reveals that house prices in local school catchment areas across England rise and fall with Ofsted results. The knock-on effects of this on those local schools needs to be understood as well.

We have less statistical evidence about how teacher recruitment and retention is affected by Ofsted inspections. There are plenty of testimonials demonstrating that many teachers are critical of Ofsted and question the value of its inspections. Given that we have a teacher recruitment crisis in England, it's a question worth asking: does a poor inspection impact a school's ability to hire and retain the right people?

## A LOT SEEMS TO RIDE ON OFSTED INSPECTIONS AND THEIR ONE-WORD JUDGEMENTS. WAS THE GOVERNMENT'S DECISION TO SCRAP THEM A STEP FORWARD?

The lack of clear, quantitative evidence on whether or not Ofsted inspections lead to school improvement is quite striking. The scrapping of simple topline judgements and all that goes with them, e.g. academisation, removes some of the pressure on school senior leadership teams and schools with a shortage or high turnover of staff. However, the underlying assumption of the system – that outsiders observing a school for two to three days will come to a valid and helpful conclusion – remains the same.

More evidence needs to be gathered for the system to work on a different basis. Meanwhile, it is encouraging to see moves by the government towards Ofsted inspections carrying less weight given the current absence of evidence in their favour. This reflects the concerns raised by me and others about school inspections in the Education Select Committee report published on this issue in January 2024.



**Dr Iftikhar Hussain** is a Senior Lecturer in Economics. His research focuses on the economics of education. He has been a member of Ofsted's methodology expert panel and contributed to UK government Department for Education consultations on education policy in England.



From battling for pay reviews to working the second shift at home, or putting up with aggressive work practices to guessing how much your colleagues earn... why can't the UK finance sector seem to close the gender pay gap? Dr Rachel Verdin's research looks at the financial, moral and legal changes needed to move towards an equal society. Starting with the UK financial sector.

# SEXISM IN THE CITY

**An economically irrational problem**



In the UK, the gender pay gap is proving to be surprisingly difficult to close, despite over 50 years of legislative efforts aimed at resolving the issue. In the last seven years, firms have been legally required to monitor and publish their pay gap data. The overall pay gap has reduced by only 1.2 percentage points from 12.8% (2017) to 11.6% (2024).

In some sectors, such as finance, the gap is significantly larger. Lloyds, HSBC, Barclays and NatWest, four of the largest UK banks, reported pay gaps in 2024 as high as 48% and bonus gaps of up to 74%.

This imbalance has a dampening effect on the whole economy. According to a report from PwC February 2024, closing the gender pay gap in the UK could potentially increase women's earnings by up to £55 billion per year. It could also encourage more women to join the workforce. Their report estimates that a 5% increase in women in employment has the potential to boost UK GDP by as much as £125 billion a year.

So why is progress on this issue so slow, particularly in finance? And what impact does it have on the women who work in the sector? For my latest book *Architectures of Inequality* I spoke to a range of women working in the industry to find out. Here is what I learned.

“

There are women all over the City who are now working their notice, who have left jobs where they were high-calibre performers because hybrid working enabled them to stick in those roles. There are leaders who are tearing their hair out because they know that they are losing great people.

”

**Fiona Mackenzie,**  
CEO The Other Half, Sexism in the City inquiry HC1746 report

## **PAYING THE PRICE FOR BECOMING A PARENT**

In the UK's finance sector, one driver of the gender pay gap is a “motherhood penalty”. For women in finance, coming back from maternity leave means working your way back up. Sacrifices like skipping post-work socialising mean missing networking opportunities, an important lever for career advancement.

Analysis by the Institute of Fiscal Studies (2021) suggests that most UK gender pay gaps reflect “motherhood penalties”, where female earnings actually fall after becoming a parent. Seven years after the birth of their first child, women's earnings are, on average, less than half of men's.

## **A CULTURAL PROBLEM**

Another issue in the finance sector is the rolling back of flexible working policies implemented during the pandemic. This is affecting the recruitment and retention of talented women.

In addition, the finance sector is doing little to address issues like presenteeism and toxic or aggressive work practices, which often drive women away from the sector.



# WOMEN'S LIVED EXPERIENCES

Women in senior UK global bank roles share their experiences:

**KAYE** described her motivation to change job from a role in capital markets and trading:

“The culture was unpleasant, bullying and it drove me to think about moving ... It was very aggressive, quite toxic, and accusatory.”

**ALICE** described how she wanted to move from retail bank management to a head office role in corporate banking. Her area director responded by telling her:

“It's the wrong role for you, you're too nice for that.”

**SOPHIE** mentioned a pay increase she had received prior to the gender pay gap reporting being implemented:

“Before the report was published, I got an ad hoc pay review, completely out of the blue. The idea of that was to put me in line with my male colleagues. Two weeks later the gender pay gap report was published. It was very nice at that point in time, but then I became suspicious, have I been paid £7k less than male counterparts and for how many years? There was no back pay.”

This points to a deep cultural issue, which is not easily fixed by voluntary workplace equality policies that some businesses have put in place.

Much of this operates beneath the level of company policy. Interviewees I spoke to reported a significant gap between policy and practice. One said: “They're very good at putting out things which look good and talk the talk, but when it comes down to it, not much has changed”.

## KEEPING EMPLOYEES IN THE DARK

A culture of secrecy around pay in some UK finance firms is another driver of the gender pay gap. In some firms, it can be a disciplinary offence to discuss your salary.

The women I interviewed said this erodes their ability to successfully negotiate increases; prevents them from accurately positioning themselves when applying for a new role; and makes it hard to tell when they are being paid below potential comparators.

The UK government introduced a voluntary pay transparency scheme in 2019 to level up employment opportunities, but shied away from making this mandatory.

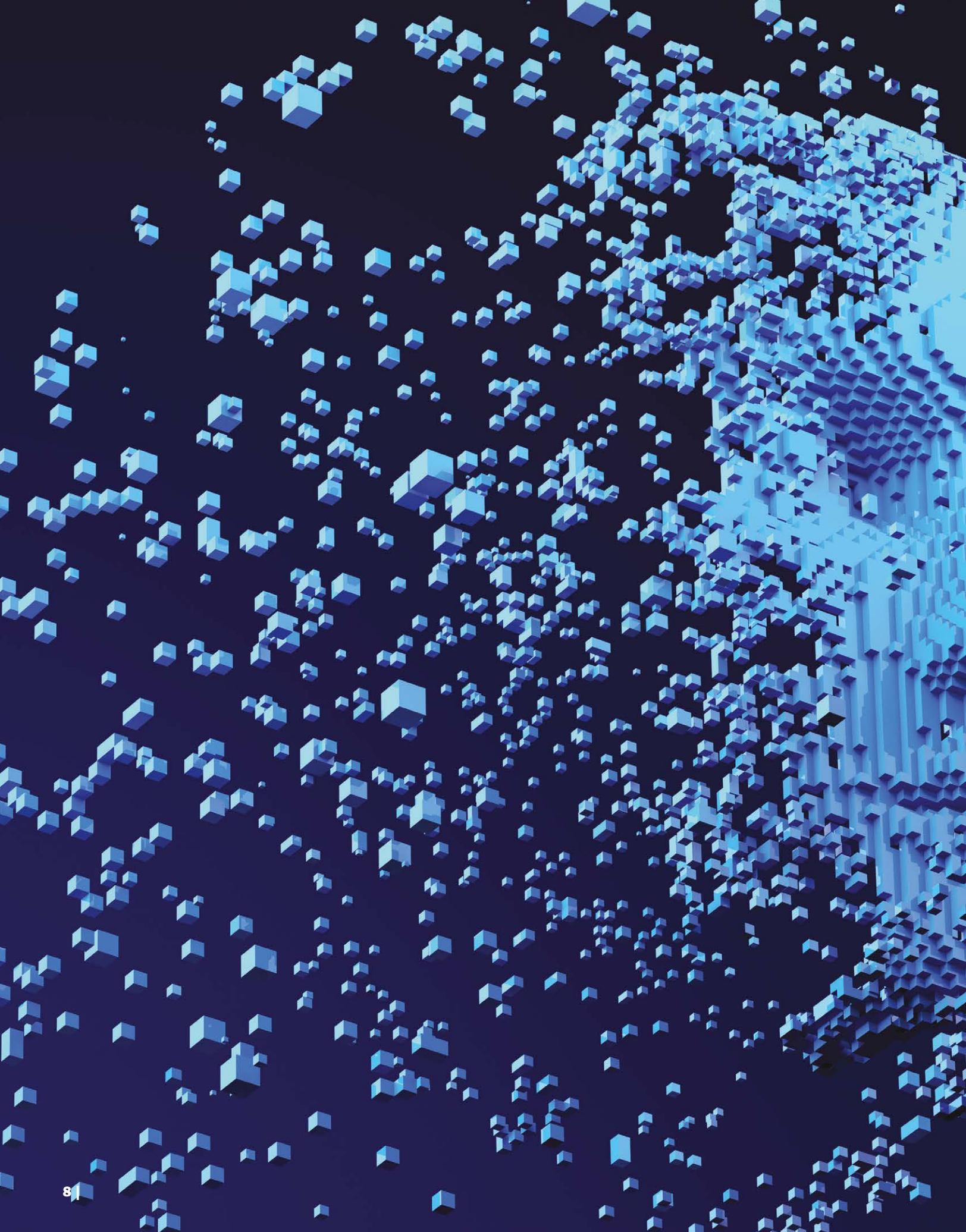
## FIVE WAYS TO TACKLE THE GENDER PAY GAP

As I told the Sexism in the City inquiry, there are a few steps the government should take to narrow the gender pay gap in finance. Here are five ideas:

- Look at what other jurisdictions have done and how much further ahead of the UK they are. In large parts of the US, Australia and Canada it is illegal for employers to ask job applicants about their salary history.
- Make the action plans that companies produce to improve equality mandatory rather than voluntary. It's not enough to say if it gets monitored it gets done.
- Strengthen and improve the current legal policies and recommendations such as improving transparency around pay.
- Widen the number of firms reporting on the gender pay gap by including smaller companies (those with over 50 employees, compared to the current threshold of 250). Extend ethnicity and disability reporting to follow the evidence that improving diversity reduces the risks of “groupthink”.
- Equality needs to be seen by government and organisations as critical, not just a “nice to have”.



**Dr Rachel Verdin** is a political economist with the Digital Futures at Work Research Centre. She is interested in equality and work, and the limits as to how the law works and who it works for. Rachel submitted gender pay gap research to the recent 2023 Sexism and the City Treasury Committee inquiry. She is the author of *Architectures of Inequality: Gender Pay Inequity and Britain's Finance Sector*.





# CALMING THE STORM

## Global security and the rise of AI

Artificial intelligence (AI) technologies are rapidly advancing and for chemical and biological weapons prohibition efforts, this could present multiple challenges. How can we navigate concerns around AI's potential risks to support informed policymaking? Dr Joshua Moon and Dr Alexander Ghionis are getting out in the field to help answer this question.

**A**rtificial Intelligence is impacting areas like drug discovery, robotics, information generation, chemical manufacturing and more. As its capabilities expand and deepen, so do our anxieties about its potential to cause harm. It is important that policies and measures keep pace with technological development, and this challenge is acutely felt in chemical and biological weapons (CBW) disarmament efforts. There is uncertainty in the field about AI's potential risks: could it be misused to create new weapons, intensify attacks, or amplify existing risks through AI-driven disinformation? Our project feeds into efforts to calm this vortex of AI anxiety by unpacking concerns and supporting decision-makers to develop grounded, informed anti-CBW policy.

### TYPES OF CHEMICAL AND BIOLOGICAL WEAPONRY

The use of chemical and biological weapons has a long history, and their development advanced rapidly throughout the 20th century. International treaties, national laws and regulations have been established to limit their development and prosecute perpetrators, but their use (and alleged use) continues today. Notable examples of chemical agents include chlorine and sarin, recently used in Syria, and other nerve agents like Novichok, used in the Salisbury attack in 2018. Biological weapons use biological agents, such as bacteria or viruses, to inflict harm. Examples include historical weaponisations of smallpox, the plague, and botulism, as well as the 2001 anthrax letters following the September 11 attacks.

Advancing AI technologies could present further challenges for existing mechanisms designed to prohibit and identify such weapons use, complicating efforts to prevent, respond, and prosecute. Uncertainty swirling around the likelihood and extent of these impacts is a significant source of AI anxieties.

### ANTICIPATING AI RISKS

Our work aims to anticipate how AI might impact chemical and biological weapons risks, by exploring specific scenarios which concern policymakers and experts.

We're analysing several key challenges relating to how AI may facilitate or accelerate the development and use of CBW, and how AI may challenge the existing legal, policy, and institutional frameworks designed to prevent and prosecute.





It's crucial to create adaptive policy frameworks that anticipate and mitigate AI-related risks, while maximising its positive potential.

### A COMPLICATED TRUTH: AI MANIPULATIONS

A consistent anxiety is whether AI could provide easier access to scientific knowledge, lowering barriers to entry for those intending to develop novel chemical and biological weapons. Could perpetrators access relevant knowledge by using large language models like ChatGPT? Might AI systems create digital twins of real-world environments to simulate, test and optimise intended attacks?

As well as weapons creation and deployment, however, AI can complicate the truth around which weapons are being developed and used, as well as by whom. This muddying of the information environment can occur through at least two methods: either AI helps design weapons which are harder to attribute (e.g. by mimicking natural evolution patterns, rapidly degrading after use, or reducing transparency around intentions and actions) or through its capability to create and automate sophisticated mis-/disinformation campaigns.

AI can create and spread convincing false information, for example by generating deepfakes or content that presents an inaccurate image to make false claims. AI's capabilities in media algorithms and natural language processing could alter or manipulate the perception of events. As a result, this could impact legal investigations of alleged uses by obscuring the truth, and by extension, risks damaging the trust held between international powers and within societies.

### REINING IN FEAR

These emerging threats are serious but to effectively navigate them, it's crucial to remain informed and clear-eyed on the potential risks to bolster prohibition measures. As we engaged with key stakeholders in the CBW field, we found that many concerns around AI were either generalised or limited to very specific scenarios. Through interviews with experts spanning chemistry, biology, international policy, computer science and more, we were able to clarify their actual concerns. We found that a significant amount of our existing regulation holds promise for mitigating the eventualities people are concerned about.

So how do we remove ourselves from this vortex of anxiety to take clearer stock of the situation, and provide decision-makers with informed recommendations? We developed several tools to help with clear identification of specific concerns, including an interpretative framework and future-planning scenarios, to support actors in the field. Our current Delphi study explores how prepared existing mechanisms are for these potential scenarios to happen, what solutions are necessary to improve their position, and which actors are important for putting those into practice.



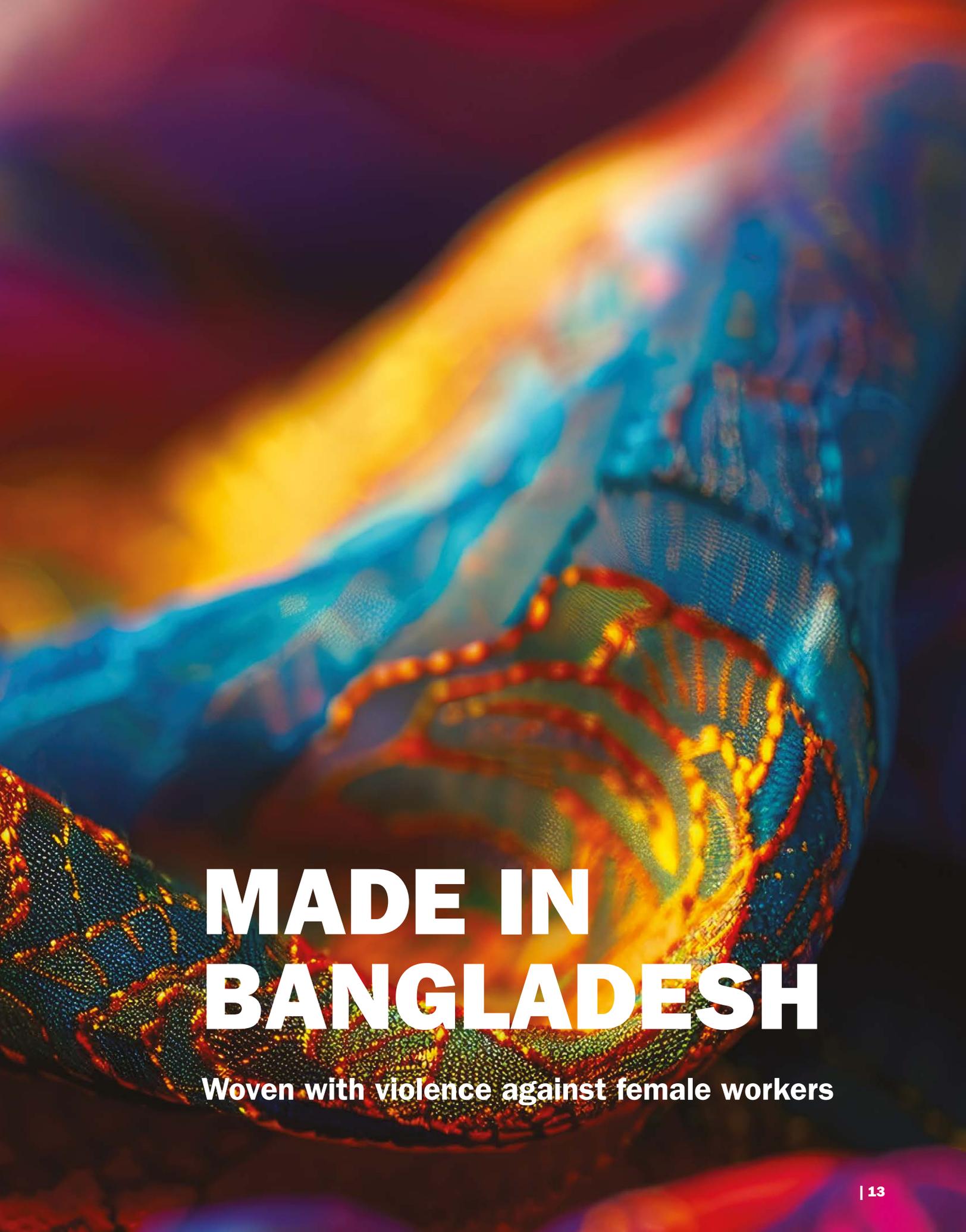
### MAXIMISING AI OPPORTUNITIES

Although AI and fear of its negative impacts go hand-in-hand, it's important that we recognise the positive impacts it could provide too. For example, AI technologies could help to identify disinformation, increase verification of compliance, and enhance early warning systems for disease outbreaks, providing additional support for our public health systems. It's crucial to create adaptive policy frameworks that anticipate and mitigate AI related risks, while maximising its positive potential to strengthen prohibition regimes. Importantly, however, this must come with a recognition that many of these frameworks already exist, and that our task may not be entirely in creation but in the adaptive and proactive maintenance of existing anti-CBW regimes.

Stakeholder engagement is central to this policy-driven research so it's crucial that we continue to engage with the CBW community and key stakeholders to gain insight of what's happening at the coalface. We're fortunate to have the support of our funder, the UK Foreign, Commonwealth and Development Office, as this research unfolds.

**Dr Joshua Moon** is a Research Fellow in Health and Research Policy and **Dr Alexander Ghionis** is a Research Fellow in Chemical and Biological Security, both based at the Harvard Sussex Program in the School's Science Policy Research Unit.





# **MADE IN BANGLADESH**

**Woven with violence against female workers**

**M**ade in Bangladesh is a label familiar to those of us who shop for clothes in major high street outlets. Major UK retailers use their enormous bargaining power to cheaply import goods from the country. Yet the Bangladeshi garment industry is extremely exploitative of its workers.

Instead of setting global industry standards, Western business practices ignore or even intensify the exploitation of a mostly young and precarious female workforce.

Dr Shoaib Ahmed investigates working conditions in the garment industry of his native Bangladesh. He shares his latest research revealing the industry's disturbingly systematic use of violence against young women. In an industry built on male-perpetrated violence and secrecy, they are its "ideal workers".

### **WHY ARE YOUNG WOMEN THE "IDEAL WORKERS" FOR BANGLADESH'S GARMENT INDUSTRY AND WHY DOES THE WORLD NEED TO LISTEN?**

In short, they're seen as less able than men to resist the exploitative and abusive practices that are normalised in the industry. Secondly, Bangladesh is the world's second largest exporter of fast-fashion clothing, and the industry's practices are partly a result of pressure created by Western retailers and their economic power.

The situation has changed in the nearly 10 years since I began my research. At the time of the 2013 Rana Plaza disaster – the collapse of an eight-storey garment factory complex on the outskirts of Dhaka – over 80% of the workforce were female, aged 16-36. Today the picture is changing with 55% of workers being from this demographic. This is partly due to the economic impact of Covid-19, when the industry shed much of its largely young female workforce. However, many did not return, leaving the industry for good due to its exploitative and violent practices.

It's not simply that garment workers are poorly paid or informally employed. Their rightful wages are frequently stolen, working hour records are falsified, and many are physically and psychologically coerced into meeting strenuous quotas, working shifts of up to 16 hours. Even though many are leaving the industry, young women still make up over half of its workforce. Since the start of my research, this struck me as remarkable given Bangladeshi society's traditional subordination of women in domestic family roles. Why would an industry in a country steeped in patriarchal values encourage so many young, and frequently childless or unmarried, women to join its workforce?

The industry's abusive and exploitative practices operate through the wider oppression of women across Bangladeshi society. Not only are women at an overall disadvantage in the labour market, but there is widespread normalisation of male violence against women. Being from Bangladesh myself, I grew up witnessing the violence of establishment-protected male elites against women, migrant and child workers. This is key to how the garment industry operates there and reflects the human reality of Western companies' cost-cutting, outsourcing practices.

### **WHAT MOTIVATED YOUR RESEARCH IN THIS AREA AND HOW DID YOU CARRY IT OUT?**

At the time of the 2012 Tazreen Fashion factory fire and the 2013 Rana Plaza factory collapse, I was living in the northwestern outskirts of Dhaka where these disasters occurred. Between them thousands of workers were killed and injured. I bore witness to their devastating impacts on the local community. I remember the screams broadcast on live TV of the Tazreen factory workers caught in the blaze. The Rana Plaza tragedy acutely revealed the specific vulnerabilities and marginalisation of an overwhelmingly young female workforce. These events left a deep mark on me.

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**Western companies are the most powerful actors in the global value chain, and only their involvement can create the real pressure for change.**  
”





as justification for wage theft and other illegal practices. I would further propose that Western retailers implement a profit-sharing scheme. For example, they might allocate a minimum of one penny per piece (1PPP) to the workforce responsible for producing the “Made in Bangladesh” goods.

Secondly, Western companies and governments have enormous bargaining power over the domestically powerful Bangladesh garment industry. Their threats to boycott imports in the wake of the Rana Plaza collapse compelled the Bangladesh industry and government to act. This influence should be used to end the abusive and manipulative methods the industry uses in the absence of formal recruitment and employment practices.

Western companies are the most powerful actors in the global value chain, and only their involvement can create the real pressure for change. However, there must be a multi-stakeholder initiative, on the model of the Accord on Fire and Building Safety in Bangladesh and the Alliance for Bangladesh Worker Safety in response to Rana Plaza. These achieved real, if limited, changes to the industry, by bringing the pressure of Western importers together with the involvement of those across the Bangladesh industry and its export operations. This includes the workers whose testimonies and different forms of resistance, such as keeping their own working logs, are vital in holding industry leaders to account.

Ultimately, workers are leaving the industry because of its dehumanising conditions, hence the number of women workers has drastically fallen in recent years. Companies cannot go on outsourcing at the expense of workers’ rights and welfare forever.

As a scholar of accounting, with an interest in philosophy, I am interested in the potential for my discipline to help realise social justice. I wanted to use the methods and insights of accounting to get to grips with problems of the Bangladesh garment industry as well as its possible solutions. I interviewed 50 workers in total, aged 18-38, and 30 of whom were women. Some of these interviews were emotive experiences that brought me to tears. One worker tearfully recalled that her supervisor demanded their workforce of 40 produce 200 pieces an hour, and when they failed to meet this target, he called them “bitch, slut, whore” and beat them with a wooden stick. Others told me more stories of physical abuse, as well as sexual harassment and psychological torture that drove some to feeling suicidal. Bringing this to light and giving voice to workers’ experiences motivated my research further. I also spent 40 hours observing operations in five factories and personally experienced the fearful and oppressive atmosphere that workers must endure. Most were afraid to even look at me.

I was able to visit the factories that I did with the permission of some of the owners I was able to interview. These were all men, and, along with the 10 managers I interviewed (also all men), some of them shocked me

by openly comparing their workers with animals and insects. One even brazenly commented that “women are very good at sewing and stitching. They are also vulnerable. They face violence at home. However, they don’t engage in nasty politics... So, we recruit them. We save them. We empower them”.

**CAN ANYTHING BE DONE TO CHANGE THE INDUSTRY AND ITS CULTURE OF VIOLENCE AND SECRECY?**

While not in themselves responsible for the Bangladesh industry’s specific systems of abuse, Western companies’ undercutting practices are a driving force behind it. If these companies consistently paid even the real market value for their products, this would remove one of the central reasons that Bangladeshi manufacturers often cite



**Dr Shoab Ahmed** is Senior Lecturer in Accounting. His research pushes the boundaries of accounting into organisational, social and cultural issues including modern slavery and workplace bullying.

# UPLIFTING THE UK'S CREATIVE INDUSTRIES



The UK's creative industries are world-leading, contributing £125 billion to our economic growth. That's more than oil and gas, automotive and pharmaceuticals combined. Millions of people work across the sector, producing creative assets that can add significant value to our lives. So, is the sector receiving optimal support to continue this trajectory? Dr Josh Siepel and team are using experimental methods to paint a picture of the UK's creative industry landscape.



## MAPPING THE UK'S CREATIVITY

I've been researching the geography of the UK's creative industries – where they are based, the barriers to growth they face, and how different sectors are developing. In our *Geographies of Creativity* report, we used the latest data to map all creative businesses and organisations across the nation and found some interesting insights. An accurate understanding of where businesses are and how they work in local areas can help policymakers to provide optimal support for developing different areas and address the UK's persistent regional inequalities.

## ALL EYES ON LONDON?

As a world-leading, cultural and financial powerhouse, London's dominant position is a given. London and the South East contribute nearly 70% of the industries' total economic outputs. This is the UK's only "supercluster" due to its strength in attracting investment, talent and infrastructure, and huge economic outputs for the industry. But its dominance isn't the start and end of the story. The creative industries have a role to play in addressing regional inequality, and high-calibre creativity and innovation can be found across the nation – so what's the full picture of the sector's growth today?

## RISE OF CREATIVE HOTSPOTS

Businesses benefit from being based near each other. It can enable collaboration, knowledge sharing and productive competition that could encourage innovation. While we often think of benefits of being in the same city, our research has shown that within cities, towns and rural areas, there are creative hotspots of activity, serving as hubs of innovation and driving growth. From the Production Park complex in Wakefield, where Beyonce, Ed Sheeran and Coldplay have practised their tour production to the businesses and freelancers in Brighton's North Laine fusing creative skills and technology, these "microclusters" are groups of 50 or more businesses and organisations in close proximity to one another. Our research has identified 709 of these microclusters across the UK, and it suggests that they have the potential to be the engines of growth for the creative industry.

Between 2019 and 2022, 77% of net job creation across the entire sector took place in microclusters, and these growth rates were especially high in Scotland, the North East, the North West and the South West, as well as London – South East. This means that creative industries growth isn't solely based in the nation's supercluster.

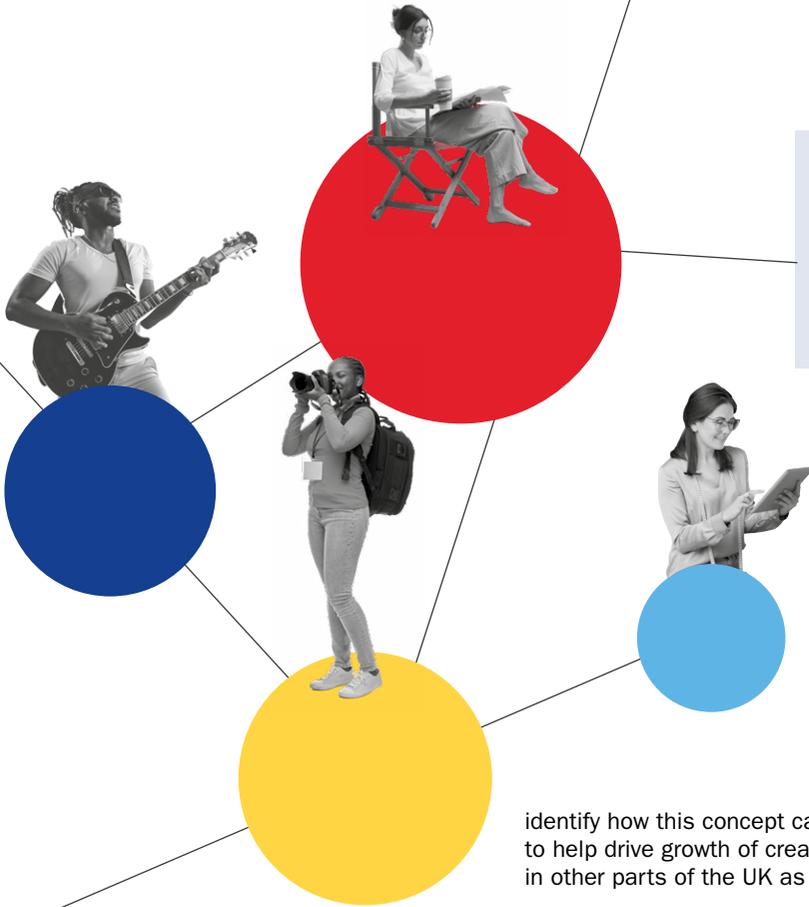


### CLUSTERS EXPLAINED

**Creative Cluster:** established areas in cities where creative activity is important to the local economy. The UK government lists 55 areas like Bristol, Liverpool and Norwich. They play a central role in the UK's creative industries growth story.

**Microcluster:** 50 or more creative businesses or organisations based nearby on street, neighbourhood or town level. They can sit within and outside of creative clusters, and those within grow more rapidly e.g. Manchester's Northern Quarter.

**Supercluster:** large, world-leading centres due to the scale of their creative industry activity regarding investment, innovation, resources and economic outputs, e.g. Silicon Valley, New York and London.



## CREATIVE INDUSTRIES

Examples of creative industry sub-sectors include advertising and marketing, design, film and TV, IT and software, and music and performing arts, according to the UK government's Department for Culture, Media and Sport.

## FRAMEWORKS TO SUPPORT GROWTH

Through this research, we're trying to build a more unified framework of understanding where and how creative industries can be supported to grow, wherever they're based. Our experimental methods push the boundaries of existing geographies, providing a detailed picture of the state of the UK's creative industries. It's fantastic to see our research mentioned in government outputs, like the new government's strategy for the creative industries, and we hope to inform policymakers and stakeholders with informative data to help optimise support going forwards.

## OVERCOMING BARRIERS TO GROWTH

Microclusters have distinct needs required to support their development. Our research shows that creative businesses in microclusters – particularly those outside of the largest cities – are more likely to perceive access to finance as a barrier to their growth, even though businesses in these clusters may be more likely to want to grow. Companies face a range of other barriers, from access to skills and customers to barriers around infrastructure.

## MAKING THE LINK: CORRIDORS TO SUPPORT CREATIVE CLUSTERS

A potential way to better connect more dispersed creative clusters lies in the "creative corridor" concept, which refers to regions where there are close linkages across a broader geographical area. Arguably the most famous example of this is Silicon Valley, which stretches over a large area but produces disproportionate innovation and economic returns. In the UK creative industries context, we argue there's already one of these in London and the South East. But our research is trying to

identify how this concept can be applied to help drive growth of creative industries in other parts of the UK as well.

Our analysis suggests the potential of seven creative corridors across the UK. One example is One Creative North, previously known as the Northern Creative Corridor. The idea is that building linkages between creative businesses across the cities and towns of Northern England may help to strengthen connections and increase market size to rival London and the South East. Our analysis suggests that companies in microclusters in the North of England had many similar characteristics to businesses in London, in terms of innovation, use of skills and access to customers. We also found that businesses in the North are more likely to sell to other parts of the UK, unlike London for example, which gets a substantial amount of turnover from other London-based trade. This suggests potential for developing North-to-North creative supply chains.



Between 2019 and 2022, 77% of net job creation across the entire sector took place in microclusters.



**Dr Josh Siepel** is a Senior Lecturer of Management. He leads research on creative clusters, research and development, and innovation for the AHRC Creative Industries Policy and Evidence Centre (Creative PEC). The centre is a major investment by the UK government to improve the quality of evidence on the creative industries to support better policymaking.



# TOXIC TRADE

## Rising pesticide levels on British farms and food post-Brexit

Professor Emily Lydgate's collaboration with the Pesticide Action Network UK (PAN) and Sustain caused a stir in Parliament and the media. Their *Toxic Trade* reports highlighted the risks that Free Trade Agreements (FTAs) with agricultural powerhouses like the USA and Australia could pose to UK public health and the environment.





“  
Brussels sprouts,  
broccoli, cabbage and  
cauliflower are now  
permitted to have  
as many as 1,500  
times the amount of  
pesticide residues as  
in the EU.

”

### **DOES OUR SUPERMARKET FRUIT AND VEG NOW CONTAIN SKY HIGH PESTICIDES?**

As an EU member, the UK had some of the strictest regulations on pesticides in the world. Maximum residue levels (MRLs) set limits on the different “active substances” used on agricultural products entering a country. The EU’s strict approach has been repeatedly criticised by agricultural exporting countries as an unnecessary and unscientific trade barrier. With the UK embarking on trade negotiations with many of these countries, there was a risk that the UK would agree to weaken its standards. I partnered with PAN and Sustain, an alliance of food and agriculture policy and practice advocacy groups, to write these reports outlining our concerns. We were unclear how the UK might approach its post-Brexit regulatory freedoms to approve new active substances for pesticides and set permitted MRLs – which previously had to match those in the EU.

To some extent, our concerns about lowering of standards are being borne out. Recent research by PAN revealed that safety limits on 49 different active substances were relaxed between 2022-24. Limits on Brussels sprouts, broccoli, cabbage and cauliflower and some other products are now permitted to have as many as 1,500 times the amount of pesticide residues as in the EU. The UK has also relaxed some MRLs on pesticides which are banned for use in

the UK but in use in countries exporting to us. These include thiamethoxam which has been linked to adverse effects on developmental, reproductive and liver health in some animal studies, now raised by 500 times as much as the EU limit for products such as rice. The MRL for the banned carcinogen bifenthrin, which is used on avocados, has been multiplied by 50.

### **HOW HAS THIS HAPPENED?**

When deciding whether to approve new “active substances” for pesticides or change MRLs, the UK Health and Safety Executive does a risk assessment to see if it’s safe to do so. Different countries have different ways of assessing what level of risk is acceptable. Post-Brexit, the UK on paper maintained the EU’s precautionary “hazard-based” approach which tends to lead to more restrictive results than international standards on pesticides.

In the world of international trade, the EU’s precautionary approach to risk assessment is very unpopular. It’s not clear that the UK changed its standards in response to specific trade partners’ requests – what we do know for sure is that its risk assessments are less precautionary in some cases. The UK has also failed to match some of the new restrictions on pesticides that the EU has introduced after Brexit.

### **WHO HAS THE UK SIGNED FREE TRADE AGREEMENTS WITH AND WHAT DO THESE AGREEMENTS MEAN FOR PESTICIDES ON OUR FOOD?**

While an FTA with the USA didn’t happen, the UK did sign one with Australia and acceded to the Comprehensive Progressive Agreement for Trans-Pacific Partnership (CPTPP) which opened our markets to countries with much lower pesticide standards. The UK may not have wholly abandoned the high standards or precautionary approach inherited from the EU, however many UK food products now contain more pesticide residues than before.



Our reports tried to explain how, exactly, FTAs that the UK negotiated might lead to increased pressure on the UK government to lower its pesticide standards. Effectively what this comes down to is some of the language that they contain – that departs from what the EU agrees in its trade agreements – that encourages countries to base their risk assessments on scientific evidence, which effectively means rejection of a precautionary approach. They also provide more channels for trade partners to raise concerns about UK food standards including on pesticides. The CPTPP is a good example of an FTA with this type of language. The UK might not be required to change its standards as a condition of signing an FTA, but negotiations and implementation of FTAs can increase diplomatic pressure to do so. Also, because of these FTAs, the UK has removed tariffs on agri-food in new FTAs. This increases imports of some products which are being produced with pesticides banned domestically. This cheaper food puts more competitive pressure on UK farmers.

### **DID ANYONE LISTEN TO THE WARNINGS OF THE TOXIC TRADE REPORTS?**

The attention the reports received took us by surprise. Before we published our research, the media was full of stories about chlorinated chicken, hormone-fed beef and insect body parts. Pesticides did not appear to be on the radar.

I'd like to think our efforts at least created public awareness and debate. We gained wide media coverage from Channel 4 Dispatches' *Dirty Secrets of American Food: Coming to a Supermarket Near You?* to the *Daily Mail*. We had multiple meetings with civil servants at the Departments for the Environment, Food and Rural Affairs, and Business and Trade, and the reports were cited in Parliamentary debate in the House of Commons and Lords. Two of the Parliament Committee Chairs also hosted an event about our reports.

Our work also helped to inform a proposed Amendment 16 to the Trade (CPTPP) Act, to ensure testing would be robust enough to prevent imports containing banned substances.

Ultimately, we did our best to create a large groundswell among the public, the media, and parliamentarians around the risks that post-Brexit trade posed for UK pesticide standards, the implications of this for public and environmental health, and how to guard against these risks.

### **WHERE DO THE GOVERNMENT AND FARMERS GO FROM HERE?**

Although many want to use more pesticides, most UK agribusinesses also favour alignment with their largest export market. UK agriculture today is profoundly different to many of our competitors outside of Europe. US and Australian agriculture, for example, is based on big agribusinesses managing vast landholdings – the UK's little hedgerow fields appear very quaint in comparison. Cheap and efficient methods of chemical pest control are used on an industrial scale there that UK farmers struggle to compete against. It's too easy to tell farmers to not spray pesticides if they cannot afford other methods of pest control.

Nick Thomas-Symonds, EU Relations Minister, has voiced support for an "ambitious" SPS [Sanitary and Phytosanitary] Agreement with the EU. An SPS Agreement, sometimes known as a Veterinary Agreement, would effectively align the UK with EU rules around animal and plant health. Ultimately, alignment with the EU is a powerful way to maintain both the high pesticide standards and access to export markets for UK agriculture. We will have to wait and see what path the current government takes.



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**UK agriculture today is profoundly different to many of our competitors outside of Europe.**  
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**Professor Emily Lydgate** is Professor of Environmental Law, Co-Director of the UK Trade Policy Observatory and Deputy Director of the Centre for Inclusive Trade Policy. A recognised expert on the links between environmental protection and trade, she advised the UK House of Commons Environmental, Food and Rural Affairs Committee on trade from 2021-24.



# INNOVATIVE INFRASTRUCTURE

## Out with the old, in with renew

Cities are major polluters. Instead of demolishing and rebuilding, we need to enhance and retrofit our existing structures for a greener future. Professor Andrew Davies has this year won the Project Management Institute (PMI) Research Achievement Award for his lifelong research. The RM Phillips Freeman Chair and Professor of Innovation Management tells us about his most recent work innovating city infrastructure.

### **WHY IS INFRASTRUCTURE INNOVATION IN CITIES AN IMPORTANT ISSUE?**

Cities produce over 70% of global CO<sup>2</sup> emissions. So how cities – their buildings, roads, parks, transport, waste and power – are designed and built matters for a low-carbon future.

So many things have to change in a coordinated way to create ecologically sustainable and liveable cities, and that's where we need innovation. No single organisation can do it by themselves. Mayors and people in city governments have often led the way in responding to the climate emergency and transitioning to net zero. Yet people in real estate, construction, housing associations and local planning departments have their own priorities, timelines and traditional ways of doing projects.

Accelerating the transition to net zero requires organisations with the capabilities in project management to orchestrate all of these people, and the ability to create innovative solutions using solar, wind and other sources of renewable energy.

### **WHAT INSPIRED YOUR WORK ON SUSTAINABILITY?**

In 2010, I was invited to study the world's first zero-carbon "ecocity" project in China with the engineering company, Arup. The work unlocked my passion to apply the innovation research I'd been doing to reduce carbon emissions in infrastructure and tackle the climate emergency.

If we think of our ageing and emission-heavy homes and commercial buildings in London, it's quite easy to knock them down and build something new. Retrofitting – adapting older buildings to make them more energy efficient with modern insulation and energy sources – is complicated. But the opportunities for emission reductions by retrofitting are enormous, which is why it has become one of my research focus areas.

### **WHAT ISSUES ARE UK CITIES FACING?**

Cities of the future have to be increasingly sustainable to tackle climate change and rapid urban growth, while being resilient and inclusive. There are 3.8 million homes in London, which contribute around one-third of the city's greenhouse gas emissions and are among the least energy-efficient in England. We don't need to get rid of this housing – people need somewhere to live – but we do have to find a way of making it more fuel efficient, both for the environment and to tackle the cost of living crisis.



## WHAT ROLE DOES INNOVATION PLAY IN CLEANING UP CITY INFRASTRUCTURE?

While new, flashy infrastructure projects may seem exciting for our cities, the most sustainable solution often lies in innovating to improve what we already have.

There are a lot of new technologies that people think will solve our global climate emergency. I've looked at novel, exciting energy technologies – such as small modular reactors and nuclear fusion – that could be game-changers in tackling our constantly increasing temperatures. I'm all for us investing in big technological breakthroughs. But it could take as long as 30 years for this sort of new technology to start paying off.

When it comes to cities, there isn't time to wait: we have to innovate now. I believe that we already have many of the technologies needed to generate, store and transmit energy from wind, solar and other renewable sources. Performance is improving all the time and costs are going down. We just have to start delivering.

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When it comes to cities, there isn't time to wait: we have to innovate now.

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## CAN YOU GIVE AN EXAMPLE OF AN INNOVATION THAT IS MAKING URBAN AREAS MORE SUSTAINABLE?

The Mayor of London launched a programme in 2020 to transform London's existing housing stock into warm, affordable, and low-carbon homes while addressing urgent climate and social challenges. Our role on this programme involved research showing how innovative whole-house retrofits for housing association homes were being introduced in seven London boroughs. “Whole-house” means preparing an existing house for insulation and different sources of heating, like heat pumps or solar panels, all at once, rather than bit by bit, which can be wasteful, costly and time-consuming. By capturing this work, we were helping to scale up these approaches to help make more buildings more sustainable in more places.

## COST – AND WHO PAYS – IS SURELY A CHALLENGE FOR RETROFITTING?

On this project, finding a way of retrofitting cheaply to make it acceptable to the residents, housing associations, boroughs and construction companies was part of the challenge. It was going to mean changing the construction industry's ways of working. They were going to have to make their approaches more flexible, and produce solutions in factories at lower cost. Plus, they would have to structure payments to make them affordable to the multiple groups. This was going to be challenging – residents and housing associations would share the costs and pay over time rather than upfront.

The “collaboration hub”, set up to stimulate innovation and bring everyone together, has made the retrofitting project possible. And, as well as the environmental benefits, residents have benefitted through lower fuel bills. In addition, by involving them in designing the approach, the work has contributed towards an enhanced sense of ownership and social cohesion in local communities.

## WHAT'S NEXT FOR CITIES?

For cities to achieve the grand challenge of transitioning to net zero, we need all of the parties involved to find new ways of working collaboratively in multiple projects.

Innovation isn't always about new technology, exciting start-ups or world-leading high-tech companies. It's about implementing the systemic changes needed to introduce proven technologies in a local context, and then producing those at scale. Some of the winners of the PMI Award before me have recognised this, and I'm delighted to be able to share this accolade with them.

### FROM ANDREW'S NOMINATION FOR THE PMI AWARD

“His research record is outstanding and his academic, as well as business- and policy-oriented, work at the intersection of project- and innovation management has made a myriad of contributions not only to multiple generations of academics, but also to business leaders and policymakers grappling with challenges in managing and leading megaprojects and complex systems.”



**Professor Andrew Davies** is the RM Phillips Freeman Chair and Professor of Innovation Management. He is a researcher, educator, consultant and advisor who is fascinated by understanding and making innovation happen in large, complex projects and project-based organisations.



# IN SEARCH OF ITALIAN GAZELLES

Innovative accounting for high-growth start-ups



In the UK, there are 5.5 million small or medium-sized businesses (SMEs) representing over 99% of the business population. SMEs employ 0-250 people, including sole traders. SMEs account for 60% of UK employment and 48% of business turnover (House of Commons, 2024). Italy's economy thrives on over 4 million small and medium-sized enterprises (SMEs) – the highest number of SMEs among the EU's member states.

These SMEs employ 13 million people and generate more than 65% of the nation's added value. They are the powerhouse of the Italian economy, playing a crucial role in economic growth.



**Gazelles, unicorns, cheetahs... the start-up business world is full of animals that sound exotic and difficult to catch. Indeed, this is quite apt as most fail to chase success, and fold within their first few years.**

**D**r Massimo Contrafatto explains that many start-ups suffer from a lack of good accounting techniques on offer. Accounting needs to do better to meet the problems that start-uppers face. He outlines how his innovative “Startup” group is trying to address the gap.



**THE START-UP WORLD SEEMS TO BE FULL OF ANIMALS, WHAT IS SO INTERESTING ABOUT GAZELLES?**

They are not animals! Of course, in a fiercely competitive marketplace, different kinds of start-up company will adopt different strategies for survival and success. But not everyone agrees what a start-up is. Certainly, scholars, entrepreneurs and consultants agree that not every new small business is a start-up. When people and the media talk about start-ups they talk about innovative small tech companies. These might be founded by a group of friends at university, or at work, or even in a garage – the origin of several famous unicorns including Apple and Amazon. The popular imagination has been shaped by the tech unicorns of Silicon Valley, from Airbnb to Tesla. But they are called unicorns for a reason. If not mythical, they are statistically too rare to be considered practical examples to follow.

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Accounting  
needs to do  
better to meet  
the problems  
that start-uppers  
face.  
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Gazelles are more plausible models of excellence. They typically quickly achieve a high-level of growth – 20% or more within their first 5 years of existence. While they might not be as rare as unicorns, they are still rare. High-growth start-ups account for around 3.5% of new American companies, and just 1.2% of Italian equivalents. Yet in Italy, as in many other countries, small and medium-sized enterprises (SMEs) contribute over 90% of new jobs. They are the backbone of the economy, and their growth is driven by communities. With less access to capital or knowledge, successful start-ups are laboratories of innovation and sustainable economic growth. If we can better understand the principles of successful start-ups, we can help entrepreneurs from wider walks of life and with new ideas to achieve success. Guidelines for start-ups should draw on gazelle-like qualities of success.

### WHERE DOES ACCOUNTING COME INTO THIS?

Any successful business needs rigorous, relevant and useful information. This information is produced by accounting-based systems and techniques. Yet in much of the business world, and certainly in Italy, accounting consultancy for SMEs tends to impose top-down models built around the needs of big business. As a scholar of accounting for society, I want to help the field and the profession to develop the tools to meet the complex needs and problems of innovative SMEs.

We need to widen our concepts of accounting for society. It should be seen as the “universe of all possible accountings” through which any aspects of social life (including economic, wellbeing, health, etc.) could be measured and calculated. As a starting point, this means grounding our approaches in the informal techniques that SMEs and community groups use to grapple with the problems they face. These can be made into more formal activities like brief reports, newsletters and blogs that compile and disclose important information for clients, investors and other stakeholders.

It is my belief that accounting for society should be something that emerges from people and businesses. It can be a tool for sustainability and the inclusion of communities in shaping the economy and society. SMEs are the backbone of the Italian economy. But it's not Silicon Valley, and small start-ups struggle to compete with larger established firms. Ultimately, wealth based on innovation, and therefore sustainable growth, is going to come from start-uppers. We need a shared space for accounting academics, professionals and start-uppers to exchange our knowledge and experience.

### HAVE YOU TRIED TO CREATE THIS SPACE IN ITALY OR ELSEWHERE?

This is exactly what I am trying to do at the moment. I am creating accounting guidelines and models for high-growth start-ups! I have been initiating and helping to lead an unprecedented academic-professional “Startup” group. This group brings together members of SIDREA, the Italian Association of Professors in Accounting and Business Administration, and CNDCEC, the National Council of Chartered Accounting and Accounting Experts. On the SIDREA side of the group are myself and academic colleagues from seven universities spanning the length and breadth of Italy's regions, reflecting also the regional variety of community-based start-ups that we want to help. Meanwhile, CNDCEC is the voice of the Italian accounting profession, it is like the Chartered Association of Accountants in England and Wales but closer to the state.

The group officially formed at the start of 2024, and we have met every two weeks since February. This has been a great way to build our relationship and a sense of trust, which is so important for getting professionals and practitioners to listen to us and work with us. Ultimately, we want our academic expertise to be of use to and informed by the wider business community and public. As our first step into the “outside world” of professionals, we have been looking at business models and how to plan, manage and evaluate start-ups. We have been working on these guidelines with and, in the first instance, for chartered accountants who provide consultancy to start-uppers. However, they will of course be useful for the start-up entrepreneurs, the accelerators and policymakers that we eventually want to work with directly as well.



**Dr Massimo Contrafatto** is a Reader in Accounting. His research focuses on accounting for sustainability and innovative social enterprises.

# USING CULTURAL REPERTOIRES AS A TOOLKIT

How do you approach life changes like starting a new job, moving into a new neighbourhood, or getting through a breakup? How can you adapt? Dr Nicole Ye Yang investigates how people use their own styles, habits, scripts and strategies to navigate life. She examines the travel experience of home swapping, and identifies four patterns that lead to distinctive approaches for the management of uncertainties and new experiences.







### **ROUTINES AND HABITS: HOW WE USE OUR CULTURE**

Almost without thinking you understand and solve daily problems using your familiar “cultural toolkit” (Swidler, 1986). Culture is more than the traditions, heritage, and social norms we know and talk about. It can also be seen as a flexible tool or narrative that individuals acquire and use throughout their lives.

Culture provides both means and ends to help people make sense of, and approach, challenges. For example, keeping your home clean and tidy is a routine part of most people’s lives. However, this practice can be threatened by changing circumstances such as moving house or into student accommodation for the first time, or sharing space with flatmates. In these unsettled times, some people might adapt to a more flexible standard of cleanliness (ends), while others might adopt new strategies like hiring a cleaner (means) to maintain the same level of cleanliness.

### **REACTING AND ADAPTING TO CHALLENGES AND UNCERTAINTIES**

Modern life is increasingly uncertain. We face significant challenges like pandemics, global warming and economic turbulence, alongside daily challenges like new technologies and models of remote work. We can also view life events such as becoming parents, or getting married, as uncertain times where our previous strategies towards life may no longer work. Regardless how big or small a challenge is, people are more likely to draw on their familiar cultural tools in response, whether it’s finding a way through homeschooling during a pandemic, or changing your bathing habits to save water during a drought.

### **WHAT HOME SWAPPING REVEALS ABOUT OUR APPROACHES TO UNCERTAINTY**

Home swapping presents travellers with heightened uncertainties and challenges compared to other types of holidays. People stay in a stranger’s house, in an unfamiliar neighbourhood, often in a foreign country. There are fewer organisational resources such as hotel staff or travel operators to rely on, and there are increased chances of last-minute cancellations. More often than not, you have to solve any problems that arise by yourself.

I interviewed home swappers about their experiences to find out how their approaches to uncertain situations compared. Their experiences reveal the different ways we navigate life challenges, and more importantly how we can keep ourselves open to new experiences and growth.

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Culture provides both a means and ends, to help people make sense of, and approach, challenges.

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### **THE FORMULAIC: MINIMISING RISKS AND MAXIMISING FAMILIARITY**

“I’m living a life similar to how I would live at home” Giselle, France.

Many people immediately associate uncertainties with risks and discomfort. When you start your first year of university or your first job, meeting someone from the same region is likely to provide you some comfort and security. Similarly, you may find yourself wandering into the same coffee chains rather than trying out new places. There is no doubt that keeping to routines can help with transitions. But, the more we are attached to familiarity and comfort, the less open we might be to new experiences.



## HOW DO YOU RESPOND TO UNSETTLED TIMES OR CHANGE?

**A**

**My comfort and safety is paramount.**

You focus on familiarity and comfort: you're formulaic.

**B**

**Life is an adventure.**

You're all about flexibility and openness: you're versatile.

**C**

**Enjoy the simple pleasures.**

You can play and make new experiences fun: you're a freewheeler.

**D**

**Life is a series of problems to deal with.**

You focus on preventing problems and risks: you're a troubleshooter.

### THE ADVENTURER: TURNING UNSETTLED SITUATIONS INTO TRANSFORMATIVE EXPERIENCES

"Things happen. So, I wasn't happy about it, but what can I do? You just make the best of it and enjoy your time" Bonnie, USA.

Do you embrace problems as opportunities for change and growth? This group is the most daring with novel experiences, while remaining pragmatic and adaptable. The adventurer approach means you do not differentiate between familiar and uncertain situations as good or bad. Instead, you embrace challenges because you see them as enablers of personal transformation and growth.

### THE FREEWHEELER: BEING PLAYFUL AND IMAGINATIVE

You're open to surprises, playfully embracing the adventure. Uncertain times are enjoyed and reframed as a "great escape" Susan, USA.

You may not be the most skilful in dealing with uncertainties, but you are always open to any surprises and unexpected experiences. The freewheeler approach is curious and romantic in imagining and experimenting different ways to lead their lives.

### THE TROUBLESHOOTER: PROBLEMS TO BE SPOTTED AND SOLVED

"We find some way around whatever looks like a problem" Bea, England.

Things like travel can be hard work, but it's worth it. You can tolerate unsettling experiences by adjusting your expectations. But, does being overly pragmatic mean that you lose the fun of the experience?

We all use a combination of our cultural repertoires, and we may vary our approach to fit the situation. Are we able to use our toolkit a little more knowingly? Can we increase awareness of our own responses and repertoires to shape a more meaningful life experience from our challenges? Or how can this make us collaborate better and have better shared experiences? There is no right or wrong approach to using our cultural repertoires, whether you are formulaic, freewheeling, versatile or troubleshooting. What is important is to be aware of what makes you more at ease, as not everyone loves surprise and wants to be transformed. However, it does not hurt to know that there are alternative ways to frame and approach uncertainties and new challenges.

**Regardless how big or small a challenge is, people are more likely to draw on their familiar cultural tools in response, whether it's finding a way through homeschooling during a pandemic, or changing your bathing habits to save water during a drought.**



**Dr Nicole Ye Yang** is an Associate Professor in the Department of Strategy and Marketing. She is passionate about how marketing, marketplaces and consumption contribute to social and environmental problems and their potential to offer alternative solutions.

# WHY IS POPULISM SO HOSTILE TO THE CLIMATE AGENDA?

It's not just about jobs –  
it's also about values





## POPULISM IS ON THE RISE

In post-industrial countries, right-wing populism is rising. A recent study of 31 European countries found that the share of the vote going to populist parties rose from 12% twenty years ago to over 30% now, and most of this growth is happening on the right.

This is bad news for the climate agenda, since right-wing populist parties are increasingly sceptical about climate change.

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Climate scepticism is very much baked into the right-wing populist worldview.

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## THE RIGHT-WING POPULIST WORLDVIEW

So what is right-wing populism? And where does its hostility to the climate agenda come from? Right-wing populism is often understood as a worldview that understands politics primarily in terms of the dynamics between three groups. First there is the People, a homogeneous group that comes from the country's heartlands. This is the group that governments exist to serve. And then there are the Elites who run the government. And then there is another group – a minority group. This group is seen in this worldview as responsible for distracting or corrupting the Elites, and taking away their attention from what they should be focussed on – the People.

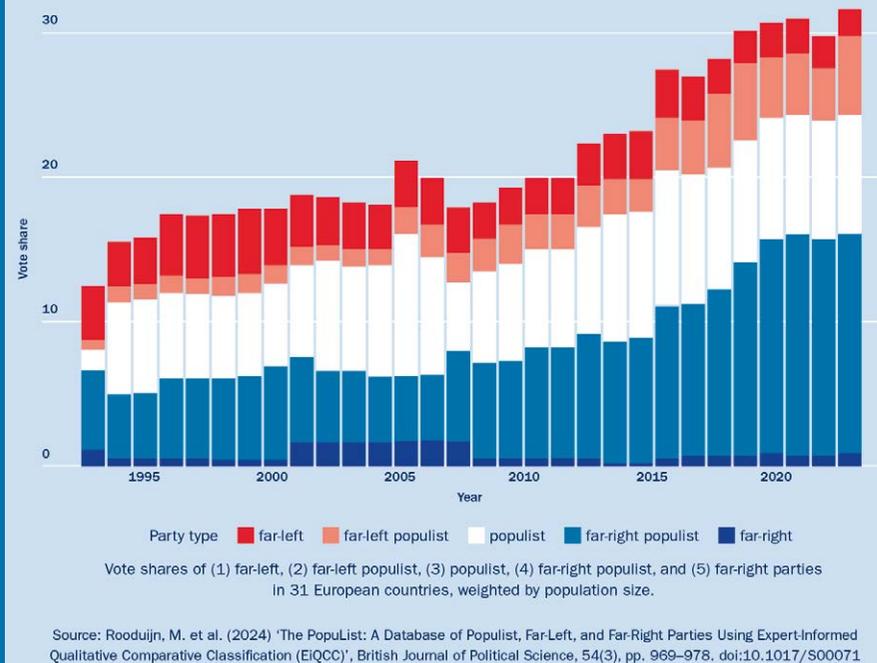
## A GROWING HOSTILITY TO CLIMATE CHANGE

Right-wing populists are often primarily concerned with immigration, but the research shows very clearly that both the supporters of right-wing populist parties and those parties themselves, are more likely to be climate sceptics and more likely to be hostile to climate policy.

For many right-wing populist parties, the minority group that is seen as distracting and corrupting their Elites is often immigrants. But it's not only immigrants doing this, in this worldview. Climate advocates are another minority group who are frequently understood as distracting and corrupting the Elites when it comes to energy and climate policy.

Historically, this antipathy to climate used to be strongest in Anglophone countries – in Australia under Abbott, Canada under Harper, and the US under Trump, for example. But it may also now be changing in Europe where we're seeing a stronger anti-climate aspect to European right-wing populism.





## IS THIS REALLY ABOUT ECONOMICS?

So what's going on? There are two kinds of explanation from academic research on populism. One takes as its reference point structural change in Organisation for Economic Cooperation and Development (OECD) countries over the last 30 or 40 years. The argument is that right-wing populism appeals especially to what the media often call "the left behind" communities; people whose jobs or economic security have been undermined by globalisation, technological change, and the shift to the knowledge economy.

So why would this group of people be hostile to climate policies? According to this argument, it's because climate policies add to job losses and economic insecurities in sectors like coal mining. They also can increase taxes – which is a bitter pill for people under a lot of economic pressure.

But I think there are limits to this argument, and we need to look a bit deeper into why right-wing populism is so hostile to the climate agenda. I think it is also to do with ideology and values.

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We need to look a bit deeper into why right-wing populism is so hostile to the climate agenda. I think it is also to do with ideology and values.

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**Professor Matthew Lockwood** is a Professor of Energy and Climate Policy and Co-Director of the Sussex Energy Group. An expert in energy policy and the political economy of climate, Matthew is former adviser to the UK government and the Greater London Authority.

## A NATIVIST IDEOLOGY

Academics often say that populism is a “thin” ideology in that it doesn't have much content in itself, and other values have come in to populate it and give it direction. Right-wing populism in its current form in the US, and in Europe is very strongly nativist. This means that when right-wing populists are thinking about the groups who are distracting and corrupting their mainstream politicians, they think especially of cosmopolitan internationalist elites. They think of the EU and they think of international institutions.

And a lot of the institutional mechanisms of the climate agenda are international. Climate science research projects, the Intergovernmental Panel on Climate Change, the United Nations Framework Convention on Climate Change: these are all international. This means right-wing populism, in its current nativist form, is a worldview that is always going to be naturally suspicious of the climate agenda. The climate agenda is not only often constructed in the populist worldview as a concern of the cosmopolitan liberal elites. It is also enforced through the kinds of international institutional mechanisms that right-wing populists are predisposed to mistrust.

So when mainstream political parties think about the politics of climate change in an era where right-wing populism is on the rise, it's important not to assume that a good economic case for climate action will carry the day. They will also need to understand that climate scepticism is very much baked into the right-wing populist worldview, and will take considerable effort to dislodge.

# INFORMING THE UK ELECTION DEBATE ON VOTING

While the UK was going to the polls our researchers were sharing their expert insights on key pre-election issues like sustainable energy, the environment, trade and education. This article, first published in *The Conversation*, highlights Dr Smadar Cohen-Chen's research on emotions and how we make important decisions.

## HOW TO DECIDE HOW TO VOTE – A PSYCHOLOGIST'S ADVICE

One of the things I often hear as an emotions researcher is that emotions should not “cloud” people's decisions, that they get in the way, or that they are irrational.

But emotions are a critical part of the human experience, and indeed in making decisions. They help people to process information, form goals and guide behaviour. So if you're struggling to decide how to vote in the UK general election don't ignore or discount your emotions. In fact, it's important to be aware of how politicians may try to tap into voters' emotional state.

Emotions are rooted in appraisals of meaningful events. This leads to “action tendencies”, which means the creation of intentions or readiness for a certain type of action.

We feel angry when we think something is unjust, and can feel propelled to change it, often using force. We feel guilty when we (or our group) have wronged others, and may be motivated to make amends through reparations or change. We feel hopeful when we see a possibility to improve our situation, and this can drive us to achieve a goal that is important to us.

Awareness of our emotions can help us to predict what events will elicit which emotions, and how these emotions shape our responses and behaviour.

This is even more important when we are trying to make decisions when the stakes are high or there's an overwhelming amount of information, such as the forthcoming UK general election. Political parties and politicians do not underestimate the power of emotions – neither should we.

Three emotions particularly relevant in the run-up to elections are fear, anxiety and hope. What these emotions have in common is a sense of low control over outcomes.

Fear and anxiety increase people's sensitivity to threat. Research shows that fear and anxiety trigger increased attention and information processing, but that this cognitive processing is often biased in political situations, reducing openness to opportunities for change.

In extreme cases, fear can even increase people's support for aggressive policies towards people seen as a "danger". Narratives invoking fear will warn and caution, promising stability and security.

Hope, on the other hand, is a pleasant emotion which is induced when we imagine a positive and desired goal in the future.

## Emotions help people to process information, form goals and guide behaviour.

A 2010 study of US national survey data found the extent to which Barack Obama made respondents feel hopeful served as a strong and reliable predictor that they voted for him.

Like fear, hope also involves a sense of uncertainty. But hope comes with a feeling of opportunity. A 2015 study found belief in a changing world increased participants' support for concessions in the Israel-Palestine conflict. Hope can increase openness to different perspectives and open mindedness in decision making. Research has also shown hope can encourage cooperative negotiation and collective action, which are critical in creating change.

Narratives using hope will paint ideal pictures of the future, making promises and enumerating countless possibilities.

### WHAT YOU CAN DO

When you are trying to decide who to vote for, my advice is to take back control of your emotions. Think about what you fear and what things in the future make you worry about yourself, your family, your community or your country. Next, ask yourself what you hope for in your personal life and for your city or region.

Take note of what things feel important to you when you're trying to imagine a better future.

Only then should you seek information about politicians and the parties they belong to, keeping in mind your emotions and the priorities and values they inform you of.

Acknowledge how different discussions, statements, parties and candidates make you feel and identify why. When you engage with information presented by a political party or candidate, we should ask – what is it that they want me to feel and why? Are they trying to induce fear (of the other, of the future, of change). Are they presenting an idyllic future so that I don't notice it is unrealistic?

This approach can help you to uncover your own goals and intentions, as well as to differentiate information from exaggerated wording. Studies have shown that this exercise, known as cognitive reappraisal, can help to regulate emotional responses.

Emotional regulation, the process of influencing emotional responses, is a growing field in psychology.

## Political parties and politicians do not underestimate the power of emotions – neither should we.

Indirect emotion regulation means using interventions or general messages, such as putting forward a perception of people as malleable, to change the way other people may experience emotions and process events. This may be used by educators, psychologists and politicians, and has been found useful in extreme conflicts, when people are reluctant to change their attitudes.

On the other hand, direct emotion regulation is when we choose to change our emotions to drive functional responses, that are based on our values and goals, to events or information.

Both approaches can improve our decision making and our understanding of the role of emotions in decision-making processes.



**Dr Smadar Cohen-Chen** is a Senior Lecturer in Social and Organisational Psychology. Her research focuses on the role of emotions in decision-making, conflict resolution, leadership and management, and negotiations.

# INFORMING THE UK ELECTION DEBATE ON THE ENVIRONMENT

In this article, first published in The Conversation in the lead up to the UK election, Professor Mari Martiskainen shares her expert insights on the environmental issues that the country should be talking about.

## FIVE ENVIRONMENTAL ISSUES THAT SHOULD BE HIGHER ON THE ELECTION AGENDA

While most of the UK general election campaigning so far has focused on issues like economic growth and fixing the cost-of-living crisis, several key environmental issues are not getting enough attention.

Climate change should be top of the agenda. The world is experiencing record-breaking temperatures, with temperature rises in the Antarctica being particularly alarming. This year, there has been a record number of weather-related insurance claims in the UK linked to extreme weather events.

Yet while addressing climate change has potential benefits for jobs, energy security and lower bills, it is not considered top priority by voters. And most political parties are giving it relatively little attention.

Whether politicians or the electorate like it or not, the impacts that climate change is already having on the economy, food security, public health and migration, should not be ignored. This election campaign offers an opportunity to show strong political leadership by discussing critical environmental challenges, but major political parties are playing it safe.

### 1. FINANCING THE NET ZERO TRANSITION

While the Green party gives climate change top priority, none of the larger parties have made this issue a driving force for their policies.

The Conservative party's manifesto affirms a commitment to climate change by addressing resilience of the most vulnerable members of the Commonwealth but they would rule out routes to a low-carbon future including green levies, road pricing schemes and a frequent flyer levy.

The Labour manifesto recognises that the climate and nature crises are serious long-term challenges. Its plan for publicly-owned Great British Energy includes measures such as doubling onshore wind, tripling solar power and quadrupling offshore wind by 2030, with investment in carbon capture and storage, hydrogen and marine energy, and energy storage.

But details about how the net zero transition will be financed are missing across the board. The UK needs better investment in both net zero and climate adaptation needs. A shift away from fossil fuels not only reduces greenhouse gas emissions but also minimises exposure to volatile, expensive and polluting energy sources. There is also limited discussion in the election on the benefits of reduced energy demand.

### 2. RESTORING BIODIVERSITY

Many people have been affected by recent increases in food prices, with more than four in 10 adults having bought less food due to rising costs. While the cost of food is detrimental for many, cheap food production is linked to fundamental environmental problems. There's little mention from politicians

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The impacts that climate change is already having on the economy, food security, public health and migration, should not be ignored.  
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of how biodiversity loss, the nature crisis and intensive farming affect long-term food security. A new report from thinktank the ODI states that close to 50% of species are declining and up to one million species face possible extinction.

The UK lags behind its commitments to help address and fund this global biodiversity loss. We depend on nature for food and a healthy ecosystem is vital for food supplies. A decline in pollinators has been shown in the UK, and pollinator loss in the US has already been linked to reduced crop yields.

Almost half of the UK's food comes from other countries, so this should be a topic for close international collaboration. Biodiversity loss can be alleviated by protecting species and forests, reducing emissions, farming more regeneratively and using nature-based solutions such as rewilding.

### 3. CLEANING UP RIVERS

There has been a lot of public outrage about water companies pumping sewage into rivers and the sea, with more than 80% of English rivers estimated to have high pollution levels from sewage overflows and manure run-off from agricultural fields.

Few politicians are calling for systemic change to how the UK water system operates. Sewage has been a big campaign issue for the Liberal Democrats, but much of the media discussion has been about party leader Ed Davey falling into Lake Windermere to highlight the issue, rather than about detailed policy proposals.

Discussion about ways to mitigate increased flooding due to more extreme weather is also missing. Measures such as rewilding could improve the UK's flood resilience. England has a fully privatised water system, which is unusual for most countries, and there is lack of debate



whether this is the best approach to providing a reliable and clean water service which is essential to everyone.

### 4. RETROFITTING HOMES

Another missed opportunity is how to fix Britain's leaky and inefficient homes. In England and Wales, the average energy efficiency rating of a home is D. For homes built before 1930, more than 80% are rated from D to G, indicating low energy efficiency.

There are policies for home retrofits in both the Labour and Scottish National party (SNP) manifestos. Labour will provide grants and low interest loans for measures such as insulation, solar panels, batteries and low-carbon heating. The SNP promises lower VAT rates for the construction sector to encourage retrofitting of existing buildings.

However, a fully costed housing improvement programme that would address UK homes in need of retrofitting is missing. The UK needs a long-term programme with easy-to-access grants and zero interest loans for households to install measures such as insulation, heat pumps and solar power, to ultimately reduce their energy bills too.

Energy-efficient homes can help reduce fuel poverty and provide more comfortable living conditions. Homes urgently need to be more climate resilient by preparing them to better cope with extreme weather such as summer heatwaves and cold winter events.

### 5. IMPROVING SUSTAINABLE TRANSPORT

The UK needs to drastically reduce its high reliance on cars. In 2023, a record number of 41.4 million vehicles were on the road in the UK. While car-related emissions reduced, only one in 40 of all vehicles is zero emission. Politicians could better support active travel options (like riding bikes and walking) or improve public transport connections.

Silence on this issue is unsurprising, given that congestion charges and related measures have proven unpopular in some areas. But homes with close links to public transport and policies that promote 15-minute cities that have accessible sustainable transport options could bring multiple benefits for health and wellbeing. Low-traffic neighbourhoods can create space for children's play and benefit residents' quality of life.



**Professor Mari Martiskainen** is a Professor of Energy and Society. As a social scientist, she has a specific interest in how we can transition our energy, housing and transport systems to help create a just and fair net zero society.

# TELLING TALES

The power of storytelling for change

How can you make business topics more exciting, relatable and memorable for students and other audiences? Picture the scene: it's September, the leaves are beginning to fall... your lecture theatre is full of new students ready to learn about management strategy. They look up to the presentation slides but instead of business theory, the Hollywood actor Mark Ruffalo, surrounded by cows, fills the screen...







## USING STORYTELLING TO TEACH COMPLEX BUSINESS ISSUES

Touching visuals and emotional storytelling have the capacity to expand student minds beyond conventional textbook teaching.

### CASE STUDIES

A film inspired by true events, *Dark Waters* with Mark Ruffalo (2015), teaches multi-stakeholder processes in the context of corporate misconduct. It translates an abstract, legally complicated topic into a character-driven story that is much more relatable.

A defence lawyer joins forces with a cow farmer to tackle a big chemical company's local water pollution, despite the fact that they're a big client at his law firm. The ethical dilemma at the heart of the film connects with students – what would you do if you were in the lawyer's shoes? Would you take a case that is against your own career interests? Using Gareth Morgan's book, *Images of Organisation*, we consider decisions as outcomes of partly overlapping, partly conflicting considerations like the nature of the task, career ambitions and aspects like personal values and interests.

The film is also a consideration of power. I can use this to draw out further questions for the class. We can explore the idea of marginalised stakeholders like the farmer, who is taking on a big company and gaining alliances by bringing in emotionally invested people to join him. We can go beyond a textbook case and ask what else could these characters do to support their cause? Who are all the stakeholders? We can fully explore all the issues raised and how they relate to business practices.

Outside of the classroom, the power of *Dark Waters'* storytelling has led policymakers to propose bans on dangerous so-called "forever chemicals", and several companies have pledged to stop using them.

### WHAT FILMS CAN TELL US ABOUT STORYTELLING FOR CHANGE

Films can change perceptions about topics and encourage people to understand the world in new ways. *Blackfish*, a documentary about orca whales in captivity, led to pressure on the company SeaWorld to change their business model, and to legislation to protect animal welfare in the USA. The documentary unpacks the cruelty and tragedy surrounding sea mammals being used for entertainment, and the death of a SeaWorld trainer. The film made an emotional connection with audiences. Along with powerful campaigns for animal welfare, it led to pressure on corporate sponsors, a drop in revenue and decreased market value for SeaWorld. I use this film in my teaching as just one example of the power of storytelling for social change.

**P**rofessor Stephan Manning's research into storytelling for social impact crosses over with his teaching here at Sussex. There are lots of techniques we can use to communicate our research better, and to make our teaching engaging and meaningful for students.





Touching visuals and emotional storytelling have the capacity to expand student minds beyond conventional textbook teaching.



### BUSINESS STORIES

Storytelling is not just a useful way of creating meaning, making an emotional connection and facilitating learning across disciplines. It has a practical application and can be used as a tool in different aspects of business.

### STRATEGIC LEADERSHIP

Developing a strategy for an organisation requires leadership, and it's about communication and storytelling. Your strategy touches on aspects like where did we come from? What's our situation as an organisation? Where do we want to go and how will we get there? It's the story that you need to tell your employees, to help them understand where the organisation is going, and to get on board with its mission and values.

### ENTREPRENEURSHIP

As an entrepreneur you'll need to build a story world to successfully convince investors. How good are you at convincing others that your business idea will work? Your story shows where you come from, your experiences and what challenges you may've faced. It shows your vision of the future and how your product can work in the world. Storytelling is a way to define your business.

## GETTING TECHNICAL

We can enhance teaching or our research presentation using the following techniques:

- **Layers of storytelling:** Telling a story on multiple levels – from specific details to broader, deeper themes. By addressing what the story is about (the characters and interactions), what it's really about (typical struggles and journeys people go through), and then what it fundamentally represents (the norms and values guiding us), we can engage the audience more effectively.
- **Three-act structure:** Structuring research like a story, with a clear beginning (setup), middle (conflict), and end (resolution), helps make complex ideas more accessible and keeps the audience engaged.
- **Character-driven stories:** Focusing on characters, whether real or fictional, allows readers to connect emotionally with the narrative. This approach can make complex topics like corporate misconduct or multi-stakeholder processes more relatable and memorable.
- **Building stories from scenes:** Breaking down research into vivid, memorable scenes or moments that illustrate key concepts or interactions can make theoretical ideas clearer, and adds depth to the story. You can vary these scenes for direct comparisons and to help the audience see how interactions can play out in changing contexts.
- **Visual and emotional impact:** Integrating films, music, art or anecdotes into research presentations can create emotional connections with the audience. Using different methods of communication in teaching can showcase complex dilemmas and make topics like ethics or strategy more exciting.
- **Personal and ethical storytelling:** Sharing personal experiences or role-modelling through stories can inspire students and make academic teaching more meaningful.



**Professor Stephan Manning** is a Professor of Strategy and Innovation. His research focuses on the role of business in economic developments and social change, and he is a filmmaker and film producer.

# ALTERNATIVE PATHS

## How we can tackle modern slavery

**T**he organisers of the Business and Modern Slavery Research Conference, Dr Mike Rogerson and Professor Rob Caruana, share their insights into what governments and organisations can do to end this extreme form of labour exploitation.

### WHAT IS MODERN SLAVERY?

Modern slavery can be distinguished from many “sweatshop” and “bad labour” contracts, as a more *extreme* form of labour exploitation (where typically no labour contract exists). It can commonly involve a range of coercive practices ranging from threats and actual violence to deception, wage theft, debt manipulation, document confiscation and other practices. These all aim to extract very low cost or free labour from vulnerable people or people made vulnerable at specific points (e.g. migration).

### LOOKING AT MODERN SLAVERY THROUGH A BUSINESS AND MANAGEMENT LENS

Modern slavery is a huge challenge to overcome, with global estimates of up to 50 million people falling victim to it. Through business and management studies we can examine and offer insight into the different business models that modern slavery perpetrators deploy. We can look at how perpetrators move illicit money through the angle of finance and accounting. Human resources management and organisational behaviour researchers can investigate how criminals recruit and deploy “workers”. We can find out how slavery practices feature in and around supply chains.

### MODERN SLAVERY RESEARCH CONFERENCE 2024 – WHY IS IT IMPORTANT TO COME TOGETHER TO STUDY MODERN SLAVERY?

We used the term “alternative paths” in the name of our conference to make a statement about our current observations on the study of modern slavery. First, that the field of business and management, historically silent on the topic of slavery (only a handful of articles until now), has started to actively acknowledge the importance of modern slavery, indicating an alternative path being taken. This captures changes in industry with major corporations and organisations increasingly focused on the challenge that modern slavery presents. Second, our fellow researchers have almost all begun their research journeys in more “mainstream” areas. They have become highly engaged in the challenge of modern slavery, and they have taken an alternative path.

### REACHING AGREEMENT IN A CONFERENCE WITH DIVERSE THEMES

A consensus is getting louder that our research needs to have an impact outside of our circles. Lara Bianchi’s keynote speech stood out for her engagement with people affected by modern slavery. Her research is in the UK agriculture sector, specifically those picking soft fruits such as strawberries in Lincolnshire. As difficult as the research is to conduct, there needs to be more

of it. Unfortunately, the structures and institutions around academic researchers do little to promote those kinds of projects. While we still need the “top-down” view of how organisations address modern slavery, we certainly need a lot more of the “bottom-up” research characterised by really understanding what is going on at the heart of the issues. This is underpinned, as Lara emphasised, by the recognition that the subjects of our research are human beings – holders of rights – who should not only be labelled as slaves or victims.

### WHY IS THE CONFERENCE SOMETHING OUR BUSINESS SCHOOL WANTED TO HOST?

Our Business School has strong recognition by policymakers and non-governmental organisations, in the UK and internationally, for research strengths in sustainability and human rights issues in practical, organisational and societal contexts. With landmark legislation such as the UK Modern Slavery Act and the growing ubiquity of corporate modern slavery statements, our niche but expanding global community of researchers has its finger on the pulse of an increasingly salient agenda in business and society. It was a great opportunity for the School to host our gathering and cement itself as one of the few institutions in the world devoted to this area of study.



**Dr Mike Rogerson** is Senior Lecturer in Operations Management. After years of working for a multinational construction firm in Africa and the Middle East, he became determined to research solutions to the myriad workers rights’ issues encountered in his job.



**Professor Rob Caruana** is Professor of Marketing and Consumer Research. Following a chance conversation at the Academy of Management, he was inspired to research this complex subject. He’s a passionate advocate for raising its visibility within his field.



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