Risk&Regulation

Magazine of the ESRC Centre for Analysis of Risk and Regulation

No 17 Summer 2009

Global risks, global regulation?

RISK, TRANSNATIONAL REGULATION AND THE PUBLIC GOOD

CRIME, TERROR AND IMMIGRATION AS ONE GLOBAL RISK

AVOIDABLE CATASTROPHES? THE ASSESSMENT AND MANAGEMENT OF GLOBAL PANDEMIC RISKS

PLUS

Financial governance: limits to transnational risk regulation

How climate change became a business risk

International Accounting Standards Board

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

LSE

CONTENTS

Risk&Regulation is also published on CARR's website.
www.lse.ac.uk/resources/riskAndRegulationMagazine

www.lse.ac.uk/collections/CARR/

RISK&REGULATION: CARR REVIEW
NO 17 SUMMER 2009

EDITOR: David Demortain
ASSISTANT EDITOR: Pranav Bihari

ENQUIRIES: Centre Administrator, ESRC Centre for Analysis of Risk and Regulation, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE United Kingdom
Tel: +44 (0)20 7955 6577
Fax: +44 (0)20 7955 6578
Website: www.lse.ac.uk/collections/CARR/
Email: risk@lse.ac.uk

PUBLISHED BY:
ESRC Centre for Analysis of Risk and Regulation,
The London School of Economics and Political Science,
Houghton Street, London WC2A 2AE

DESIGN AND ART DIRECTION: LSE Design Unit
PHOTOGRAPHY: iStockphoto (p3, p9, p10, p17) and LSE Photography
PRINTED BY: AquatintBSC
COVER IMAGE: Rory Morrison

ISSN 1473-6004
Online ISSN: 1473-6012

carr
centre for analysis of risk and regulation

Risk, a global agenda?

CARR Director **Bridget Hutter** discusses the constitution of global risks as regulatory issues

Discussion of global risks has become more critical than ever over the past two years. The very real nature of these risks has been highlighted by such events as the global financial crisis which has emphasized the interconnectedness of countries in the 21st Century and the vulnerabilities of global financial systems to cross border failures. Similar difficulties arise with respect to global warming, where it is generally accepted that climate change represents a potentially catastrophic global risk. Experts argue over the precise numbers and speed of change but there is a growing consensus that the existing world population needs to act now to limit and mitigate the damage for future generations.

These issues were the subject of a CARR workshop organized by David Demortain and Jeanette Hofmann earlier this year. Part of the discussion focused on the construction of world risks. Many risks attract contentious debate about their status as risks and the severity they represent. One such example are CO_2 emissions. In the USA, there has been a radical change of position concerning the acceptance of these risks and actions to mitigate them. The Bush administrations steadfastly refused to accept that these emissions posed a risk and thus failed to act to control them. In recent months, the Obama regime has announced that it will act to restrict CO_2 emissions from cars and also from power plants. In other examples, global risks may be constructed on the basis of very little evidence. For example, the article by Edwards explores transnational and organized crime and how it has become constituted as a problem crossing national borders and demanding transnational attention. Those purporting that this is a genuine global risk associate organized crime to terrorism and immigration. Yet, maintains Edwards, there is very little empirical evidence to support the view that there is a genuine global risk here, the evidence such as it exists, is that much organized crime is home-grown rather than external.

Hofmann discusses the case of internet address space, particularly the risks attaching to the supply of addresses. This is an interesting problem as it is a risk which transcends national borders, it is stateless. The governance systems which have emerged have been regionally based across the five continents and based on monopoly suppliers of internet addresses. But, Hofmann argues, the risks they are facing are unclear as are the risks attaching to either action or inaction in response to any hypothesized global problem. She calls for a coherent and consensual understanding of the risks involved.

Transnational risk governance may be partially organized by the private sector as is the case by the International Accounting Standards Board (IASB). As our 'Meet the Regulator' column explains, the IASB was born out of an earlier financial crisis, namely the 1990s Asian financial crisis. Through a collaborative strategy, IASB standards have been adopted by over 100 countries. This consensual strategy is partly a necessity as the IASB does not have any enforcement powers – although they do work closely with regulators. Young, in our student column, discusses another transnational financial organization which is not state based, namely the Basel Committee which comprises financial regulators and central bankers. This network of specialists is also consensus based and Young believes has much to commend it. Yet it does remain vulnerable to national demands and constraints emanating from members' originating countries.

Pattberg discusses investor led initiatives with respect to the environment, such as the Coalition for Environmentally Responsible Economies (CERES) which is a coalition of investors and environmental organizations. He attributes this success in turning climate change into a business risk but believes that there is generally insufficient co-ordination between all of the different groups and initiatives promoting environmental controls. This contrasts with the 'Talking Point' on pandemics which is part of a globally co-ordinated approach against public health risks. In this case, there are legally based international agreements to co-operate and multiple international organizations involved. As Mansnerus and Torny explain, social scientists do have an important role to play in this through posing critical questions and appraisals of scientific proposals. More specifically they can focus on the social aspects of proposals. Scientific and technological developments and solutions to problems do not of course take place in a vacuum. Scientific and technological solutions are not always accepted or trusted and may require governance; they require implementation; and society has to consider how to deal with issues of scientific uncertainty. This is the stuff of CARR's research agenda and one we hope to develop in the coming years.

Bridget Hutter
CARR Director

MEET THE REGULATOR

International Accounting Standards Board

Tom Jones, Vice-Chairman of the International Accounting Standards Board, depicts the dilemmas of non-state international standard-setting, or how to produce compelling standards without formal regulatory authority.

International Accounting Standards Board®

What does the IASB do?
It is an independent board which, with the encouragement of regulatory authorities around the world, sets international financial reporting standards that provide companies, countries and the global capital markets with a common language for financial reporting.

How did the IASB come about?
The need for an organisation like the IASB arose out of the Asian financial crisis in the 1990s. Many companies which had seemed financially secure went under and investor organisations around the world decided that they needed greater certainty and comparability in financial reporting from one market to another. The various organisations which represent securities exchanges around the world, like IOSCO, the International Organisation of Securities Commissions, and others like the SEC, the Securities Exchange Commission in the US, and the European Commission, concluded that the old International Accounting Standards Committee, IASC, which had been building accounting standards for emerging economies, should be transformed into an organisation that could create common financial reporting standards for use around the world. The IASB started work in 2001 initially spending its time mainly on revising the standards it had inherited from the IASC. Shortly afterwards the European Commission decided that the use of the IASB's standards, which became known as International Financial Reporting Standards (IFRSs), should be mandatory for all listed companies in the European Community from 2005. That decision acted as a catalyst for many economies around the world to take up IFRSs as their financial reporting language.

What has the IASB achieved so far?
The IASB has developed a comprehensive set of financial reporting standards that are now required or permitted for use by over 100 countries around the world, including all member states of the European Union, Australia and China. In 2007, Brazil, Canada, Chile, India and Japan all established timelines to adopt or converge with IFRSs, and in 2008 the US Securities and Exchange commission (SEC) published proposals to consider adoption of IFRSs in 2011. The long-term objective of developing a common global language for financial reporting, which was thought would take some considerable time to implement, is well within sight.

What are the IASB's priorities for the next few years?
Right now we are working flat-out in our response to the global financial crisis. Whilst the crisis has not been caused by accounting it does have an important role to play in its resolution. It is only when investors are confident that all of the bad news is out on the table that the recovery can begin. We have prioritised projects that deal with the accounting for financial instruments and identifying off balance sheet risk and expect to publish enhancements to the current standards by the end of the year.

The unprecedented recent events in the financial markets simply underline the importance of having one global financial reporting language which can bring about simplicity, comparability and transparency in the world's capital markets.

Is there a secret to being a successful standard-setter?
Being clear in our intentions, open in our deliberations and as a result taking people with us. Our collaborative approach has proved to be very successful with organisations and economies around the world. Ours has been a market-led approach, a bottom up approach. It has been a process of creating a system of financial reporting standards which jurisdictions can see are open and transparent and we try to make it easy for them to implement these standards. It has not been a top down legal mess of imposing treaties and resented rules via horse-trading. The end result can clearly be seen as common sense. Our intention is that, for example, a Wall Street trader can understand and have confidence in the accounts of a company in China. IFRSs provide the ability to achieve that. And as a result the cost of capital around the world falls.

How do you go about identifying problem areas?
By putting a lot of work into getting our due process right. We consult widely with all our constituents. We have an advisory board which is there to provide input from the wider business community. There are multiple stages in our due process which ensure that all interested parties have a chance to make their points of view known in a timely way. And we have a post-implementation review which ensures that all standards are examined again two years after implementation to check that they are working in the way that was intended. The nature of the IASB's transparency as a standard-setter has been independently recognised. The One World Trust said in its annual report on global accountability that the IASB has the best developed external stakeholder engagement capabilities amongst 30 of the world's most powerful global organisations.

Have you come across any particular problems as a standard-setter?
You cannot satisfy everyone. Financial reporting really matters. It provides a language for companies to articulate their business performance. Trying to get a consensus for this, to bring about one approach for over 100 countries worldwide, is unlikely to always be universally popular.

How do you engage the public in the IASB's work?
By operating as open and extensive a consultation process as possible.

What are the IASB's powers?
We are not a regulator, so we have no authority to mandate jurisdictional use of IFRSs. We do however work in close cooperation with regulatory authorities, national standard-setters and others around the world. The development of IFRSs is a collaborative effort.

What is the most common myth about the IASB?
The most common myth is that we don't listen. But if you look at what the One World Trust said about our processes it is clear that we do. Companies and other organisations may have their own reasons of self-interest to wish that some of our financial reporting standards allowed them to do things which we would not wish them to do. Our independent stance means that people will sometimes try to equate a refusal to change our principles with a suggestion that we are not listening to them.

What is the most common misconception about the work that the IASB does?
The most popular misconception is that the IASB is dominated by what might be called an Anglo-Saxon approach. Yet our Trustees and our Board all have geographical diversification as a criterion for appointment. We are based in London, you have to be based somewhere, but that has no influence on our work. At our headquarters we have around 100 staff from over 30 countries.

What sort of measures do you have to ensure the IASB's independence?
Sensible ones. The IASB is an independent standard-setting board which is appointed and overseen by a geographically and professionally diverse group of trustees who are accountable to capital market authorities via our Monitoring Board and to the public interest generally. Our funding comes from a wide range of market participants from across the world's capital markets and is shared across jurisdictions with official support from the relevant regulatory authorities. None of it is contingent on any particular actions that the IASB might take. And the proceedings of the IASB are entirely open and transparent. You cannot even have more than five Board members discussing technical issues in a meeting without it being called as an open Board meeting.

CARR IMPACT

Jeanette Hofmann was re-appointed as member of the sub-committee on communication and information of the German Commission for UNESCO.

Christopher Hood gave advice in January to Helena Charlton and Nic Suggit of the National School of Government on their project 'Updating Policy Skills in the Public Sector'.

Bridget Hutter featured in a film produced by *The Independent* newspaper on the topic 'Risk regulation has gone too far'. The film was published online in March as part of Big Ideas, a series of films featuring leading academics from LSE.

Bridget Hutter contributed to the Pennington Inquiry report on the Welsh E.coli outbreak which took the life of one five-year old and made around 150 others ill. The Inquiry commissioned Professor Hutter and Dr Tola Amodu (former CARR graduate) to prepare a report on Risk Regulation and Compliance: Food Safety in the UK.

Bridget Hutter addressed the Universities UK Members' Meeting on the subject of Risk Regulation in May.

Michael Power was consulted in January by the UK Treasury Select Committee on the Banking Crisis about the role of auditors.

Michael Power has been awarded honorary doctorate by the University of St Gallen, Switzerland for lifetime work and specifically the influence of his books *The Audit Society* and *Organized Uncertainty*.

ACADEMICS ABROAD

Sharon Gilad gave a talk on 'Putting Principles into Practice: the FSA's Treating Customers' Fairly Initiative' at the International Law and Society Conference in Jerusalem, in December.

Sharon Gilad gave a seminar on 'Seeking Dialogue in a Blame Culture: Principles-Based Regulation in UK Retail Finance' at the University of Haifa, Israel, in April.

Sharon Gilad presented a paper, 'Talking about Fairness: The FSA's Treating Customers Fairly Initiative' at the Law and Society Association Annual Conference, as part of a panel on 'Financial Services in Times of Crisis' in Denver, in May.

Jeanette Hofmann chaired two workshops: 'Internet and Governance and ccTLDs' and 'Open Dialogue – Transition from IPv4 to IPv6' at the Giga-Net Symposium, in Hyderabad, in December.

Jeanette Hofmann presented a paper on the 'Internet Governance Forum' at the Domain Pulse conference in Dresden, in February.

Bridget Hutter gave lectures on 'A Delicate Balance: Social Science Perspectives on Risk Regulation' to LSE alumni groups in Beijing and Shanghai as well as to Chevening scholars at the British Embassy, Beijing, in December.

Bridget Hutter was a keynote speaker at the International Symposium on Risk and Social Policy in Changing Asian Societies, organised by the Department of Applied Social Studies, City University of Hong Kong and co-organised by Graduate School of International Development and Cooperation, Kibi International University, Japan and the Social Policy Research Centre, National Taiwan University, Taiwan, in December.

Bridget Hutter was a keynote speaker at the conference on 'Societal Risk, Relevant Interdisciplinary Frames of Reference' in Oslo, in April.

Bridget Hutter presented a paper on 'Policy Responses to Climate Change: the Role of Risk Regulation in Mitigating Adverse Effects' at the Shanghai Forum 2009, in May.

Bridget Hutter gave a lecture on 'New Governance, Risk Regulation and the Business Organization' at the conference on 'New Governance and the Business Organization' in Vancouver, in May.

Martin Lodge presented a paper on 'Responding to Crisis: Regulation, Food & Argumentation' at the Australian National University's Economics and Democracy conference, in Canberra, in December.

Martin Lodge gave a lecture on 'Public Service Bargains and the Politics of Administrative Reform' at the Australian National University's Research School of Social Sciences, in Canberra, in December.

Andrea Mennicken presented a paper on 'From Inspection to Auditing: Audit and Markets as Linked Ecologies' at the University of Alberta, School of Business, Edmonton, Canada, in December. She also presented this paper at the University of Innsbruck, School of Management, Austria, in January, at the Stockholm Centre for Organisational Research, Sweden, in March, and at the 32nd Annual Meeting of the European Accounting Association in Tampere, Finland, in May.

Yuval Millo gave a presentation on 'Paid for Connections or too Connected to be Good? Social Networks and Executive vs. Non-Executive Directors Compensation' at a conference organised by the Interdisciplinary Committee on Organizational Studies in Ann Arbor, USA, in January.

Mark Thatcher presented a paper on 'Internationalization and the state: reforming regulatory institutions' at the conference on 'Mapping State Administrations: towards a Common European Research Agenda' in Dublin, Ireland, in March.

CARR VISITORS

Lotta Bjorklund Larsen visited CARR in March. She is a PhD candidate in social anthropology at SCORE, Sweden. During her visit she gave a presentation to CARR staff about her research project 'Black Work. Justifying illegal purchases of services in contemporary Sweden'.

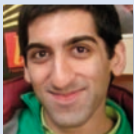
Carl Macrae visited CARR between January and May. He is Special Advisor, National Reporting and Learning Service at the National Patient Safety Agency. His research interests are in risk and safety management in high-reliability organisations. He is particularly concerned with the construction and analysis of near-miss events, and the social and psychological processes involved in organisational learning and resilience.

Fran Osrecki extended his stay at CARR until March. He is a doctoral fellow at the Institute for Science and Technology Studies, University of Bielefeld. His main interests are sociology of scientific organisations, sociology of risk, and sociology of time.

Åsa Vifell visited CARR in March. She is a researcher in political science at SCORE, Sweden, working primarily within the themes of democracy and organization and rule setting and rule following. Her current projects include studies of the internationalization of the Swedish state administration within the empirical fields of climate change, and trade and employment policy.

STAFF NEWS

Erika Mansnerus has been appointed as an ESRC Postdoctoral Fellow. Her research interests include sociology and history of public health, sociology and philosophy of science, models and simulations in scientific practice and policy making, and governance of risk in public health policy.



Yusuf Osman has joined CARR as Events and Office Administrator.

Have you moved or changed jobs recently? Please keep us informed of any changes in your contact details so you can continue receiving *Risk&Regulation*. **Email: risk@lse.ac.uk or Tel: +44 (0)20 7955 6577**

Risk, transnational regulation and the public good:

insights from internet address management

Jeanette Hofmann shows how moral conceptions of public good underpin technical controversies on the internet space

Without drawing much public attention yet, the Internet is at risk of running out of Internet addresses. The pool of unallocated addresses could dry out as early as July 2012. In the face of the pending crisis, controversies among experts are flaring over the right courses of regulatory action and the risks they might involve. My research shows that the competing perceptions of risk in this domain resonate with different notions of the public good.

Communication services such as telephony or postal mail require a universal addressing system in order to connect people. Well known examples are telephone numbers, postcodes or house numbers. The addressing system of the Internet has been likened to a language that enables global interaction across different network architectures. Without such a uniform language, the Internet wouldn't exist. The introduction of the technical standard defining the Internet address space, Internet Protocol version 4 (IPv4), is considered the 'date of birth' of the Internet.

From a regulatory point of view, the address space of the Internet differs from that of older communication infrastructures such as the telephone networks in several ways. First, users hardly ever notice it because it is hidden. Internet users don't type numbers to access a webpage, they type names which resolve into numbers. For example, 'www.lse.ac.uk' may resolve into '158.143.29.38'. Second, the address space of the Internet is finite. While the number space of telephone networks can be expanded by a digit when it reaches its capacity limits, the address space of the Internet cannot but needs to be replaced by a new addressing system. Considering the number of Internet users, this is a truly complex task. A third important difference concerns ownership. While the telephone networks' number space is kept under state regulatory responsibility, the Internet address space is a common pool resource. The global reach of the address space and its non-proprietary character raise the question of control. Who regulates the use of a global resource not owned by anyone?

The Internet address space is governed by five regional membership organisations each covering one continent. The Regional Internet Registries are independent of national governments or intergovernmental organisations. Their members consist mainly of Internet Service Providers, who are today the main 'users' of Internet addresses. The Regional Internet Registries have two roles: they allocate addresses to their members in line with the address policies set by their members, and they maintain a database, the registry, which records information about the holders of Internet addresses. Due to the constant need to set or adjust address policies, regulatory communities have formed both within and across the regions which discuss policy proposal over the Internet. Most of the active participants are technical experts with a leaning for the political implications of address policies.

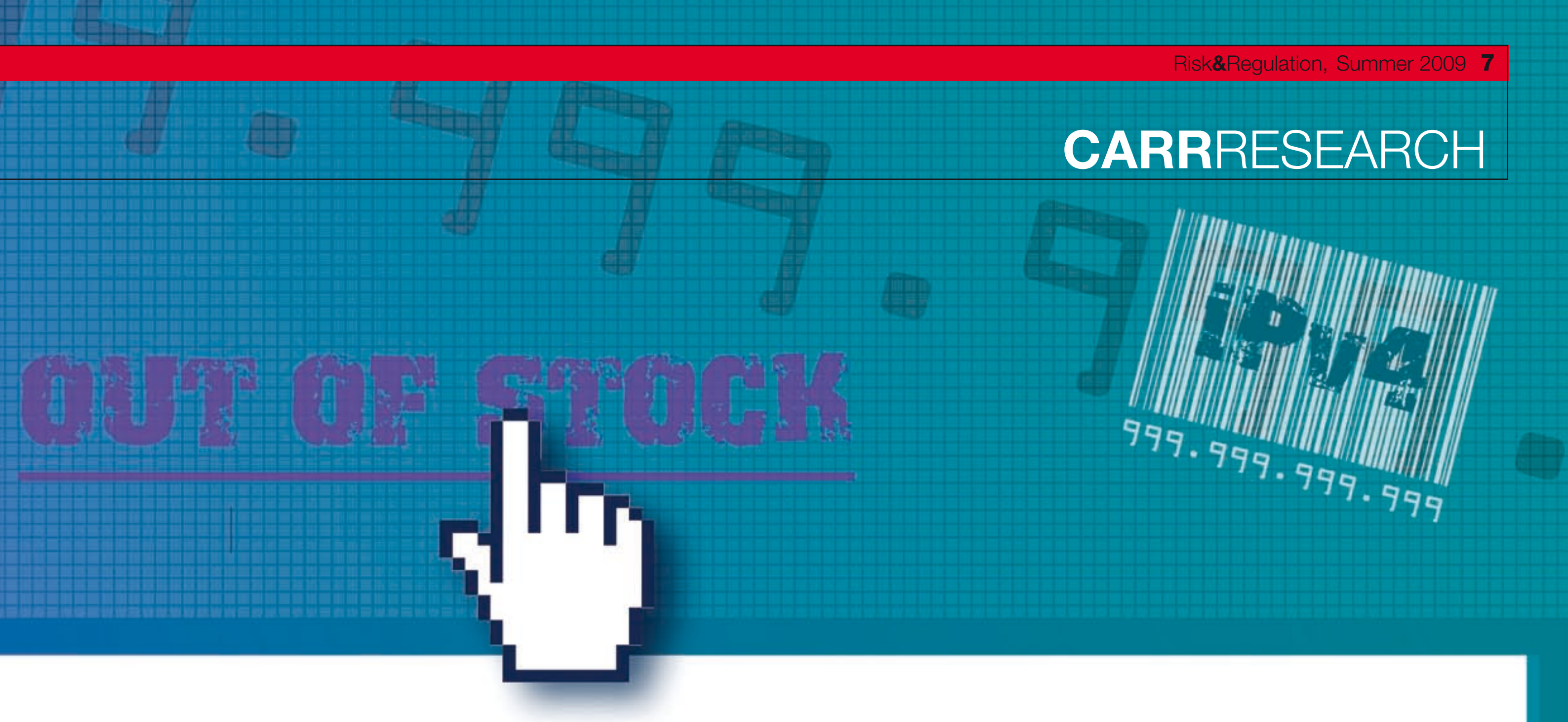
The pending depletion of Internet addresses

Although the addressing space allows for more than 4 billion unique addresses, Internet addresses have become a scarce resource. In the 1990s, a new and much larger address space was developed to cope with this problem. However, in the absence of a global regulatory framework, no organisation was authorised and no plan devised to coordinate this major transition from the present to the future address space. Organisations did not adopt the new addressing standard and preferred to rely on IPv4. Due to the continuous growth of the Internet, the global demand for IPv4 addresses is accelerating and will soon exceed the remaining supply. According to recent calculations, the Internet may run out of unallocated addresses by June 2012. Since global connectivity will require the use of both types of addresses in the foreseeable future, it is expected that the demand for IPv4 addresses will persist for at least a decade after the pool of unallocated addresses has run dry.

The upcoming depletion of the Internet address space has been likened to the impact of the 1970s gasoline shortages on the industrial society. It is feared that the lack of addresses would not only seriously hamper the future growth of the Internet but also put the governing structure of the address space at risk. The regulatory authority of the Regional Internet Registries is based on their monopoly in handing out addresses. Once the address pool is exhausted, the Internet registries have lost their means of enforcing policies. Against this background, the Internet Registries have been discussing various ways of alleviating the upcoming address shortage, for example, by reclaiming allocated addresses that are not in use. One particularly controversial policy proposal concerns the creation of a market for Internet addresses.

This proposal is based on the assumption that a significant share of the address space is underused and that monetarisation would provide incentives to offer addresses for sale. A higher utilisation efficiency is expected to extend the supply of IPv4 addresses by several years. However, Internet addresses have so far been allocated as loans based on a documented need. Holders of addresses are regarded as custodians who are obliged to return excess addresses. The creation of a market would thus represent a sea change in the governance of Internet resources.

At a time when the members of the Regional Internet Registries are debating the pros and cons of a market for Internet addresses, the actual consequences of the address space depletion are a matter of speculation. Regulatory activities for the Internet are facing the fragility of order and authority in the – nonetheless preferred – absence of an intervening state. The notion of risk plays an important role in the debates about the possible implications of address trading. For want of reliable data, the experts need to form their own opinions on the risks involved, their respective causes and means of prevention. As the passionate controversies show, many different risks can be associated with the address shortage and one of the few common denominators in this complex situation is the focus on regulatory action. The plurality of risks discussed by the Regional Internet Registries can be grouped into the risk of doing nothing and the risk of doing and thus changing something.



The risks of doing nothing and of changing something

The advocates of creating a market argue that a black market for IPv4 addresses is evolving right now. By refusing to accept the reality of address trading, in other words by *doing nothing*, they suggest, the Regional Internet Registries put at risk their policy authority and relevance. The proponents of a market expect that after the exhaustion of the remaining address space, the use and ownership of addresses will no longer be governed by regulatory policies but by logic of economic scarcity that imposes its own rules and incentives of circulation.

In this view, the risk of a black market would for now affect the Internet Registries and the database they maintain but ultimately the entire Internet infrastructure. As one of the authors of the market proposal points out, Internet addresses are odd objects that can be as easily copied as stolen. Without a functioning registry and a reliable database that accurately reflects the actual ownership of addresses, Internet addresses may begin to move and multiply without any control. As a consequence of a black market that evades the registry, addresses would lose their uniqueness and degrade into mere strings of numbers. A black market would also imply risks for the prospective buyers as they couldn't be sure that their purchases are not used by someone else. Chaos in the address space, however, would eventually endanger the Internet.

The opponents of a market for Internet addresses offer a very different risk scenario. In their view, combating a black market by means of creating an open market could lead to numerous undesirable side-effects and thus additional risks. For example, the trading of addresses may transform the common pool resource into an asset with the effect that the address space would be no longer governed by industry consensus but by property rights, tax and antitrust law. The creation of a market could thus entail governmental intervention resulting in the Internet industry's loss of its self-governance mandate.

Furthermore, monetarisation of Internet addresses is thought to corrode the community spirit and morals on which self-regulation has been based. Money is deemed to create opportunities for abuse and manipulation. For example, companies with large resources may hoard addresses for speculative purposes instead of returning excess resources to the Registries. The introduction of a market, indeed even the mere discussion of it, might be performative in the sense that it generates a monetary value for addresses where as yet there has been none. Once a market governs the movement of addresses, the Regional Internet Registries may find themselves without the authority to set or revise its rules and boundaries. New struggles over the address space could be the result.

Risks reflecting notions of the public good

The dangers ascribed to a market for Internet addresses suggest that in addition to the risks of *doing nothing* there are considerable risks related to *doing something*. The transformation of a shared public resource into a tradable good is regarded as dangerous, so dangerous in fact that to some observers the risk of a black market seems secondary. Put in a more abstract way, the anticipation and assessment of risks do not centre on one specific danger or harm but are in competing bundles of conflicting expectations, forebodings and conclusions. Some of the anticipated harms such as governmental intervention or the distortion of the community spirit can be, and are indeed, attributed to more than one course of action. The causal links between risks and regulatory action are not simply given and obvious, they need to be agreed upon. Hence, the development of a coherent and consensual understanding of the risks at hand turns out to be an important step in regulatory action.

It seems striking that all technical experts involved are selective in their perception of risks. While the proponents of address trading believe that a black market is already evolving out there, the opponents express doubts about both its existence and inevitability. For the latter group, a black market can be prevented by regulation whereas the former group expects regulatory authority to fade away sooner or later. The Internet Registry members who prioritise the risk of a black market, regard the integrity of the address database as the most crucial registry function in need of protection. The Registry members who privilege risks attributed to the monetarisation and proprietarisation of Internet addresses, regard their common pool resource status and the related governance model as the core institution that need to be preserved.

The potential harm mobilised in support of or opposition to specific courses of action is by no means trivial. They pertain to central institutions, values and procedures of the policy field such as the integrity of the address space, the definition of addresses as a public good or the tradition of self-regulation. What is believed to be at stake here is nothing less than the foundation of the Internet and its governing structure. Mary Douglas has coined the phrase 'constitutional dialogue' to grasp the reflective, self-assuring elements of public controversies about risks. Constitutional dialogues, in her view, concern dangers that affect the 'life and limb' of a community.

Facing the exhaustion of the address pool, the Internet Registries may have reached a crossroad. The continuation of the existing regulatory process no longer goes without saying. A new and, perhaps, reduced understanding of the Registry's role might be needed in the near future. In this situation, both groups focus on dangers that concern what they see as the *core of the social order* or the *public good*. Seen through the lens of cultural theory, important moments of choice are flagged as dangers to the social order of a community, in this case, the experts who are managing the Internet's address space. Risks are moralised by linking them to what is regarded as unacceptable behaviour, that is, *doing something* or *doing nothing* respectively.

Jeanette Hofmann is ESRC Research officer at CARR

Crime, terror and immigration as one global risk?

The nebulous construction of a global security issue

Adam Edwards points at the paradox by which government's 'threat assessments' legitimise ambiguous conceptions of risks and undermine the analysis of their causation.

During the period marked by the end of the Cold War and the announcement of a 'War on Terror', the perceived problem of 'transnational organised crime' became a focal point for high politics in the United Nations, European Union, G8 and other international relations fora. Advocates of the concept identified reasons for the emergence of a global crime problem in, inter alia, the increased mobility of illicit as well as licit capital and labour occasioned by the collapse of the Soviet Bloc, the deregulation of international finance, the erosion of national border controls and rapid developments in information and communication technologies.

It is possible to identify a 'post-Westphalian' narrative of security where transnational organised crime, along with terrorism and immigration, is perceived as a threat that cannot be contained within the borders of nation-states and which can circumvent the relatively laborious protocols of international cooperation between national ministries of the interior. Rather, in this narrative, the cross-border agility of illicit enterprise implies forms of regulation that can reduce, if not anticipate and prevent, the harms associated with trafficking drugs, people and armaments.

This narrative can be discerned in official policy statements and conventions, such as the United Nations Convention against Transnational Organised Crime and the European Union's Millennium Strategy for the Prevention and Control of Organised Crime, both agreed in 2000, and the European Union's five-year Action Plans for Freedom, Security and Justice. Exemplary statements of this narrative can be found in the EU Commission's 'first political assessment of progress on the implementation of the Hague Programme' and in the United Nation's Convention against Transnational Organised Crime.

This narrative is distinctive in its way of uncritically bundling various issues together: the new terrorism and illegal immigration are understood as interrelated threats to the security of nation states, generated by the greater freedom of movement of people, goods and services across national borders, the particular consequences of which are uncertain and unpredictable. The vocabulary of risk analysis and threat assessment, paradoxically, legitimises this sort of un-reflexive construction.

Assessing the external threat of organised crime

Post-Westphalian security is associated, in criminological thought, with the framing of organised crime as an 'external threat' by organised crime groups and/or individuals to otherwise unproblematic liberal democratic and capitalist political economies. The detailed presumptions of this narrative are best discerned in the EU's Organised Crime Threat Assessment (OCTA), first introduced in 2006, to impose some greater conceptual order on the uncertainties of this threat so as 'to help decision-makers identify strategic priority areas in the fight against serious and organised crime'.

OCTA presents an attempt to transform nebulous, uncertain and unpredictable risks into more predictable threats against which EU member states can better insure themselves. Central to this attempt is the concept of the threat assessment which is premised on qualitative intelligence rather than statistical modelling. The first OCTA defines the threat of organised crime in terms of the behaviour of organised crime groups and then proceeds to define 'key indicators' (international dimension, group structures, the use of legitimate business structures, their specialisation, etc.) with regard to these groups.

On the basis of these indicators, informed in turn by 'years of political and law enforcement experience', the 2006 OCTA report distinguishes between four categories of organised crime groups: principally territorially based indigenous groups, with extensive transnational activities, especially those with possibilities of shielding their leadership and assets even inside the EU; mainly ethnically homogenous groups with their leadership and main assets abroad; dynamic networks of perpetrators, whose organisational setup is less viable to attack from a law enforcement perspective than their communications and finances; and organised crime groups based on strictly defined organisational principles without an ethnic component, coupled with a large international presence.

In addition, political and law enforcement experience is used by OCTA to identify four regional patterns of organised crime (OC) groups: the southeastern region of the EU, with a focus on Turkish and Albanian OC groups; the southwestern region of the EU, with a focus on certain African OC groups; the northeastern region of the EU, focusing on the Baltic states and the influence of Russian-speaking OC; the Atlantic region, revolving mainly around the pivotal transnational role of Dutch, British and Belgian criminal organisations.

Finally, reference is made to the substantive activities of these groups, primarily drug trafficking, especially synthetic drugs; exploitation of trafficking in human beings and illegal immigration; fraud; Euro counterfeiting; commodity counterfeiting and intellectual property theft; and money laundering. The involvement of these groups in terrorism and illicit arms trafficking is also acknowledged but these are ruled out of the threat assessment due to the 'particularities' of these issues, their analysis as separate issues by the EU, the lack of material available to OCTA for their 'in-depth assessment' and, non-substantiated reasons for emphasising 'the need to focus on Euro counterfeiting, commodity counterfeiting, intellectual property theft and money laundering'. Separately, the threat assessment identifies 'key facilitating factors with regards to criminal markets', which provide opportunities for OC actors to commission serious crimes, such as document forgery and identity fraud, misuse of the transport sector, the exploitation of the financial sector, globalisation and borders.

In place of any scientific reasons for indexing rather than explaining the causes of the activities of the OC groups identified, OCTA states, 'Weighting crime areas against one another is inherently difficult. This too has less to do with analytical insights than value statements, reflecting different priorities in the Member States of the EU and beyond'. As such OCTA, as the proclaimed state of the art in threat assessment and exemplar of this framing of organised crime, is explicitly premised on political and value-driven description rather than analysis in any social scientific sense of this term.

The routine activity of organising serious crimes

Alternative analyses provided by social scientists show that these assessments, although premised on establishing causes, are in fact very nebulous and ambiguous as to the causes of these problems.

The conceptualisation of risk provided by OCTA is vulnerable to key criticisms: limited explanatory power and equivocal intelligence for the purposes of harm reduction; even where representative of a whole population of offenders, diagnosed threats are unlikely to be generalisable to other populations at different times and places; ecological fallacy in making inferences about individual actors from aggregate data and patterns.

Counterpoised to the imagery of the external threats presented by types of 'risky' actor (core nominals, OCGs, 'rogue states' etc.), is Felson's 'routine activities theory' of how serious crimes are actually organised. In his 'Ecosystem of organised crime' paper published in 2006, the analytical focus is switched from taxonomical groups to causal groups interacting in specific situations (e.g. exchanges between drug dealers and consumers in public parks or street corners). Emphasis is placed on the 'downstream' conditions which enable the commission of particular offences (i.e. the coming together of motivated offenders and suitable targets for crime in the absence of any capable guardians in specific places at certain times). Rejecting the 'dramatic fallacy' of media and politically constructed notions of 'organised crime' in favour of the assiduous study of those routine, everyday, mundane and 'small' activities that provide the possible conditions for serious crimes to be commissioned, enables causal theory to be built about tangible risks. Indeed, it implies a rejection of the very vocabulary of 'risk', with its tendencies towards the reification of social practices, and its replacement with a more realist articulation of concrete, not necessarily related, activities. As such, this frame supports an important countervailing analysis of activities that are uncritically related to one another in the post-Westphalian narrative. In an attempt to capture the antecedent conditions of serious crime and build more determinate causal accounts of their reality, other social scientists such as Dick Hobbs or John Lea have emphasised the politico-economic and cultural structures that underlie or undermine the routine relationships between 'motivated offenders', 'suitable targets' and 'absent guardians'.

Notwithstanding certain progress in the more subtle re-conceptualisation of 'organised crime', empirical understanding of global crime problems remains weak. Little is known about the integration of criminals within and across national borders. Existing research suggests the existence of relatively unsophisticated, episodic and fragile collaborations between offenders across national borders. Where criminal organisations have greater longevity they tend to be highly localised in the scope of their operations. In the one, non-classified, attempt to profile the distribution and attributes of organised crime groups in the UK, reports from police forces to the Home Office Organised Crime Notification Scheme suggested that of the 965 organised crime groups identified in 1999, 85 per cent were based in the UK, of those with known bases only 14 were based outside the UK, and of these 11 were based in another European country. Of those based in the UK, 40 per cent were active in other countries (overwhelmingly other European countries) but only 8 per cent were known to be active in more than two continents. Notwithstanding the methodological limitations of this scheme, this data provides limited support for the rhetoric of a globalised crime problem found in the EU's organised crime threat assessments or in relatively sophisticated but journalistic accounts.

None of this is, however, to deny the reality of transnational organised crime or suggest it is *only* an artefact of those producing governmental assessments of external threats, as in the United Kingdom Threat Assessment produced by the Serious Organised Crime Agency or the EU's Organised Crime Threat Assessment. The point is not to simply debunk these post-Westphalian conceptions of risk; it is entirely plausible that non-state organisations employing violence to further their political or cultural goals will employ, if not perform, lucrative illicit services such as drugs, people and armaments trafficking to finance their activities. The point is to build causal explanations of how such activity is accomplished, by whom and in what concrete instances, rather than infer some generalised, nebulous, threat.

The post-Westphalian articulation of organised crime, terror and immigration found in the conventions and strategies of the UN and EU feed a culture of fear. An allied security fetish threatens the erosion of established liberties and legal protections, as epitomised in recent disputes in the UK over the length of detention before trial for suspects of terrorism and the extension of surveillance powers to monitor private internet and telecommunications. It also has a tendency to reduce structural problems to individual situations and calculations. In these terms, the post-Westphalian narrative may well capture important tendencies of the unregulated movement of people, goods and services across national borders and how these escape nation state solutions.

Again, however, before inferring such tendencies, threats and 'necessary' security measures from flimsy intelligence and discredited conceptual frameworks, there needs to be a greater specificity about the causal mechanisms that produce concrete practices and connect them up to other practices. If, as is the social scientific consensus, we still lack the empirical research base for making robust assertions about the causal relations between organised crime, terror and immigration trends, it is remarkable that the UN and EU have felt confident in asserting these since the turn of the century.

Adam Edwards is a lecturer at the Cardiff School of Social Sciences, Cardiff University

Avoidable CATASTROPHES?

The assessment and management of global pandemic risks

We interview sociologists **Erika Mansnerus** and **Didier Torny** to explore the way in which pandemics, as truly global risks, lead to global coordinated action – or not.

The world was preparing for a pandemic of H5N1, but the current pandemic is due to H1N1. Have we missed the target?

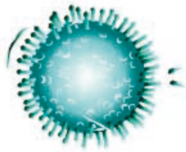
Erika Mansnerus: National and international preparedness plans are not targeted to a specific virus, but any infection that can gain the characteristics of a pandemic. Current plans are well prepared for the current outbreak of the A (H1N1) influenza. I wouldn't say that we've missed the target. On the contrary the international health authorities (WHO) have responded rather quickly to the situation and raised the pandemic alert phase to 5, which is the final stage before pandemic period. What this means in practice, is that the current alert phase defines a set of actions for the national and local public health authorities. These actions include providing educational material for the public, assessing the impact of containment measures and monitoring the development of antiviral resistance.

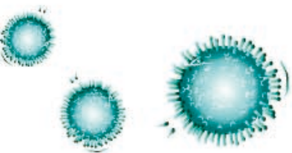
Didier Torny: Mexican flu undoubtedly surprised international organizations and influenza scientists for two reasons. Firstly, because the direct emergence of a virus transmissible from human to human, without being detected from animal to man transmission stage is unexpected in respect to the supposedly contemporary powerful surveillance systems. Secondly, because the recent history of flu pandemics (since 1889) had always seen the emergence of such an influenza virus in the Euro-Asian continent, where the main concentrations of animal and human are found. In that sense, the Mexican flu has taken authorities off-guard, as it can be seen in the escalading WHO phases, going from phase 3 to phase 5 in a matter of days.

What are the specificities of assessing a global risk?

EM: Global risks and their assessment require collaboration and coordination in order to be grounded on available data. The WHO initiative, GOARN – a Global Outbreak and Response Network is a significant attempt on establishing a network to support preparedness for global outbreaks. Yet, from the SARS epidemic we learned that there were delays in case notification, which then accumulated in the course of that outbreak. Furthermore, even the formation of up-to-date scientific base of evidence for preparedness work suffers from lack of international collaboration. The genetic databases lack the information from the sequences of the current viral strains of H5N1 pathogen. And these sequences carry the information of the origin of the pathogen, its genetic mutation and its geographic location – all of which contain important information for the preparedness work.

DT: Influenza is probably the disease on which we globally share the most data, standards and experience. If cross-national and global networks have their own distinctive flaws, whether originating in linguistic differences, scientific training or political struggles, they also produce their own risks. In 2005, deadly 1957 influenza viruses were mistakenly sent to 3700 laboratories in the world as testing kits and could have triggered by themselves a new pandemic!





How precisely can we anticipate where and when pandemics start?

EM: When a pandemic could start is not purely a matter of agreement, it is a phase in which the new subtype of an influenza virus has gained, through mutations, a form that effectively passes by the human immunity and becomes easily transmissible in human-to-human contacts. So, on the epidemiological side, there is a definite agreement on when a pandemic is a pandemic. However, from the social and political side, the agreement might be harder to reach. It is difficult to anticipate the process when a country admits that, indeed, we are experiencing a pandemic. If we think of the SARS epidemic in China in 2002, there were delays in reporting, giving access to information, and allowing international health officials to assess the situation. So, how do we know where the pandemic originates? Again, the epidemiological approach is to detect the potential origin by mapping the strain of the virus. The studies that analysed the current cases of H5N1 infections point to Asia: Vietnam, Cambodia, Indonesia and China. Yet, there have also been cases in Turkey and Egypt, which bring the threat of the pandemic to the gates of Europe. In terms of the cumulative cases of H5N1, the most likely origin of the pandemic is Southeast Asia. The current outbreak of the Swine flu, shows that despite the anticipation, a viral infection follows its own life-course. In the current case the suspected contact is between humans and pigs, followed by the capacity of the virus to mutate in order to sustain human-to-human transmission.

DT: The when question is the tricky one: not only nobody knows or even pretends to know, but it has no importance at all. The WHO rhetorical victory was to spread its vision. In its 'Ten things you need to know about pandemic influenza' in 2005 it asserted that 'The world may be on the brink of another pandemic.' This apocalyptical rhetoric doesn't have a dateline, it only gets closer everyday. According to the WHO website in 2005, 'Experts at WHO and elsewhere believe that the world is now closer to another influenza pandemic than at any time since 1968.' The fact that the pandemic has a shared technical definition is second to the incredible attention focused on this future event, which is presented as inevitable – in a Gilliam's Twelve Monkeys way: 'All countries will be affected, Widespread illness will occur, Medical supplies will be inadequate, Large numbers of deaths will occur, Economic and social disruption will be great.' Thus, the only thing possible is to assess its coming and prepare to face it in order to limit its consequences.

Is there then such a thing as a global coordinated approach against pandemics?

EM: One could say that there is a global coordinated approach, not only against the pandemic, but against public health risks in general. What is, then, this approach? The International Health Regulations (IHR), originally formed in 1969 to regulate only a handful of infectious diseases and revised in 2005 are at the core of that approach. The current purpose and scope of IHR is to 'prevent, protect against, control and provide a public health response to the international spread of disease'. The Regulations are a legally binding agreement among 193 WHO member states. On the basis of the Regulations, WHO has provided a preparedness plan and recommendations for national measures. However, on the EU-level comes, yet, an additional layer of coordination with a focus on unifying the national preparedness plans and measures, and supporting the epidemiological surveillance by ECDC, the European Centre for Disease Control. As this answer reveals, a global approach is not singular but nonetheless homogeneous, and coordinated by multiple international agencies. The definition of pandemic phases provided in the WHO global influenzae preparedness plan and the decisions made to update the pandemic alert phase according to the recent developments with the A(H1N1) influenza show the global coordination of the pandemic in action.

DT: The most striking aspect is the shared belief that the pandemic flu will come: over 70 countries have followed WHO wishes and written down a preparedness plan. Actual epidemics such as cholera in Zimbabwe or polio in Nigeria involves less countries, and global epidemics such as malaria have not triggered the same level of concern outside of public health arenas. So, pandemic flu is a global health legitimate topic. There is no 'Global pandemic plan', only a 'Global pandemic information'. Of course, it implies that only the rich get richer, and developing countries have been at first largely left out, even if WHO has tried to build global stockpiles and OIE (World Organization for Animal Health) paid for some animal health infrastructure. WHO has not only been able to make pandemic flu a topic on numerous national governments agenda, but to define a global framework to write down preparedness plans: what questions have to be answered to make a good preparation? What actors have to be gathered and what is at stake? Its success in mobilisation has also been useful to push for the revision of the International Health Regulation which now encompasses all kinds of infectious threats and gives WHO a key role in risk assessment and favours international cooperation in sharing epidemiological data, especially through integrated network such as GOARN. The main resistance to its supremacy has come from other international organisations, FAO and OIE, that have underlined the lack of concern for the current avian epizooty compared to the overwhelming preoccupation for the future human pandemic. As the head of OIE repetitively said, to fight the pandemic at its source means to develop animal health in developing countries, provide vaccine for poultry, and give money to farmers whose animals are culled. These debates had a deep impact as it can be seen in the interest for the zoonotic part of the current pandemic (the controversy over its naming being the most obvious example) or in the controversial Egyptian decision to cull thousands of pigs.

Has the reference to other 'iconic' global events, particularly the 1918 pandemic, been helpful in preparing for the next pandemic flu?

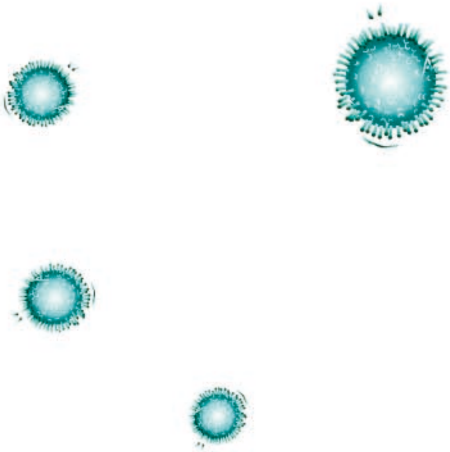
EM: One could ask how the next pandemic looks like – and to what extent it shares any characteristics of the past pandemics (1918, 1957 and 1968). It is argued that none of the past pandemics will provide a satisfying reference point to the future one. However, they provide an important base for preparation plans. Pandemic preparation plans could be approached from two directions. They are initiated by the International Health Regulations, and they are grounded on scientific evidence. This evidence base consists of results from research and modelling and it is, as the UK National framework for responding to an influenza pandemic claims 'of critical importance to the strategic and operational approach'. What kind of help the past provides to the attempts to anticipate and prepare for the future? First, the past provides data that allow current estimations on case fatality, incubation period, occurrence of infectious waves and population statistics of the most affected age-groups. Secondly, the past epidemic of 1918 provided the viral strain itself for genetic cloning. The strain was isolated from bodies buried in permafrost. At the moment, the virus is reconstructed and studied for its pathogenesis, which tells us, for example, how virulent the strain was and why it was so deadly, since it caused approximately 50 million deaths worldwide. Thirdly, as emphasised in the UK framework, epidemiological and operational modelling provide tools to produce evidence for the preparedness plans. The model assumptions are derived from the past data, and when the data are not available the past turns into a good source of estimates. So, the past is helpful – and yet it is important to see that the past is not a mirroring of the future.

TALKINGPOINT

DT: The 1918-1919 pandemic has been primarily used as a precedent to show the potential impact of a pandemic, though it happened in an antiviral-less world. The other main event is the 2003 SARS 'pandemic', which was mistaken for influenza in its primary steps. The SARS epidemic has been the opportunity to establish four statements: (1) an epidemic starting from a singular point in a country (the famous H hotel in Hong Kong) could effectively spread to three continents in a matter of weeks; (2) consequently, airport flow controls are crucial to limit the scope of the first epidemic wave. The effect can be seen in preparation plans that have included this dimension from 2004 on; (3) health care workers in hospitals have to be heavily protected, especially through the use of masks, which triggered a huge respiratory mask production in the western world; (4) open international scientific cooperation, primarily through WHO collaboration centres, could dramatically quicken the production of knowledge both on pathogenic agents and means to protect against them.

The media attention for the pandemic varies across time. How beneficial or detrimental is it to prepare and fight pandemics?

EM: In a way, the media attention carries a dual nature. It is beneficial in terms of reminding the general public of the presence of the current threat. However, continuous attention may also result in media tiredness, and raise questions on the reasonability of the whole pandemic preparedness work. Yet, media plays a crucial role in keeping the general public informed during the real event. How this will happen and whether the media manages to communicate the preparation work in beneficial or detrimental manner remains an open question. If we think of the most recent, media-fuelled public health controversy, the MMR vaccine (measles, mumps and rubella triple vaccine, implemented in the UK 1988), we notice that media managed to keep 'false facts' about the adverse effects of the vaccine circulating for a decade. When it comes to the current H1N1 outbreak, media loves strong metaphors – characterising the potential of the current virus to mutate into an 'Armageddon' virus is one irresponsible example possibly just increasing concerns and worries. On the other hand, there is discrepancy in the numbers about the confirmed cases published by different sources. Yet, the public health officials use media as the way to inform the audience about the recent development of the pandemic. This duality – which could be challenged by asking how reliable is the image of the current pandemic given to us – seems to remain when news about pandemic are reported.



'The impact and importance of social scientific expertise lies in the fact that a pandemic outbreak is never only an epidemic: it affects societies, economies, social relations, and raises ethical questions.'

DT: From a logical point of view, it is hard to answer: we don't really know what could be effective in 'real-world pandemic'. In the long run, have constant alarms and follow-up of warning signs been useful to change everyday life practices? Or have they only raised irony and bird flu jokes as the coming pandemic would never happen? Time will tell. From a political point of view, it has been very useful to raise probably unprecedented money outside of the military domain, to build masks and antiviral stockpiles, to have public health campaigns and public debates, at least in western countries. The media have been under the heavy influence of international organisations which would point out every animal-to-human contamination as potentially crucial and make wild birds migration a newsworthy subject. Apart from OIE and FAO, few critical voices have been heard in the main media, contrary to the Internet where uncertainties on the effects of antivirals have been used to denounce such spending of public funds, or even accusing WHO and western governments of playing into the hands of pharmaceutical firms. Even the current H1N1 episode could go both ways: if it ends in only hundreds of deaths, then it could be seen, just like the 1976 US swine flu, as a proof of WHO paranoia or lack of interest for other important health or social issues.

Social scientists have been consulted by their governments in the preparation for the pandemic, but what impact can they hope to make?

EM: I can only address this question from a general point of view, not having been personally involved in consultation work. The impact and importance of social scientific expertise lies in the fact that a pandemic outbreak is never only an epidemic: it affects societies, economies, social relations, and raises ethical questions. If the preparedness work relies solely on epidemiological or modelling expertise, questions such as how humans behave under a pandemic, how to inform the members of public of the course of pandemic, or what kinds of actions are needed to keep the society functional during a pandemic, are addressed only partially, without beneficial contribution from the social sciences. On a more specific level, social scientific expertise provides a point of reflection to the various preventive and counter measures in the event of a pandemic. How quarantine, school closure or travel restrictions are likely to be accepted by the general public can be crucial for the course of the pandemic itself.

DT: As I have been in some of these committees for the French Ministry of Health, I can give a straight answer: Very limited, for two reasons. (1) Sociological pragmatism is shared: in the first steps of writing plans, social sciences could be useful in pointing out the lack of realism, implementation problems and counter-effects of some measures such as uncontrolled school closures, or raw antiviral stockpiling without defining the ways for distributing such drugs to the population. As time goes by and as the number and the type of actors grow (health, defence, education, police, law), these criticisms are either taken into account or voiced in the media. For example, antiviral trafficking, massive fleeing from the cities or a long-term shortage of Asian-imported goods have been considered. (2) Sociological foresight is limited: predicting a range of institutional, collective or individual behaviour is rather easy but crunching numbers is another story. Would 20 per cent or rather 50 per cent, or perhaps even more health care workers not fulfil their professional duties to avoid contamination or protect their families? What percentage of parents would go to hospitals with ill kids, even if they are asked to stay at home and wait for a GP? The answer could be crucial in a preparation plan for defining appropriate measures, but there is no way to tell, or at least I won't assume such predictions, even through the use of questionnaires, focus groups or simulations. The uncertainties on the epidemiological or biological level are probably as high as the social ones as factors such as the lethality level of the virus, effectiveness of masks in real-life conditions, populations at risk, are not known. So, the usefulness of social scientists, as their biological counterparts, is rather in asking new questions and raising new scenarios rather than giving straightforward answers.

Erika Mansnerus is ESRC Post-doctoral fellow at CARR. **Didier Torny** is research fellow at the French National Institute for Agricultural Research (INRA)

Financial Governance and the limits to transnational risk regulation

Kevin Young depicts the two-way relationship between national and transnational regulators of finance.

The recent global financial crisis has underscored the importance of regulating financial risks beyond the national level. Amidst the flurry of recent discussion and debate on what should be done and how, understanding the structure of governance that already exists is essential. Unlike many of the more well-known international institutions of financial governance such as the World Bank and the International Monetary Fund, many of the institutions which seek to monitor and regulate private capital flows are organised in a manner that is better described as transnational. Rather than conforming to a traditional model of how international institutions behave, wherein individual states seek a collective goal through a formal process of negotiation, transnational institutions are constituted by agents and institutions that are not official delegations from states, and involved in non-state, non-formal engagements between different parties. Moreover, their decisions are not even authorised by states.

A cursory look at the existing institutions of global financial governance confirms this depiction. The international regime for the regulation of stock exchanges, the International Organization for Securities Commissions, is a non-state regime of risk regulation constituted by securities commissioners. The equivalent regime in the field of accounting, the International Accounting Standards Board, is in fact a completely private sector initiative. The Financial Stability Forum, the subject of so much recent discussion in the G20 summits, operates in a highly transnational manner as well, with not only ministries of finance, but also regulatory agencies and central banks playing a central role in this informally organised institution. While each of these institutions plays an important role in the existing system of financial governance, both their transnational character and their policy reach are arguably dwarfed by the Basel Committee on Banking Supervision, the institution which constructs the common set of standards by which banks are to be regulated. The Basel Committee embodies the high water mark of transnational risk regulation, and can thus help us better understand its limits.

As an informal group within the Bank for International Settlements in Basel, Switzerland, the Basel Committee began in 1974 after it was becoming evident that the re-emergence of global finance was causing policy dilemmas which could not be addressed at the national level alone. Until quite recently, the Basel Committee comprise financial regulators and central bankers from what is known as the G10 – a club of countries which actually includes 13 states: Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, and the United States. At the end of March 2009, regulators and central bankers from 7 additional states were added: Australia, Brazil, China, India, Mexico, Russia, and South Korea. Scholars of financial governance have long examined this institution for its unique characteristics. Decisions are typically made on the basis of deliberation under a consensus rule, and policies are constructed on the basis of scientific studies of highly technical issues. It regularly consults with non-state actors, such as international private sector associations like the Institute of International Finance and the International Swaps and Derivatives Association. Negotiations are made behind closed doors, purposefully shielded from media attention, national legislatures, and outside interest groups.

The Basel Committee has been heralded for its transcendence of many of the problems that have beleaguered regulatory initiatives at the international level. It is able to draw on a network of specialists organised at the transnational level without being encumbered by national politics. In many of its various initiatives over its 25-year history, it has shown an efficiency and flexibility that is the envy of more formalised governance institutions. Yet while it provides a powerful example of the possibilities of the transnational governance of risks, it also demonstrates its limits. When regulatory preferences diverge among members of the Basel Committee, and the issue cannot be resolved through deliberation, conflicts are resolved through a process more characteristic of classic diplomacy and realpolitik.

The formation of the Basel II Accord, the Basel Committee's most significant and detailed set of regulations for the banking sector, provides a good illustration of the equivocal efficacy of transnational risk regulation. The Basel II Accord tried to match the riskiness of bank behaviour with the amount of regulatory capital banks had to hold. Because of the redistributive nature of this regulation, financial sector lobbyists organised on a scale never before seen. In some cases, when these private sector groups managed to get their legislatures involved in their cause, the Basel Committee began to work much more in line with classical international negotiation than anything transcending it. When the German delegates to the Basel Committee had a different view of the riskiness of commercial real estate than the rest of the Committee did in 1999, the conflict was resolved through direct governmental intervention. The constraints that German financial sector lobbies imposed upon the delegation meant that a special national carve-out had to be produced for the German economy. The same happened in 2000 with the use of internal credit ratings, whereby a widespread politicisation of the Basel Committee's activities by private financial groups led to German legislative hearings on the issue – hearings which gave the German delegation the opportunity to have their demands met very directly. In 2003, when the Basel Committee's design for credit card lending was not treated with high regard by that industry in the United States, a concerted campaign on behalf of that industry meant that negotiations had to come to a standstill until US credit card lenders received a regulatory response that was more in line with their own preferences.

These examples are highlighted not because they tell us something about private sector influence in regulatory formation (although that is an interesting story in and of itself), but rather because they speak on the limits of transnational regulation, even in strongly transnational institutions like the Basel Committee. They underscore the fact that even highly transnational policymaking processes can be subject to pressures and constraints emerging from the national level.

The transnational regulation of risks in the financial sector has offered a flexibility and efficacy that is not typical of purely 'international' initiatives. Yet there exists an inherent vulnerability to national-level demands and constraints even in the most sophisticated systems of transnational governance. Understanding the limits to the transnational regulation of risks in this way can help to provide a more solid foundation for discussion of how new regulatory initiatives might best be designed.

Kevin Young is research student at CARR

How climate change became a business risk

Philipp Pattberg shows that corporations feel all the more responsible for an environmental issue as it is framed as a business risk. But how effective is this to address environmental problems?

Many observers have greeted the entry into force of the 'Kyoto Protocol' to the United Nations Framework Convention on Climate Change in 2005 as a landmark achievement in combating global climate change. However, this treaty is but a first necessary step. Even full compliance with the Kyoto agreement will not prevent 'dangerous anthropogenic interference with the climate system' – the overall objective of the climate convention. This situation has led to wide-ranging debates among policy makers, academics and environmentalists on the future of climate governance after 2012.

Within this context, a growing number of scholars have voiced their concern about the problem-solving capacity of the state and the international state-system. Increasingly, scholars and practitioners alike acknowledge that solutions to the challenges of global change do not exclusively originate from public sources of authority (governments, international organisations such as the United Nations). As shown in my latest book *Private Institutions and Global Governance*, they are co-produced by a host of non-state actors whose authority is contested and whose legitimacy is questionable. Next to traditional international negotiations, a multitude of transnational climate governance arrangements have emerged. Consider for example the C40 Global Cities Leadership Group that brings together London, Los Angeles, Tokyo and many other major cities in a substantive attempt to mitigate carbon dioxide emissions or the Carbon Disclosure Project (CDP) that uses the power of institutional investors to force companies to disclose their historic and future carbon emissions.

Similarly, a number of investor-led initiatives have emerged in recent years (e.g. Institutional Investor Group on Climate Change, Australian Investors Group on Climate Change, Investors Network on Climate Change) that aim at changing corporate behaviour and strategies in light of the perception of climate change as a business risk. The framing of climate change as a business risk is the result of the action of one particular non-state organisation, the Coalition for Environmentally Responsible Economies (CERES). CERES has been a critical driver in turning climate change into a business risk. Novel instruments of disclosure and transparency have been devised to manage the business risk of climate change and have become crucial tools in the climate governance toolbox. Will such developments have a long-term positive effect on global greenhouse gas emissions or sink without a trace in the endless sea of corporate social responsibility rhetoric? How effective is non-state transnational governance?

Climate change as a business risk

Companies on both sides of the Atlantic moved towards a more cooperative stand on climate change, acknowledging the risks and opportunities for business actors and the resulting responsibility to act by the year 2000. Previously, the threat of regulatory controls had prompted companies to aggressively reject the 'global warming hypotheses'. It is the very same threat that now prompts them to acknowledge the existence of a risk.

The risk that climate change poses to companies varies depending on the energy intensity and the fuel source mix for their production, geographic location of production facilities, product mix, technological trajectory of individual companies, company-specific risk management capability, and the entrepreneurial risk companies are ready to take. Despite these differences, companies will nevertheless face some pressure from climate change. Simply put, risks from climate change fall into four categories. First, regulatory risks when companies with significant greenhouse gas emissions or energy intensive operations face risk from new regulation, both at national and international levels. Second, physical risks for production and transport facilities deriving from increased intensity and frequency of severe weather events such as prolonged droughts, floods, storms and sea level rise. Third, reputational and competitive risks that will threaten companies which miss the opportunity for innovation. Finally, companies face increasing risks from litigation. In particular, carbon-intensive industries such as oil and gas, electric utilities, and automobile manufacturing are already starting to face litigation concerning corporate contributions to global climate change. For example, a number of attorney generals, the City of New York and three land trusts brought suit in 2005 against the five largest electric utilities in the United States, on the grounds that they were substantial contributors to the 'public nuisance' of global warming.

CERES (Coalition for Environmentally Responsible Economies) has been one of the primary drivers of manufacturing climate change into a business risk. In the words of a CERES staff member, 'CERES has really driven this issue and made it into the press.' CERES was founded in 1989 as a partnership of the institutional investors and US-American environmental organisations after publishing the so-called Valdez Principles, utilising the huge public outrage around the Exxon Valdez oil spill, which occurred on 24 March the same year. The original idea for CERES emerged at a board meeting of the Social Investment Forum in 1988. The catalyst was the fact that most of their clients considered environmental performance a key issue for investment decisions. However, serving those clients proved difficult because there was no publicly available information on the overall environmental performance of companies, or it was simply very hard to obtain.

Based on this observation, CERES engages companies in an ongoing dialogue and works towards the subsequent endorsement of environmental principles that establish long-term corporate commitment to continual progress in environmental performance. The ten-point *Corporate Code of Conduct* developed by the organisation establishes an environmental ethic with criteria by which investors and others can assess the environmental performance of companies. The pivotal commitment, established in point ten, is the corporate obligation to report regularly about the state and the improvement of their environmental behaviour. Hence, the Code popularised the idea of environmental reporting, but also contributed to a stronger awareness of the financial consequences of environmental misbehaviour of corporations. As a result, environmental improvements, lowered investment risks and positive corporate performance were expected to go hand in hand.

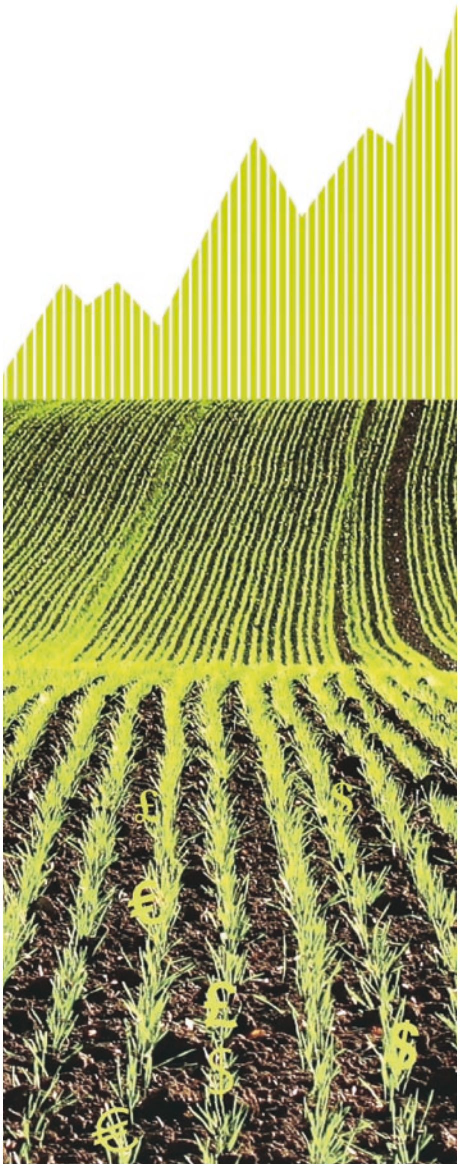
During its first joint meeting in April 1989, the new coalition agreed to focus on two priority issues: first, the development of an environmental mission statement for companies, which was envisaged as being more than a management tool, but rather a kind of environmental ethic for corporations; and second, the development of adequate instruments for gathering and disclosing important corporate environmental information. This second priority proved highly influential in the broader context of transnational climate governance as it paved the way for disclosure to become a central governance tool in the environmental/sustainability domain. As a CERES staff member once stated, 'The number one issue is disclosure. We want a standardized way of letting investment managers know about environmental aspects of the business.'

Closely connected to the aim of developing adequate instruments for gathering and disclosing important corporate environmental information, CERES has been active in engaging a new class of actors, namely public pension funds. In particular, the changed voting behaviour of large pension funds, which have started to vote in favour of resolutions calling for adequate policies concerning climate change, has attracted much media coverage over the past few years. In the view of one observer, CERES has been a prime mover and organiser of these critical resolutions, particularly by highlighting the business case and approaching mainstream advisors, convincing them that climate change is a core business risk and not just an elusive environmental concern.

A clear indicator for the success of CERES' attempt to challenge the existing discourse on business and climate change can be found in the 2005 record high voting support for shareholder resolutions seeking greater analysis and disclosure from companies about the financial impacts of climate change. One good example is the recent attempt made by CERES to actively (re)define industry's stance towards climate change. As part of this strategy, CERES has produced and commissioned a range of studies that raise the issue of climate change as a risk for business and investors. For example, in a 2002 report CERES states: 'The bottom line [...] is straightforward: climate change represents a potential multi-billion dollar risk to a wide variety of U.S. businesses and industries. It should, therefore, command the same level of attention and urgency as any other business risk of this magnitude.'

Consequently, CERES has developed a number of tools to increase the transparency of corporate responses to climate change. In its latest report, the RiskMetrics Group (commissioned by CERES) employs a 'climate change governance framework' to evaluate how 48 US companies and 15 non-US companies are addressing climate change through board oversight, management execution, public disclosure and strategic planning. In its 2008 'Corporate governance on climate change' report, CERES assert that 'Given this rapidly changing landscape [of climate change and the political responses to it, PP], it is particularly important to identify which companies are making climate change a transformational issue for their business.'

CERES' attempt to alter the existing discourse on climate change within the business community is also reflected in recent developments in its communications strategy. The media strategy that has been developed from 2001 on reflects the situation that CERES is often perceived as an environmental advocate, while its audience are really the companies and the financial markets. As one staff member recalls, 'the shift that CERES



tries to make is really about getting our issues into the financial press; not on the environmental page, but in the business section'. This attempt has been rather successful with more than ten articles on the issue of climate change and business risk in major US and international newspapers, including The *Wall Street Journal*, *Financial Times*, and *New York Times*, in 2003. Although the articles do not necessarily mention CERES, they make a strong case for the issue of climate change. The *Wall Street Journal* for example comments: 'Here's what companies' directors have to worry about these days: accounting scandals ... earnings problems ... oh, and global warming'. In addition, the *Financial Times* recalls: 'There was a time when the most prominent voices in the debate on climate change were environmental lobby groups, activists and non-governmental organisations. These days, however, new speakers are entering the fray: banks, insurers, investors and other organisations in the financial services sector.'

Effective non-state regulation?

The perception of climate change as a major risk for corporations has emerged out of the activities of a distinct network of non-state actors, ranging from non-governmental environmental organisations to institutional investors and other financial entrepreneurs that have more recently acquired agency in global climate governance.

Although many observers acknowledge that transnational voluntary governance experiments have considerable impact (e.g. London has pledged for a 60 per cent reduction in carbon dioxide emissions below 1990 levels by 2025; more than 2,000 multinational corporations today report on their historic and future carbon emissions following the CDP guidelines), it seems necessary now to initialise a trajectory towards more political oversight of private climate change mitigation policies.

While recognising their potential contribution towards climate change mitigation, the public at large simply has insufficient information to evaluate effects, both intended and unintended, of private climate governance arrangements that are based on the perception of climate change as a business risk. To address the problem of insufficient coordination among existing environmental programmes and initiatives, a number of scholars have suggested setting up a world environment organisation that could integrate existing governance interventions into a coherent whole. A similar argument can be made in the case of transnational climate governance where increased coordination among, for example, the climate convention and business-driven schemes, could be mutually beneficial. However, similar to the discourse about a world environment organisation, the possibility of administrative congestion and overburdening of already burdened bureaucracies presents a powerful caveat to such an idea.

Therefore, I propose a light coordination mechanism that would deliver real benefits, thrive on limited resources and could be easily integrated into any international successor treaty of the current Kyoto Protocol. As a first step towards greater coordination between international and transnational governance mechanisms, a clearing house should be institutionalised that gathers information about existing non-state climate governance initiatives, evaluates their complementarity with international mechanisms and makes recommendations towards improved integration. The Commission on Sustainable Development could host such a clearing house that essentially provides an authoritative overview of the current landscape of transnational climate governance. As an observer to the conferences of the parties, the Commission could serve as the missing link between the international negotiations and the burgeoning arena of transnational climate governance.

Philipp Pattberg is senior researcher and project leader at the Institute for Environmental Studies (IVM) of the Vrije Universiteit Amsterdam.

CARREVENTS

Close Calls Conference

The 2009 CARR annual conference addressed the theme of 'close calls: organisations, near misses, alarms and early warnings'. Although such a focus might seem 'too late' given the recent manifestations of failure in the global financial system, it is undoubtedly relevant to how organisations, nations and transnational bodies develop capacities to represent and learn from events which, though not themselves accidents and failures, are nevertheless signals of dangers.

Todd LaPorte, who pioneered the study of 'reliability seeking' organisations, opened the conference with a series of reflections on 'operational wisdom'. His presentation distinguished between 'close calls', understood as an abrupt experiential encounter, and 'near misses' as a formalised category within information systems. Laporte used this schema to argue that organisations need to give more credence to close call experiences as a stronger basis for shared learning than formal reporting systems. He also suggested a need to institutionalise 'honour' for the self reporting of error. Laporte was followed by Andrew Hopkins who outlined the generic lessons arising from the explosion at the BP Texas City oil refinery in 2005. The reward system at BP was highly focused on operational health and safety metrics, and insufficiently oriented to the process safety issues which were at the heart of accident.

The health field was represented by a number of papers. Mary Dixon Woods and Justin Waring addressed the underlying logic of registration as an early warning system for 'dodgy doctors', a logic with an inherent tendency to create a high level of false alarms. Nicola Mackintosh and Jane Sandall discussed a ward-level early warning technology for patient deterioration, arguing that such instruments were likely to have a number of unintended consequences, not least by becoming tools for performance assessment for medical staff. Similarly, Anu Suokas argued that risk assessment of patients is a complex, situated task which is not necessarily well suited to a 'track and trigger' system. Myles Leslie's case study of coroners in Toronto also suggested that near misses do not necessarily lead to organisational learning and transparency; they may result in the suppression of error coupled with local forgiveness for the sake of overall system stability. Finally, Dingwall and Vassy addressed the issue of when and how a 'cluster' of deaths can become an official signal for medical authorities. Drawing on the example of the spike in heatwave related deaths of elderly people in France, they suggest that it was the undertaker network which first registered the phenomenon, rather than the bureaucratic and unconnected system for officially recording deaths.

At a broader conceptual level John Downer distinguished between normal accidents and 'paradigm' failure, suggesting that engineers operate within design paradigms which can be sticky, and which require more than near misses to change. Ulku Oktem outlined the Wharton blueprint for a near miss management system, emphasising important links between quality and risk issues, with the former acting as proxy near miss events. In the closing plenary session, Paul Shrivastava presented his conception of a 'near miss society' in which crisis was to be understood as a process, rather than as a set of discrete, exceptional events. The near miss society is one in which all systems are under strain in interconnected ways, and this forces us to seek new understandings of organisational operations.

In addition to many other papers dealing with nuclear safety, universities, the construction industry and aviation, there was a practitioner panel session in which Mark Cooke (UBS), Martyn Jones (Deloitte) and Richard Hobbs (Beachcroft Consulting) provided the basis for a lively discussion about the sources of the financial crisis. There was broad agreement that signals of 'overtrading' for many organisations clearly existed and that the crisis, if not the its exact timing and shape, was foreseeable. Indeed, it was emphasised by all the speakers that the chain of causes always begins with internal factors, not least among which are senior management and governance issues.

Overall, the conference achieved its aim of creating a debate about the nature of close calls, near misses and early warning systems which cut across both intellectual disciplines and fields of practice. Many of the key themes to emerge from the conference were already recognised by Barry Turner in the 1970s. For example, ex post analysis of incidents of failure suggest that there is no lack of early warning 'data', and that the problem lies, with the exception of 'paradigm failure', in an institutionalised incapacity to assemble and act upon such data. Turner also recommended that we should listen to actors at the margins of organisational hierarchies whose views are often prescient in hindsight.

Another recurrent theme concerned the design challenges for material technologies and scorecards in near miss/early warning management. Many papers pointed to the dangers and paradoxes of mechanising practitioner judgement about 'tail events', particularly where 'going around the system' is a crucial source of intelligence. In addition, a sociology of 'near misses' would need to confront complex problems of epistemology and values i.e. whether for any given field of practice false positives (false alarms) are worse than false negatives. The topic of 'near misses' is fascinating because there is probably no definitive answer to this question. Organisations and societies pass through changing phases and appetites for making performance and risk triggers more or less sensitive, more or less conservative. There is no overarching 'technological fix.'

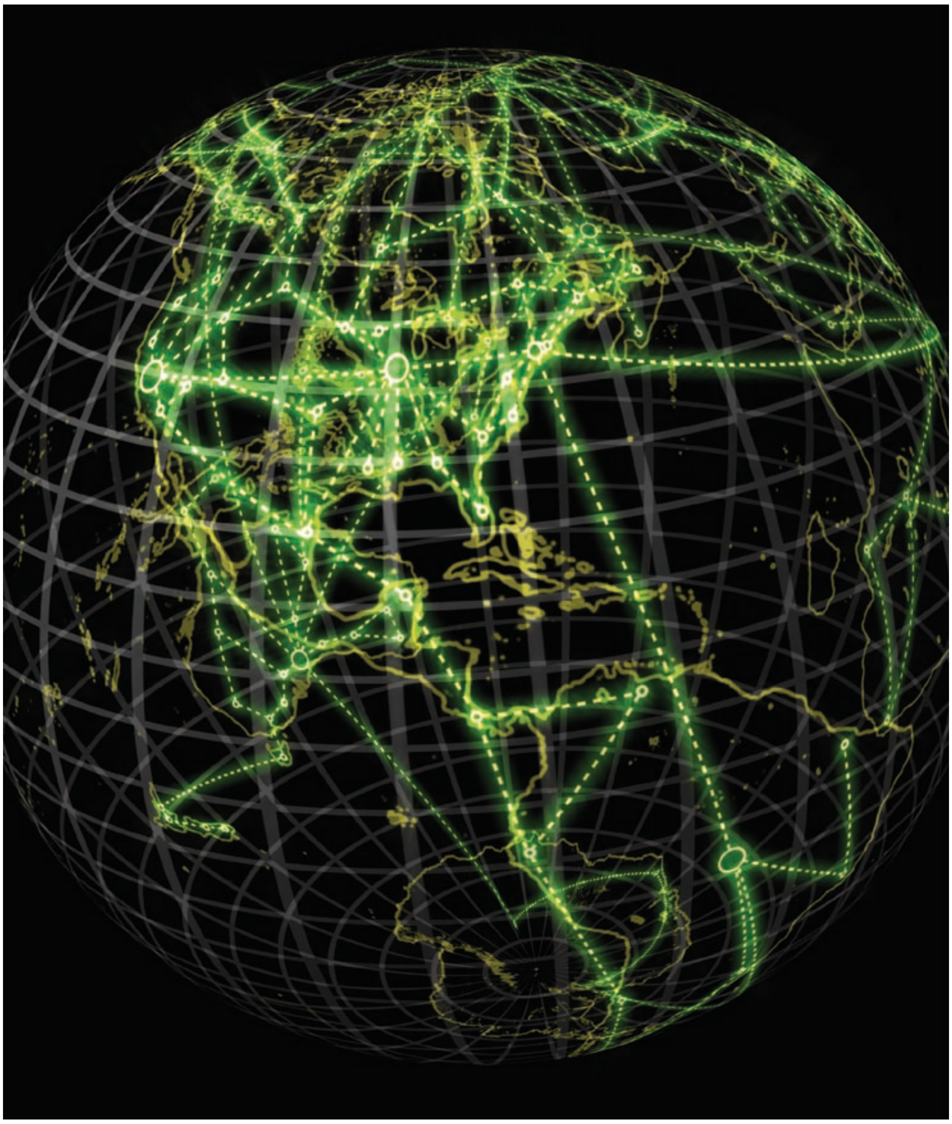
Arguably the broad cross-disciplinary field of close calls, nears misses and alarms belongs to what might be called 'hot' end of risk management which requires organisations to be alert and reactive to relevant risk events. Yet, such events are not just 'out there' – they must be constructed as management objects of attention. This inevitably brings them closer to the dominant zone of 'cold', legalistically constructed risk management with its emphasis on compliance and due process. As a number of papers in this conference suggested, 'hot', experientially rich risk management inevitably 'cools', and the local and intuitive becomes standardised and centralised, leaving us with less responsiveness and less 'operational wisdom' in LaPorte's terms. How to prevent this is one of the thorniest issues in both organisational design and psychology. How, for example, might we construct 'hindsight organisations' which combine both a forensic capacity to learn with values of forgiveness? Today it seems clear that the forensic orientation will dominate any talk of forgiving.

CARR workshop 'Manufacturing global risks'

David Demortain and Jeanette Hofmann organised a workshop at CARR on the manufacturing of global risks. The two-day workshop took place on 8 and 9 of January. The aim of the workshop was to understand how global risks are framed and represented, measured and evaluated, in particular by legitimacy-seeking transnational regulatory actors. In broader terms, it explored the complex inter-relation between risks and their regulation at the global level. In close relation to CARR themes, the workshop looked at the forms of representation that allow the transport of risk issues across borders and portray them as transnational regulatory issues, the configuration of actors by which this takes place and the circulation of regulatory and professional practices. Speakers from a variety of European universities and research centres were invited to present an altogether high quality and original collection of papers.

Several papers explored the patterns of dominance, disagreement or competition between definitions of risks, such as Adam Edwards' (Cardiff University) reflections on the articulation of the concept of 'transnational organised crime', Jeanette Hofmann's research on the competing visions of risks related to the Internet address space or Anna Leander's (Copenhagen Business School) inquiry into the use of the risk concept by private military companies. Another series of papers endeavoured to study how global risks create opportunities for international organisations to deploy projects of standardisation. Andrea Mennicken (CARR) studied the action of multi-lateral agencies in the production and spread of global accounting standards and Didier Torny from INRA focused on the failed attempts of the World Health Organisation to impose on states its harmonised avian flu pandemic preparedness plan. Finally, three papers looked at private non-state actors in the construction of global risks. David Demortain presented on transnational sets of scientific experts and their role in channelling together experiments and tests of the risks of novel foods, and supporting a standard representation of their risks and the ways to monitor them. Philippe Pattberg from the University of Amsterdam discussed the framing of climate change as a risk for corporations. Leonard Seabrooke (Copenhagen Business School) and Eleni Tsingou (Warwick University) looked at the mixing of public and private roles in organisations that participate in the international regulation of finance.

The paper highlighted the complexity of global risks when considered as regulatory issues. Global risks are not simply 'out there' but can also be taken as a product of existing regulatory forms, processes and actors. The papers generated animated discussions between all speakers as well as with other CARR attendants. They are expected to lead to the publication of a special journal issue.



RECENT SEMINARS

Regulating doctors and the custody of virtue

Professor Mary Dixon-Woods

University of Leicester
20 January 2009, 1-2.30pm

Seeing risks amongst the numbers: visualisation techniques in financial markets

Dr Michael Pryke

The Open University
17 February 2009, 1-2.30pm

Nanotechnology regulation: Prospects and Problems of Transatlantic Convergence

Dr Robert Falkner

LSE
12 May 2009, 1-2.30pm

Risk Governance for Food and Nuclear Safety in Japan – Institutional Reform and Its Implementation

Professor Hideaki Shiroyama

University of Tokyo
26 May 2009, 1-2.30pm

CARRINPRINT

PUBLICATIONS

Governance als Prozess. Koordinationsformen im Wandel
Sebastian Botzem, Jeanette Hofmann, Sigrid Quack, Gunnar Folke Schuppert, Holger Straßheim. 2009. Baden-Baden, Nomos Verlag.

Reshaping European Regulatory Space: an evolutionary analysis
David Coen and Mark Thatcher. 2009. *West European Politics*, 31(4), p.806-836.

Rendre transférable plutôt que diffuser. Le développement de la norme internationale HACCP
David Demortain. 2009. In Y Schemeil and WD Eberwein (eds.). *Normer le monde*, Paris, L'harmattan.

Standards of scientific advice. Risk analysis and the formation of the European Food Safety Authority
David Demortain. 2009. In J Lentsch and P Weingart (eds.). *Scientific Advice to Policy Making: International Comparison*, Berlin, Barbara Budrich Publishers

High Quality Regulation: Its popularity, its tools and its future
Martin Lodge and Kai Wegrich. 2009. *Public Money & Management*, 29(3), p.145-52.

Human Factors at Sea: Common patterns of error in groundings and collisions
Carl Macrae. 2009. *Maritime Policy and Management*, 36(1), p.21-38.

Making Risks Visible: Identifying and interpreting threats to airline flight safety
Carl Macrae. 2009. *Journal of Occupational and Organizational Psychology*, 82(2), p.273-293.

Reputational Risk as a Logic of Organizing in Late Modernity
Michael Power, Tobias Scheytt, Kim Soin and Kerstin Sahlin. 2009. *Organization Studies*, 30(2/3), p.165-188.

Performance and the logic of the audit trail
Michael Power. 2009. Journal of the *New Lacanian Society*, forthcoming.

RECENT CARR DISCUSSION PAPERS

www.lse.ac.uk/collections/CARR/documents/discussionPapers.htm

DP 53 When Failure is an Option: Redundancy, reliability and regulation in complex technical systems
John Downer, May 2009

DP 52 The Administrative Burden Reduction Policy Boom in Europe: Comparing mechanisms of policy diffusion
Kai Wegrich, March 2009

DP 51 Transnational Institution Building as Public-Private Interaction – The Case of Standard Setting on the Internet and in Corporate Financial Reporting
Sebastian Botzem and Jeanette Hofmann, December 2008

CARRBOOKS

Governing the Present: Administering Economic, Social and Personal Life
Peter Miller and Nikolas Rose
Polity Press 2008

Internationalisation and Economic Institutions
Mark Thatcher
Oxford University Press 2007

Organized Uncertainty: designing a world of risk management
Michael Power
Oxford University Press 2007

The Politics of Public Service Bargains
Christopher Hood and Martin Lodge
Oxford University Press 2006

Regulatory Innovation: a comparative analysis
Julia Black, Martin Lodge and Mark Thatcher (eds)
Edward Elgar 2005

Organizational Encounters with Risk
Bridget Hutter and Michael Power (eds)
Cambridge University Press 2005

Regulating Law
Christine Parker, John Braithwaite, Nicola Lacey and Colin Scott
Oxford University Press 2004

On Different Tracks: designing railway regulation in Britain and Germany
Martin Lodge
Greenwood Press 2002

The Government of Risk: understanding risk regulation regimes
Christopher Hood, Henry Rothstein and Robert Baldwin
Oxford University Press 2001

CARRPEOPLE

www.lse.ac.uk/Depts/collections/carr

CARR research staff

Bridget Hutter
CARR Director
Professor of Risk Regulation
Sociology of risk regulation; risk management; regulation of economic life; the impact of state and non-state regulation; risk regulation in Asia

David Demortain
ESRC Research Officer
Sociology of regulation and risk management; sociology of expertise and scientific advice.

John Downer
ESRC Research Officer
Sociology of knowledge; epistemology of technological risk assessment; regulation of complex and dangerous technologies.

Sharon Gilad
ESRC Research Officer
Corporate responses to regulation; citizen-consumer complaints and complaint handling; retail financial services regulation.

Jeanette Hofmann
ESRC Research Officer
Internet regulation and the development of intellectual property rights.

Martin Lodge
CARR Research Theme Director: Reputation, Security and Trust. Reader in Political Science and Public Policy
Comparative regulation and public administration; government and politics of the EU and of Germany.

Sally Lloyd-Bostock
Professorial Research Fellow
Medical regulation by the GMC. The psychology of routine decision making, blaming and accountability and the construction and use of information about risk. Regulation and compensation culture.

Erika Mansnerus
ESRC Postdoctoral Fellow,
Models and simulations in scientific practice and policy-making.

Peter Miller
Deputy Director and CARR Research Theme Director: Performance, Accountability and Information; Professor of Management Accounting
Accounting and advanced manufacturing systems; investment appraisal and capital budgeting; accounting and the public sector; social and institutional aspects of accounting.

Michael Power
CARR Research Theme Director: Knowledge, Technology and Expertise; Professor of Accounting
Internal and external auditing; risk management and corporate governance; financial accounting and auditing regulation.

CARR research associates

Michael Barzelay
Professor of Public Management, LSE

Ulrich Beck
Professor, Institute for Sociology, Munich

Gwyn Bevan
Professor of Management Science, LSE

Julia Black
Professor of Law, LSE

Damian Chalmers
Professor in European Union Law, LSE

Simon Deakin
Professor of Corporate Governance, University of Cambridge

Anneliese Dodds
Lecturer in Public Policy, King's College London

George Gaskell
Professor of Social Psychology, LSE

Maitreesh Ghatak
Professor of Economics, LSE

Andrew Gouldson
Director, Sustainability Research Institute, University of Leeds

Terence Gourvish
Director, Business History Unit, LSE

Carol Harlow
Professor Emeritus of Public Law, LSE

Christopher Hood
Professor of Government and Fellow, All Souls College, University of Oxford

Michael Huber
Professor for Higher Education Research, Institute for Science and Technology Studies, Bielefeld University

Will Jennings
Hallsworth Research Fellow in Political Economy, University of Manchester

Roger King
Visiting Professor, Centre for Higher Education Research and Information, Open University

Liisa Kurunmäki
Reader in Accounting, LSE

Javier Lezaun
Lecturer in Science and Technology Governance, James Martin Institute, Saïd Business School, University of Oxford.

Donald MacKenzie
Professor of Sociology, University of Edinburgh

Andrea Mennicken
Lecturer in Accounting, LSE

Yuval Millo
Lecturer in Accounting, LSE

Edward Page
Professor of Public Policy, LSE

Nick Pidgeon
Professor of Applied Psychology, Cardiff University

Tony Prosser
Professor of Public Law, Bristol University

Judith Rees
Professor of Environmental and Resources Management, LSE

Henry Rothstein
Lecturer, Centre for Risk Management, King's College London

Colin Scott
Professor of EU Regulation and Governance, University College Dublin

Susan Scott
Senior Lecturer, Information Systems, LSE

Jon Stern
Honorary Senior Visiting Fellow, City University

Lindsay Stirton
Lecturer in Medical Law and Ethics, University of Manchester

Peter Taylor-Gooby
Professor of Social Policy, University of Kent at Canterbury

Mark Thatcher
Professor of Public Administration and Public Policy, LSE

Kai Wegrich
Professor of Public Management, Hertie School of Governance, Berlin

Paul Willman
Professor in Employment Relations and Organizational Behaviour, LSE

Brian Wynne
Professor of Science Studies, Lancaster University

CARR visiting professors

Keith Hawkins
Emeritus Professor of Law and Society, University of Oxford

Frank Vibert
Founder Director, European Policy Forum

CARR administrative team

Pranav Bihari
Web and Publications Administrator

Phil Lomas
Centre Administrator

Yusuf Osman
Events and Office Administrator

carr
centre for analysis
of risk and regulation

LSE

ESRC Centre for Analysis of Risk and Regulation
The London School of Economics
and Political Science
Houghton Street
London WC2A 2AE
United Kingdom

Tel: +44 (0)20 7955 6577

Fax: +44 (0)20 7955 6578

Website: www.lse.ac.uk/collections/CARR/

Email: risk@lse.ac.uk