

Risk & Regulation

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The ENRON EFFECT

also

The Information Game

Compliance and Beyond

Greening the 'Right to Know'

Pensions at Risk

ICT and the Duality of Risk

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Organisational Encounters with Risk

As CARR enters its third year, world events have underlined the importance of CARR's remit. In this issue of *Risk&Regulation*, Timothy Besley, Christopher Hood and Michael Power debate the regulatory challenges emerging from the collapse of Enron and Worldcom in the USA. And in the shadow of the World Summit in Johannesburg, Andrew Gouldson and Bridget Hutter consider regulation, sustainable development and the opening-up of environmental risk management. These debates relate directly to CARR's funding under the ESRC Governance, Regulation and Accountability initiative. We are particularly examining and conducting comparative research on the organisational and institutional aspects of regulation and risk management. Accordingly, our research programme analyses the tools and techniques of regulation and risk management, such as auditing and inspection, in the setting of broader risk governance regimes. This agenda reflects contemporary notions of organisational governance, which span and reconcile concepts of externally directed regulation with those of self-regulation and 'best practice' management.

Embedding risk and governance issues in their organisational setting also touches on a number of other key social science concerns promoted by the ESRC and highlighted by CARR in its original bid for funding, notably the nature of economic performance and globalisation. Enron's misleading representation of its performance is leading to reforms in the regulation of accounting and the disclosure of risk, and the collapse of Andersen demonstrates the global reach of reputational meltdown. Debate also rages both domestically and transnationally about the possibilities for aligning risk regulation and economic viability in the name of sustainability. In the wake of the Johannesburg World Summit on Sustainable Development, the importance of transnational co-operation in regulating risk in the 21st century is underlined. For example, the recent floods in central Europe have led to a new and potentially important dialogue between Germany and its Eastern neighbours on collective disaster risk management.

The contemporary taste for governance expresses the strategic importance of multiple sources of regulation and corporate governance beyond formal law. As Christopher Hood observes, the post-Enron climate of suspicion by investors, employees and customers may prove to be a more effective regulatory mechanism than increased legal sanctions for company directors who 'cook the books'. Suspicion of corporate disclosures and rights of random enquiry may do more for improving corporate accountability than any mandatory rotation of auditors.

Large organisations occupy an increasingly prominent position in modern economic life and may indeed be so powerful as to supplant the traditional powers of the nation state. What kind of internal and external strategies of control are available to manage these large organisations that are both creators and regulators of risk? In order to explore the differing

ways in which organisations understand and process risk, CARR held a major workshop in May on the theme *Organisational Encounters with Risk*. An invited audience of national and international scholars discussed three related moments in the management and mismanagement of risk: encountering, sense-making and re-organising. Organisations can be understood as legally stabilised assemblies of routines, roles and decisions, together with technology of varying kinds, which categorise and act upon their internal and external environments. From this point of view, large organisations, like Enron or Federal Air Traffic Control, are not just discrete 'actors' but have an internal complexity and diversity that determines the way they recognise and deal with errors, mistakes and anomalies. These interpretive structures are vital in the management of risk, but rarely conform to the 'engineering model' of risk management. Understanding how practices could once have been accepted as 'normal', which now appear pathological and deviant, is a major challenge for research. And as Enron also demonstrates, the failure to manage risk is distributional for groups such as pensioners, employees and others. Risks which are predictable and manageable for a regulatory agency, may be experienced as an abrupt encounter by others.

Organisational Encounters with Risk will be published as an edited collection and will be the first in a book series to serve as a focus for 'risk and regulation' studies. This series will be an important part of CARR's remit to function as a national centre for risk and regulation studies ('outreach'). We shall say more about CARR's outreach strategy and performance in future numbers of *Risk&Regulation* and welcome any comments you may have on this fourth issue.

Bridget Hutter and Michael Power
CARR Co-Directors



'...and financial districts will be experiencing high levels of suspicion over the next few days'

As the focus of utility regulation turns from measures based on inputs to those based on outputs, both the energy and water regulators are experimenting with schemes to reward companies according to their performance. Both regulators, however, are deterred from extending these schemes because of doubts over the accuracy of the data used to assess service quality. These developments highlight the regulatory importance of not only service quality, but also the quality of information in incentivising service quality.

Regulating service quality requires sensitivity. Users of monopoly networks, like energy or water distribution systems, can neither choose their own individual level of quality nor the price they pay for it. Although consumers and their representatives lobby for higher quality, higher standards usually mean higher costs. Regulators, who decide the prices that companies are allowed to charge, have to strike the right balance between service quality and price on behalf of consumers.

Regulation based on rate of return encourages over-provision of quality if it is capital-intensive because the increase in capital associated with any improvement receives a reward through higher allowed profit. This is the familiar argument of 'gold-plating' in terms of reliability of the system and quality of service under rate of return regulation. There are, however, counter-concerns that the price-cap system of regulation imposed in the UK may have the opposite effect. Quality may fall below its 'optimal' level because of the strong incentives to reduce costs between review periods.

Evidence from a recent survey of all the main privatised networks shows that since privatisation, standards have been extended to new service areas, target levels have been consistently tightened and compensation payments for breached targets have been raised and made compulsory. All this has been accompanied by steadily improving corporate achievements. The improvement in average performance, however, has been mainly due to previously 'low achievers' redressing their poor performance, rather than by improvement in the 'best practice' frontier.

Senior managers suggest, moreover, that companies are influenced more by financial benefits that good achievements bestow on them in unregulated overseas markets, than by direct rewards in regulated domestic markets. Companies therefore raise their standards (and costs recoverable under the price-cap), so that quality and price in regulated markets are



The Information Game



Catherine Waddams Price

is Professor of Regulation and Director of the Centre for Competition and Regulation at the University of East Anglia, and is a member of CARR's Policy Advisory Committee. This article draws on two recent papers on these subjects available on the CCR website: www.ccr.uea.ac.uk

likely to be 'too high', and resources mis-allocated. The system of regulation which is meant to protect consumers in regulated markets may, therefore, in effect be taxing them so the companies can earn profits elsewhere.

The quality of information provided by companies to inform quality performance and other regulatory decisions is also proving an issue of major regulatory concern. Companies complain about the increasing burdens imposed by regulators in seeking ever more information. Regulators conversely complain about the reluctance of firms to produce adequate amounts of information in a useful form. Some companies, in turn, delay producing information when required to do so, and then provide so much useless data that it is difficult to unearth the information that the regulator originally requested.

The amount of information requested and its usefulness seems to vary considerably between industries and requires hard theoretical analysis. Even if companies cannot bias the information that they provide (because such behaviour would be detected and punished) they may choose to make the information less precise and useful to the regulator. In such cases, both sides incur costs in obfuscat-

ing and unravelling the data respectively.

In other cases, companies take an 'all or nothing' approach – concealing either all the information or none. The more information they are asked for, the less likely companies are to cover up. But regulators are often reluctant to ask for more information because handling large amounts of data can be costly. Moreover, where the regulator seeks information to decide whether to continue regulating a monopoly or to admit a new entrant, the company's decision to obfuscate is likely to depend on both the regulator's aversion to the possible failure of an entrant, and the company's relative attraction of being a regulated monopolist or facing competition in an unregulated market.

This model explains some of the variation that can be observed between different regulators and companies. Service quality and the information on which its measurement depends, however, will continue to pose critical challenges to both regulators and companies over the coming years.

MPs Behaving Badly



Robert Kaye gave evidence, in May, to the Committee on Standards in Public Life on regulating conduct in the House of Commons. Robert painted a pessimistic picture of parliamentary inquiries into MPs' misconduct, suggesting that they were doomed to fail. Citing detailed evidence from his recent research, he argued that such inquiries are often dominated by party considerations and frequently result in a political 'fudge' rather than a serious attempt to establish the facts. Even if they were capable of delivering just verdicts, Robert argued that the public was unlikely to have confidence in a system that relies on MPs judging their colleagues.

The New Risk Management

Michael Power addressed the theme of regulation and organisational control when he was invited, in March, to give the 5th annual series of PD Leake lectures at the Saïd Business School, Oxford University. The three lectures examined corporate governance and auditing, developments in operational risk and the emergence of the corporate risk officer.



Charting New Directions

Bridget Hutter chaired a dinner for distinguished guests at the Royal Geographical Society earlier this year. The event, which was attended by a number of CARR members, addressed the theme of New Directions in Risk Management.

Staff Conference

CARR held its first staff conference in June 2002 at the Royal Institute of British Architects. John Ashworth, a former director of LSE and a Chief Scientist advising Prime Ministers Callaghan and Thatcher, gave a talk on the history of scientific advice to government and offered many insights gained from his personal experience.

Staff News

CARR welcomes new members of staff...



Yuval Millo joins CARR as an ESRC Postdoctoral Fellow. Yuval is currently examining the historical sociology of financial derivatives markets and, more generally, the nature of contemporary financial risk. His focus is on the formation of leading derivatives markets, the regulatory use of mathematical pricing models, and the impact of market crashes on financial risk-assessment systems.

Joan O'Mahony joins CARR as Leverhulme Special Research Fellow. Joan will be extending her research interests in civil society and democracy, by examining the role of civil society in regulating business. Joan's central research aim is to establish the conditions under which non-state organisations can be productive participants in national and international regulatory processes.

Filippa Corneliussen joins CARR as an ESRC Postdoctoral Fellow and is working on the governance of biotechnology. Filippa's focus is on the effectiveness of regulatory frameworks in shaping the behaviour of firms. She is examining, in particular, the

implementation and enforcement practices of regulators, and the incorporation of regulatory requirements into company structures and practices.

Stephen Tully joins CARR as BP Postdoctoral Fellow and will work on the extent to which corporate engagement with civil society has an effect upon corporate risk management. Drawing on a diverse range of sectors, such as insurance and energy, Stephen will be examining the preconditions and limitations of non-governmental organisations' engagement with corporations.



We also welcome **Sabrina Antão** as CARR's new Events and Publications Administrator and Assistant Editor of *Risk&Regulation*.

...whilst other CARR members take up positions at LSE and UEA

Martin Lodge takes up a lectureship in LSE's Government Department and **Lindsay Stirton** takes up a lectureship in Law at the University of East Anglia. Both will remain full and active members of CARR.

Student News



Student Conference

CARR hosted a very successful conference in September for social science doctoral students studying risk and regulation topics. A full report on the conference will appear in the next issue of *Risk&Regulation*.

MSc Course

The first year of the MSc Management and Regulation of Risk has recently come to a successful conclusion. The graduating students were pleased with the nature and structure of the programme and the intellectual challenge presented by the breadth of material they were exposed to during the year. Competition for places in the coming academic year has been tough. We expect to welcome 26 new students, selected from amongst 600 international applicants with a wide range of academic and professional backgrounds.

Doctoral Programme

CARR's research student programme, launched last year, continues under the directorship of Michael Huber and George Gaskell, and we now welcome five new students onto the programme.

Christophe Genoud and **Paolo Dasgupta** are both studying independent regulatory agencies; Christophe is studying the institutional dynamics of the electricity sector, whilst Paolo is undertaking Anglo-French comparative work on Ofitel and ART. **Alberto Asquer** is studying Italian water reform as a case study of public management and policy implementation, whilst **Valentina Mele** is comparing the Italian and UK experiences of policy innovation, design and implementation. Finally, **Claire O'Brien** is examining the theoretical challenges, policy problems and practical solutions for human rights implementation in the private sector.

Compliance and Beyond

Bridget Hutter argues that sustainable development is the business of more than business, requiring a multi-faceted endeavour that embraces both state regulation and non-state action and which appeals to affirmative motivations as well as negative sanctioning.

The challenge of sustainable development, as defined in the 1987 Brundtland Report, demands radical rethinking and behavioural changes both across nations and generations. The assumption from the start has been that these short-term pains for long-term gains are too important to leave to business alone and that some form of external regulation is needed.

Some have faith in the free market, others have no faith in business to regulate its own activities without 'help'. The necessity and desirability of state and transnational regulation are hotly debated. Few, except free marketeers, would entirely trust the market to voluntarily organise for social and costly long-term ends. The question then turns on the degree of governance that should be exercised, most especially the extent to which the state machinery can and should be used to order business priorities.

The state can intervene in a variety of ways. It can adopt policies that encourage sustainable development through incentives and sanctions such as tax subsidies or penalties. Or the legal system can be used to coerce or persuade business to prioritise policies to promote sustainable development. The law can also be used to constitute national markets by imposing entry requirements, such as licensing conditions, and setting performance or outcome targets.

But there are dangers in unilaterally adopting stringent regulation. The classic argument is that too much 'red tape' is too costly and burdensome for business. Moreover regulation may be counter-pro-

ductive as it leads to regulatory shopping whereby businesses relocate to cheaper, less regulated jurisdictions. So, collective action is an issue and the emphasis is on transnational co-operation and action.

Achieving such action is no mean task. There are so many treaties and conventions relating to environmental protection that many commentators have referred to 'convention fatigue'. These developments have also been piecemeal, with little coherence, limited mandates and typically small budgets. The longevity and maturation time for many environmental problems is in many respects at odds with political democracy, which does not tend to favour long-term planning, especially if it is costly in the short-term.

Knowing what constitutes compliance in such a system can be problematic. Often legal standards are broadly framed and vague, leading to accusations from some that the legislation is designed to be more symbolic than substantive in its effects. Others stress the need to tailor legal standards to outcomes and to the 'realities' of cost-benefit analyses.

The crunch point is enforcement. Internationally, there is a lack of effective enforcement mechanisms for the implementation of internationally agreed regulations. Supra-national enforcement of environmental agreements is virtually non-existent. Typically, internationally agreed standards are nationally enforced, and not surprisingly there is a great variety of arrangements both between, and sometimes even within, nations.

Tensions between environmental protection and economic growth have bedevilled regulatory efforts. This debate is sometimes characterised as the debate between the 'race to the top' and the 'race to the bottom'. Believers in the 'race to the top' argue that those at the cutting edge of regulation are at a competitive advantage and strict regulation is an opportunity for companies to upgrade. 'Race to the bottom' protagonists hold that stricter standards are the source of competitive disadvantage and will lead to regulatory

shopping. But these debates are almost entirely bounded by national interests and do little to address issues of global equity. The costs of dealing with sustainable development may be levied disproportionately on developing countries. The problem is one of global co-operation.

The global dimension to sustainable development highlights the complex factors and dynamics involved in making environmental law effective. The role of political and business considerations are brought to the fore and 'solutions' seem hard to agree upon. Greater internationalisation brings fears of loss of national sovereignty, making public participation more difficult and possibly moving policy processes closer to business interests.

Contemporary perspectives on regulation increasingly regard it as a diversified set of activities with multiple sources. Thus we see the state trying to harness the regulatory capacity of companies, of the market, of insurance companies and civil society organisations. This trend emerges from the recognition of the limits of state regulatory activities and broader moves in public governance towards contracting out public management functions.

Sustainable development is the business of more than just business. We must all be involved, and that is reflected in international efforts such as the United Nations Agenda 21, which attempts to bring together governments, non-governmental organisations, industry and the general public. A multi-faceted endeavour is called for; one which embraces different state and non-state regulatory sources and one which appeals to affirmative motivations as well as negative sanctioning.

Bridget Hutter is CARR Co-Director and Peacock Professor of Risk Management. This is an abridged version of an article that appeared in the *International Herald Tribune*, 1 July 2002, as part of a 'Guest Forum' commissioned and edited by the European Business Forum: www.ebfonline.com

Greening the 'Right to Know'



KLARA HENDERSON

New legislation on freedom of access to environmental information is being introduced in countries across the EU, but **Andrew Gouldson** finds that principles do not always translate into practice.

The general public is said to be increasingly less willing to accept the legitimacy of decisions that are taken on their behalf by a closed community of experts. This is particularly evident in the field of environmental regulation where there has been widespread suspicion about regulators being too cozy with the industries that they regulate. One common response to this perceived crisis has been to call for the opening up of regulatory decision-making processes to external scrutiny and wider public participation.

Such calls for greater openness have recently been embodied in the 1998 Aarhus Convention, which obliges public authorities in signatory states to permit public access to environmental information, provide opportunities for public participation and establish appeal mechanisms. The Aarhus Convention is triggering the introduction of new legislation on freedom of access to environmental information across the EU. Until now, however, there has been little research to assess the impact of such moves on the regulation of environmental risks.

The influence of such measures can be expected to be significant. In the US, community 'Right to Know' legislation adopted in 1986 has been associated with significant reductions in the emissions of toxics. In England and Wales, the Environment Agency has similarly provided online emissions data since the mid-1990s, but in

Scotland access to such data is more limited. My current research, therefore, seeks to examine how these different levels and forms of access to information in the UK are impacting on relations between regulators, industry and the stakeholder groups. Preliminary findings from studies of two major chemical complexes in Scotland and England present a mixed picture.

For many regulators, increasing access to information is regarded as a critically important way of building public confidence in their activities. There is concern, however, that regulated firms may be inclined to withhold sensitive information and that requirements for information collection and dissemination will place an extra demand on the already scarce resources of street-level inspectors. Support in principle for the collection and provision of information amongst regulators does not always, therefore, translate into support in practice. Furthermore, there is considerable uncertainty amongst regulators about how to communicate complex information on environmental risks to the lay public. As a consequence, there is a tendency towards passive, on-demand forms of information provision, rather than pro-active information dissemination to inform, or learn, about the concerns of local communities.

From the perspective of the regulated industries, some firms see public disclosure as an opportunity to build trust and social capital in

their relations with their stakeholders. This social capital has a clear economic value; firms that are trusted find it easier, for example, to recruit and retain staff, obtain planning permission or be forgiven after minor incidents. Managers are, however, very aware that trust that has taken years to build can be destroyed overnight by major incidents or if the integrity of the information that firms provide is undermined. In contrast, other firms take a more nervous view of information disclosure, believing that it could restrict their autonomy and stimulate increased opposition to their activities. Many of those firms, therefore, either resist providing information or hide in the shadow of their progressive competitors to escape the attentions of campaigning stakeholders.

Amongst those communities in close proximity to hazardous facilities, there is considerable uncertainty, anxiety and mistrust. Whilst some community members are aware of the information that they might, in theory, be able to access, those that have tried have found the information to be inaccessible and almost impossible to interpret. In the absence of reliable and readily understandable information, these communities form their own 'truths' based on shared experience, social discourse and often sensationalist media coverage. Interestingly, most accept that environmental quality in their area has improved dramatically in the last two decades. Their tolerance, however, of the remaining risks has declined, as the economic benefits of the chemical sector, which employs fewer but more highly-skilled people, are no longer distributed within these disadvantaged communities.

Finally, pressure groups regard access to information as both a basic democratic right and a way of developing more sophisticated and influential campaigns. In England and Wales, access to information has enabled Friends of the Earth to compile league tables of the biggest polluters and has generated some interesting conclusions. The campaigning group has found, for example, that in England and Wales, emissions of 'cancer-causing' chemicals from the biggest factories has fallen by almost 40% over the last three years. However, 70% of the regulated emissions come from just ten factories and 66% of all toxic emissions are released in the poorest 10% of communities in England.

By building a fuller understanding of the factors shaping the impact of increased access to environmental information, this research hopes to inform the development of new forms of risk regulation and new strategies for stakeholder engagement.

Andrew Gouldson is a CARR member and a Lecturer in Environmental Policy.

The Enron Effect

The collapse of Enron and subsequent corporate bankruptcies in 2002, including the demise of the accounting firm Andersen, continue to have broad repercussions for regulation and risk management. *Risk&Regulation* asked CARR members, **Michael Power**, **Timothy Besley** and **Christopher Hood** to consider the major issues arising from these collapses.



What does the Enron affair tell us about risk and the effectiveness of regulation?

Besley: Well the first thing that can be said is that the accountants didn't see this coming, did they.

Power: There was no prediction as such and I don't think there were even general feelings of weakness, here or in the US. Corporate America was rocked to the core.

Hood: So all the elaborate work on risk and risk management didn't produce a specific vulnerability marker that could have predicted Enron?

Power: Absolutely. Enron had a 'fully functioning' enterprise risk management system and even a chief risk officer, which is still a relatively rare position.

Hood: So you think its risk management document should be in the Smithsonian along with its ethics manual?

Power: Well I certainly sense some desperation within the regulatory and professional communities in facing up to this fact.

Will Enron have wider impacts on politics and patterns of trust in society?

Besley: We've always had bankruptcies with severe distributional issues for specific individuals. But the sheer scale and nature of the problem and the implication of corruption rather than just bad business deals, puts the expendability of corporations in a different light. One of the big implications may be a significant loss of faith in private institutions, particularly as models of best practice for the public sector.

Hood: There is some work that indicates that trust in big private corporations has declined, although there is better survey data to show a decline in trust in government. But there is little sign of an 'Enron Effect' in politics. For example, there is little evidence that it's a mid-term election issue in the US, and if Enron can't get things like campaign finance reform onto the agenda, what will? And in the UK, Enron doesn't seem to have resulted in more caution about public-private partnerships.

Besley: Well I think it would be hard to argue that Enron was a more significant event than the collapse of Railtrack in the UK context.

Hood: I think you're right. Enron does have to be put into perspective. It's not like the collapses people have had to face in Argentina or Russia. But I do think that the crisis shows that cultural climate is as important as regulatory tools. We're often told that trust in institutions is declining in society, and that this is a bad thing. But in this case a bit less trust would probably have been good. You could say that collapses like Enron are an alternative to regulation, and might even be good for capitalism! They send an effective message to

investors and others, not to be so gullible and to look critically at information. I think we are now in suspicious mode, and that will probably do more than a thousand pages of regulation.

Do you think Enron will herald a retreat from models of 'enforced self-regulation' to 'command-and-control' styles of business regulation?

Hood: The Enron problem is not whether you do enforced self-regulation or command-and-control regulation. The real problem with Enron was a lack of enforcement.

Besley: That's why at some level it's a more fundamental issue than regulation – it's about whether we can rely on people in positions of responsibility not to exercise naked greed and cheat. Few of us believe that regulation has historically been an effective antidote to the pursuit of naked self-interest.

Power: And perhaps the precautionary reactions of the financial markets post-Enron to 'funny' accounting suggest that Christopher's climate of suspicion may indeed be a more effective control tool than regulation.

Enron seems to have added to the general crisis of independent expertise by revealing conflicts of interest for financial analysts and auditors. How can this problem be tackled?

Besley: I think the length of relationships between actors needs to be restricted in two dimensions: a vertical dimension that measures the length of a relationship between

any one player and their principal, and a horizontal dimension encompassing activities like consulting.

Power: I think there will be some form of mandated rotation of some kind, but I also think firms will find very clever ways of getting around that.

Hood: But does it need to be mandated? Wouldn't you expect the financial markets to place a relatively high-risk profile on corporations that don't rotate their auditors? Again, regulation might only function as a backstop.

Power: You could be right. Already some large corporations are purchasing consulting and auditing service from different firms in order to manage the way they are perceived.

Besley: That would be an interesting case study of the way that social pressures are filtered into routine business practice.

If we can't trust the experts, do we have to take our own counsel on financial matters like pensions, investments and employment contracts?

Power: There does seem to be an increasing individualisation of risk of the kind suggested by Ulrich Beck.

Hood: I think this is, indeed, an area where an Enron Effect could have wide ramifications. For example, you might expect trends towards privatisation of social security, especially in the US, to be blown out of the water by the Enron pension fund issue.

Besley: At the same time, you have to bear in mind that most individuals who held stocks in Enron in their pension plans, did so voluntarily. And let's face it, for the majority of the period in which they did that, they actually saw that as a better investment than anything else they could do.

Hood: But there have been allegations that lower-level employees were somehow coerced into holding stocks that then disappeared, while senior management bailed out.

Besley: They may have been 'encouraged' but they were more or less voluntary decisions.

What are the likely impacts of Enron on the accounting industry and accountancy practice?

Power: The swift and spectacular meltdown of Andersen has had global effects on the accounting professions. The competition authorities are, of course, breathing down the neck of the professions because there are now only four large firms left. But the key question is, can auditing get any better as a tool? Has it got any new tricks? I'm pretty sceptical. Perhaps social trust in auditing needs to be downgraded

relative to other mechanisms, like audit committees. Any one of these features alone is imperfect, but together they provide the best we can hope for as a mutually reinforcing patchwork.

Besley: But presumably Enron will prompt the expansion of auditor checklists and that will require further regulation?

Power: I think that will happen, but there may also be pressures for a return to more traditional, inspectorial forms of audit. That involves looking at old-fashioned bits of paper and really going into the details. There are great old stories of frauds being discovered because someone saw an invoice that wasn't folded and that meant that it hadn't come in an envelope through the post. But that style conflicts with contemporary, largely cost-driven trends towards high-level examination of risks and management systems.

Hood: You get the same kind of debates about Treasury control over departments. Do you do it at an overall system level; do you look at the general running cost basis; or do you follow the traditionalists who say if you're really going to control you must have detailed and random checks?

Power: My hunch is that the generation of auditors who could do that style of inspection simply doesn't exist anymore. Even if there was a will to redesign the audit, it would be almost impossible to resource it.

Hood: So we don't have enough randomness in the system and there isn't the capacity to put it back? Audit practice has simply become too predictable.

Power: Worse still, there are disincentives to find mistakes and errors of the Enron kind. On-site pressures are highly conformist and what goes on inside companies like Enron is regarded by auditors as 'the way things are done around here', a 'notional normality' as Barry Turner calls it. The incapacity to ask awkward questions comes back to your original point about cultural climate.



Will the role of non-executive directors change given that their failings played such a prominent role in the Enron story?

Hood: The issues are likely to extend even beyond non-executive directors and consultants. Enron recruited the great and the good from various walks of life to sit on advisory committees and the like for substantial fees. I would have thought that such individuals are likely to be more cautious in the future.

Power: I think the personal risks attached to the role will certainly make non-executive directors more vigilant and you could well ask, 'After Enron, who wants to run anything anymore?' In the United States, directors can now be prosecuted for misleading accounts. That has led to a rash of accounting restatements by big corporations. So Enron really has got to the senior people in organisations in a very public way. We might find that executive and non-executive directors will demand more as a result – a kind of perverse Enron Effect?

Besley: I would find that puzzling. We've already seen a massive increase in real terms in senior salaries since 1985, so I think it is unlikely that post-Enron, senior salaries will have to increase even further. As an economist, I believe that, put crudely, to get someone to do a job, any job, you have to offer them a package that is as good as the next best alternative. But equally, it may be that you can overlay incentives. I believe strongly in the selection of the right kinds of people, with the right kinds of motivation, to undertake tasks – particularly where they affect the well-being of others. Many people are motivated by the way in which they can both take home a big pay cheque and also think they're doing some good for society. I think we will look back on the 1990s as a period when we forgot that private greed comes at a price.

Timothy Besley is a member of CARR, Professor of Economics and Director of STICERD. Christopher Hood is a CARR Programme Director and Gladstone Professor of Government and Fellow of All Souls College, University of Oxford. Michael Power is a CARR Co-Director and PD Leake Professor of Accounting.



Pensions at Risk

As the government tries to shift the balance between public and private pension provision, **Julia Black** examines the problems facing consumers in managing the increasing individualisation of risk.

The current debate over pension provision is marked by two distinct and contradictory elements. On the one hand, there is concern in policy circles at the inadequacy of individuals' current levels of savings for retirement. On the other hand, individuals themselves seem remarkably resistant to increasing those levels of personal savings, even though they know that they cannot rely on the state to provide for them in their old age. They are right. Since the 1980s successive governments have been seeking to reduce the amount of an individual's retirement income that comes from public funds, reversing current proportions of retirement income from 60% public: 40% private to 40% public: 60% private, within the next twenty to thirty years.

The risks associated with ensuring an adequate retirement income are thus being shifted from the state to the individual. These risks are not inconsiderable, as events at Equitable Life and pensions mis-selling illustrate. Indeed twelve principle types of risk may be identified, ranging from public policy and macro-economic risks (inflation, interest rates, employment rates) through market and governance risks, to risks arising from bad advice and

unsuitable products. The extent to which consumers bear these risks directly varies with the type of pension. But even if the risks are not borne directly, they are usually passed onto the consumer, with sometimes dramatic consequences. The current closure of defined benefit occupational schemes to existing, as well as new, employees provides a good example.

Although consumers bear the risks directly or indirectly, very few of the risks are capable of being managed directly by consumers. Most risks lie beyond their control, as recent stock market collapses illustrate all too clearly. Rather, many risks are managed or regulated by a range of other actors, to the extent they are managed at all.

Indeed, three features of the overall risk management of pension provision are particularly striking. First, decision-making on risk is fragmented. There is no single risk management process in which risks are assessed, managed and communicated. There is instead a multitude of processes carried out by a wide variety of players.

Second, regulatory regimes vary widely. Some, such as the management of interest rate or inflation risk, are part of macro-economic policy-making. Others, such as the management of demographic

and mortality risk, are highly specific to pensions. Some, such as the management of funding and advice risk are subject to a high degree of rule-bound regulation implemented by sectoral regulatory agencies. Yet others, such as market risk, are left largely to industry players.

Third, whilst some risk mitigation is possible, reduction of one type of risk often simply increases exposure to another. Moreover, mitigation of one type of risk to one actor (often the pension provider) can increase another's exposure to the same risk (often the consumer). Risk trade-off and risk distribution, rather than overall risk reduction, are thus key issues in contention.

Whilst consumers are not able to manage many of the risks on their own, they can vary their risk exposure to some extent through their purchase decisions on pension products. These choices are often highly constrained, however, by regulation, including tax law, and product availability (whether an employer offers an occupational pension, for example, and the form it takes).

There is also a wealth of evidence that consumers are simply not equipped to make these choices. Consumers have, at best, only a vague understanding of the products available, and few recognise that there is a trade-off between risk and return, or that they might be exposed to any form of risk at all. There are suggestions, moreover, that consumers' understanding of risk is not the same as that of their financial advisors or product providers.

The complex risks and choices facing consumers, coupled with their lack of 'cultural capital' to make informed decisions, suggests that the increased emphasis on private pension provision will not be matched by rational consumer choices, at least in the eyes of policy-makers. Instead, increasing individualisation of risk in the form of private pensions is likely to result in consumers continuing to under-provide for their retirement. Moreover, until detailed research focused specifically on consumer understandings of risk is done, advisors, regulators and consumers will continue to speak at cross-purposes on this central issue.

Julia Black is a CARR member and a Reader in Law. This article is based on a working paper for the National Consumers Council: *Risk, Trust and Regulation: The Case of Pensions* (NCC, London, 2002).

The Duality of Risk



Implementation of ICT infrastructures is held to be the key to economic growth, but **Claudio Ciborra** argues that greater attention needs to be paid to the organisational risks involved.

Many organisations, from large corporations to hospitals, and from governments in advanced economies to those in less developed countries, are investing considerable resources in large Information and Communication Technology (ICT) infrastructures.

Infrastructure is a generic term referring to hardware, software, networks, and technical and business process standards. These heterogeneous elements are regarded as shared resources aimed at securing seamless information flows and sophisticated, common data access throughout, and between, organisations and the outside world.

The notion of infrastructure has been borrowed from older technical infrastructures, such as railways, roads or airports, to emphasise their ramification, standardised linkages and vital support to economic and social activities and, ultimately, growth. Typically, investments in ICT infrastructures require long-term commitment and a strategic perspective. The reward for such investments is the potential for enhanced integration of information flows and activities within the organisation. Higher levels of integration mean

better co-ordination, lower transaction costs and virtuous efficiencies that deliver economic growth and social development at all levels.

In general, if one looks at national economies and their respective infrastructure investments, then it can be seen that not investing in infrastructure entails the risk of a lower rate of development. Organisations that fail to 'cultivate' their ICT infrastructure risk lacking common standards, fragmented systems and poor circulation of information; resulting in uninformed decision-making at all levels of the organisation. Planning and implementing infrastructure, however, involves high-risk decisions given the long time-horizon and the sheer amount of resources invested.

Risks can stem from various sources. First, ICT technology evolves rapidly and, sometimes, discontinuously. This can affect the standards being adopted at any one time. Past investments in infrastructure come to represent the so-called 'installed base', or legacy systems, and as a consequence, new standards need to take into account the constraints posed by that installed base.

Second, ICT infrastructures are innovations for the organisations adopting them. Organisational adaptability, acceptance and actual support are often uncertain, especially when infrastructures are nested into an organisation's processes.

Finally, ICT infrastructures are complex and interdependent systems. Their full interaction with the surrounding, pre-existing technical and social environments is not fully controllable. The limited rationality of the decision-makers and organisations can make for side-effects and unexpected consequences.

At the Risk Research Institute, thanks to generous PricewaterhouseCoopers research funds, we have launched a project to study such duality of risk related to the implementation of ICT infrastructures. Whilst there is a growing body of research on ICT infrastructures, this study aims to make some substantive contributions to the often neglected analysis of risks involved in IT projects.

First, the study picks up the challenge posed by technical and institutional variety. Too often, study of infrastructures and the ensuing managerial or consulting recipes are tied to one type of technology (typically enterprise resource planning [ERP] systems) and one type of organisation (typically large corporations). In this exploratory study we want, instead, to study a variety of platforms and a variety of organisations. The cases will range from corporate wide e-mail systems in an international bank to electronic patient records in a hospital; from ERP-like systems in an international service company to e-government applications in a developing country; from peer-to-peer platforms (open source) to mobile infrastructures in an international telecom business.

Second, the project will not just use the quantitative notion of risk usually included in evaluating IT systems. Given the frequency and impact of side-effects and unintended consequences, we will explore broader notions of risk and test their relevance for the understanding of the dynamics of large infrastructure projects.

Third, given the complex and wide scope of the project, we will multiply our forces by conducting the study through an alliance with a 'twin' research group at the Institute of Informatics of the University of Oslo.

We hope that this empirical study will be able to help determine the extent to which different ICT infrastructures pose different sets of risks. The study should also help assess whether alternative notions of risk can be used to track the challenges posed by large infrastructure projects.

Claudio Ciborra is PricewaterhouseCoopers Chair in Risk Management and Director of the Risk Research Institute.

Details of forthcoming seminars can be found on the CARR website: www.lse.ac.uk/Depts/carr/

Risk Analysis and Behavioural Law-and-Economics

Anthony Ogus, University of Manchester
April 2002

According to Professor Anthony Ogus, traditional law-and-economics has provided major analytical tools for risk assessment and developing and managing legal interventions. In theory, subjectivity is incorporated into analysis through the variable of risk-aversion, but in practice, individuals are either treated as risk-neutral or some crude, homogeneous degree of risk-aversion is assumed. In other respects, the approach is objective and based on rationality.

'Behavioural law-and-economics' seeks to extend the sub-discipline by relaxing some of the key rationalist assumptions of neo-classical analysis, replacing them with predictions drawn from other disciplines, notably social psychology. This recent intellectual movement has important applications to risk assessment and management. For example, the 'hindsight bias' and the 'availability heuristic' show how individual behaviour diverges from the rational model.

According to Professor Ogus, such work has generated major insights that should clearly influence policy-making. Yet whilst this literature's predictive dimension is compelling, its normative dimension remains problematic. Proponents have not always been sufficiently explicit on how its implications will affect legal principles and decision-making processes. Professor Ogus concluded by suggesting how the principles and processes should be adjusted to the insights generated.

Regulation and Co-Regulation of Environmental Management in Industry

Marius Aalders, University of Amsterdam
May 2002

Since the late 1980s policy-makers in industrialised countries have called for more industrial self-regulation to protect the environment. Initiatives such as the EU Eco-Management and Audit Scheme (EMAS) have triggered a number of self-regulatory activities by industry in the EU and US, such as the chemical industry's Responsible Care programme. According to Professor Aalders, governments have learnt to adapt to the special structural and cultural needs of firms in enhancing their environmental performances. As a consequence, new forms of self-regulation are now being stimulated.

Professor Aalders argued that in the Netherlands, increasing adoption of co-regulatory arrangements is leading to new relationships, based on mutual

trust and professional experience. He suggested that these changes have had important consequences for state enforcement of environmental regulations and the participation of public interest groups in decision-making.

Such 'smart' regulation has created better understanding between regulator and regulatee and better environmental and economic performance by companies. But Professor Aalders observed that some companies have resisted such strategies, because: they consider the negotiating process to be too resource intensive; they prefer the certainties of old-fashioned command-and-control strategies; or, they are unhappy about the flexible conduct of government.

Corporations, Risk Management and the Environment

Neil Gunningham, Australian National University
May 2002

According to Professor Gunningham, in the struggle to prevent further deterioration of the natural environment, the capitalist business corporation holds one of the keys to success. Scientists and environmentalists analyse and publicise environmental problems, and governments promulgate environmental laws and regulations. But it falls to business corporations to develop, finance and install pollution prevention technologies and practices.

In his seminar, Professor Gunningham presented his recent study of the pulp and paper industry (with his Berkeley colleagues Robert Kagan and Dorothy Thornton), which found that environmental performance improvements over time were related to increasingly stringent demands from legal and social actors. These improvements resulted in many companies taking 'beyond compliance' actions, although market demands limited the degree to which compliance was exceeded. The study also found that although legal, social and economic demands have converged over time, there is still significant variation in environmental performance, which cannot be explained purely in terms of the different social, regulatory and economic pressures experienced by different firms. Rather, variation in the commitments and attitudes of management appears to correlate with environmental performance.

Professor Gunningham argued that perceptions of how to address risk management were central and that corporate cost-benefit calculations for environmental actions were nowadays broader, and more sensitive to social mores than assumed by traditional models of firms as 'amoral calculators'. Professor Gunningham concluded that it is management and corporate culture that gives these values breadth and life.

Ideologies of Risk and Regulation

Charles Dannreuther, University of Leeds
June 2002

Risks and their regulatory management have become defining characteristics of contemporary governance. Closely associated with these politics has been the rise of Third Way politics, which rejects traditional distinctions of left and right. According to Dr Dannreuther, however, the rejection of ideology as an organising principle may have been premature, despite past electoral successes of Third Way politics. With the consensus politics of Globalisation under the strain of international events, government has appeared aloof and ineffective and, while business enjoys good access to political decision-making, labour looks better represented by the extreme right than the left.

In this context, Dr Dannreuther examined the relationship between risk, regulation and ideology in two ways. First, he examined how ideologies can be seen in the relationship between risk and regulation, and, second, he explored how the norms relating risks to regulation have become ideological. In particular, Dr Dannreuther explored the interaction between governors and the governed in regulatory politics and the role that risk plays in maintaining that relationship. He also examined the way in which norms take on an ideological form when they place a premium on one way of looking at the world over another. Dr Dannreuther concluded by discussing how other forms of representation may offer alternative ideologies to the politics of regulation.

FORTHCOMING LUNCHTIME SEMINARS

David Campbell and Bob Lee

Cardiff University

8 October 2002

The 2001 Foot and Mouth Epidemic: An object lesson in regulatory failure

Fabrizio Panozzo

University of Venice

29 October 2002

Technologies With(out) Programmes: Exploring the roles of accounting within webs of public management regulation

David Nelken

Cardiff University

December

'Too much Ice Cream' or 'Tigers in the Bushes'? Adversarial legalism as the American 'way of law'

Seminars start at 1pm, Room H615, Connaught House, LSE

CARR sponsors risk and regulation conferences at LSE and at universities throughout the UK.

CONFERENCE NEWS

Accountability, Accounting and Regulation

Centre for Competition and Regulation, UEA, Norwich, April 2002

CARR and the University of East Anglia's Centre for Competition and Regulation (CCR), with funding from the ESRC, held a major conference on the theme of accountability and regulation in the professions. The conference brought together more than fifty academics, industrialists and regulators.

'The main issue facing the professions - such as law, medicine and accounting - is that regulation in these areas is not perceived to be sufficiently independent,' said conference speaker, Peter Russell (CCR). A key task ahead, therefore, is to find successful ways of introducing more independence into such regulatory schemes. The conference provided a platform for discussion of these issues, and a chance to consider models from a diverse range of areas.

Sir John Bourn, Comptroller and Auditor General and Head of the National Audit Office, gave the keynote address on a new scheme of regulation for accountants. Anne Davis of Oxford University continued with a discussion on regulation of the medical profession outlining various models of accountability.

Delegates then turned their attention to regulation and accountability within the privatised utilities, such as water, gas and electricity, with a presentation by Martin Lodge and Lindsay Stirton from CARR on transparency in network regulation.

Stuart Ogden of UMIST focused in particular on accountability in the privatised water industry, while Peter Russell and Ian Dewing (CCR) moved on to look at auditor accountability and information provision to different audiences, such as regulators and shareholders.

The event ended with a discussion by Catherine Waddams Price and Lynne Conrad (CCR) on regulatory accountability in which they explored changing concepts of public interest.

Organisational Encounters with Risk

CARR, LSE

May 2002

A major workshop on 'organisational encounters with risk' was held in May under the auspices of CARR's Organisations and Risk programme. The workshop's purpose was to address aspects of risk management in organisational settings that are not easily captured by technocratic or engineering disciplines. Whilst such approaches work well for stable environments, they work less well in situations where there is radical uncertainty, where risk description, interpretation and communication are ambiguous, and where actors' incentives are problematic. In these contexts, the smooth reproduction of institutional facts and ways of doing things can be shattered. References to September 11th and Enron inevitably punctuated the discussions, although Bhopal, Challenger and Barings were also evident as important reference points.

Papers were presented by an internationally distinguished group of speakers: Diane Vaughan (Boston College), author of *The Challenger Launch Decision*, presented her latest work on air traffic control under the title 'Organisational rituals of risk and error'; Donald Mackenzie (Edinburgh) addressed the co-production of markets and pricing tools from a science and technology studies perspective in 'Models, risk and crises: the global financial system in 1998 and 2001'; Sheila Jasanoff (Harvard) analysed aspects of public processes of explanation in the face of risk, what she terms 'civic epistemology', in 'Restoring reason: good explanations for bad events'; Howard Kunreuther (Wharton School) addressed the possibility of 'tipping points' for organisational investments in risk management systems in 'Risk management in an uncertain world'; and Carol Heimer (Northwestern) examined the diverse sources of legalism in the management of medical risk in 'Risk and Rules: the "legalisation" of medicine in AIDS treatment and research'.

The proceedings of the workshop will be published as a monograph, with additional contributions from Brian Wynne (Lancaster) and the editors, Bridget Hutter and Michael Power.

More information on CARR events can be found on CARR's website, www.lse.ac.uk/Depts/carr/

CARR Discussion Papers

NEW DP9
Conceptualising Insurance: Risk management under conditions of solvency
 Michael Huber

NEW DP8
Social Licence and Environmental Protection: Why businesses go beyond compliance
 Neil Gunningham, Robert Kagan and Dorothy Thornton

NEW DP7
Neglected Regulation: The institutional attenuation phenomenon
 Henry Rothstein

NEW DP6
Mass Media and Political Accountability
 Timothy Besley, Robin Burgess and Andrea Pratt

DP5
Embedding Regulatory Autonomy: The reform of Jamaican telecommunications regulation 1988-2001
 Lindsay Stirton and Martin Lodge

DP4
Critical Reflections on Regulation
 Julia Black

DP3
The New Politics of Risk Regulation in Europe
 David Vogel

DP2
The EU Commission and National Governments as Partners: EC regulatory expansion in telecommunications 1979-2000
 Mark Thatcher

DP1
Regulating Government in a 'Managerial' Age: Towards a cross-national perspective
 Christopher Hood and Colin Scott

DP0
Is Regulation Right?
 Robert Baldwin

Business Risk Management in Government: Pitfalls and possibilities
 Christopher Hood and Henry Rothstein

Risk Management and Business Regulation
 Bridget Hutter and Michael Power

Recent Books and Special Journal Editions by CARR Members



Other Recent Publications by CARR Members

The New Public Management: Invitation to a cosmopolitan dialogue
 Michael Barzelay
 Hitotsubashi Business Review
 Spring 2002

The Labyrinths of Information – Challenging the Wisdom of Systems
 Claudio Ciborra
 Oxford University Press 2002

The Political Economy of Government Responsiveness: Theory and evidence from India
 Timothy Besley and Robin Burgess
 Quarterly Journal of Economics
 CXVII (4) 2002



Biotechnology 1996-2000: The years of controversy
 George Gaskell and Martin Bauer
 London: Science Museum Press and Michigan State University Press 2001

Regulatory Conversations
 Julia Black
 Journal of Law and Society 29 (1) 2002: pp163-96

Mind the Gap! Comparing ex-ante and ex-post assessments of the costs of complying with environmental regulation
 Andrew Gouldson, Peter Bailey and Gary Haq
 European Environment 12 (5) 2002



The Politics of Delegation: Non-majoritarian institutions in Europe
 Mark Thatcher and Alec Stone Sweet (Eds)
 West European Politics
 25 (1) 2002

Why We Need to Understand Corporate Life
 Bridget Hutter
 Parliamentary Brief April 2002: p18

Varieties of Europeanisation and the National Regulatory State
 Martin Lodge
 Public Policy and Administration
 17 (2) 2002: pp43-67



Environmental Policy in Europe: Assessing the costs of compliance
 Andrew Gouldson and Evan Williams (Eds)
 European Environment
 12 (5) 2000

The Governance of the European Union: The potential for multi-level control
 Colin Scott
 European Law Journal 8, 2002: pp59-79

Regulatory Reform in Small Developing States: Globalisation, regulatory autonomy and Jamaican telecommunications
 Lindsay Stirton and Martin Lodge
 New Political Economy 7 (3) 2002: pp437-55

Risk&Regulation is also published on CARR's website and back issues are available free on request. Please email David Black at risk@lse.ac.uk if you wish to order copies.



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