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Wortprotokoll
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(Auszug)

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Prof. Dr. Roland Koch:

I would like to switch to English now for a very warm welcome to our colleague Julia Black from the London School of Economics. Julia, you are here the second time in this conference. Thank you very much for that and for having you with us as the international part. The conference as you know is in German without full translation, but we all are basically in English, not only the School is always speaking English. So, it's no problem that now we will switch in English and listen to you for that.

I made some remarks in my introductory words saying that what we tried to achieve is a bit of broader perspective to regulatory items, not just jumping in sectoral issues before looking about more general approaches to the question how regulation can be.

Last year, you were presenting us here a very principal approach to the question what regulation is, which I think was very helpful, and we had the chance to publish that. Now I am happy, that we could ask you to talk a bit about the issue how to challenge regulation more in general. And we also talk about regulatory disasters where you worked about long time.

You don't only have your chair in the London School of Economics, you are a member of the board of the Bank of England, you have a lot of experience in implementing environmental regulation in Scotland, Northern Ireland and Wales, and a lot of other things. So, you are living the approach to regulation, and that's very interesting for us to get that which we in Germany are not as used as your British colleagues are. So, that is a very important point for and our understanding, what we try to do in our centre here. Thank you for joining us and the floor is yours!

Julia Black:

Thank you and thank you very much for this friendly introduction. It is a great pleasure to be with you virtually again as we are in our current times. Thank you very much as well for switching to English for these purposes - I'm afraid my German is enough to order something tasty in a restaurant, but not enough to actually give a presentation on regulation and regulation disasters.

I'm going to share my screen now. Let me just put up my slides.

The work that I've done on regulatory disasters has fed into my entire thinking on regulation and how we think about regulatory systems. As Roland did mention, I inhabit a number of different worlds simultaneously: One as an academic, a second as somebody having to run an organization and a third as a regulator. I am not speaking with my Bank of England hat on today, but I do constantly reflect in practice as well as in my academic work on the dynamics of regulatory systems and on what can go wrong.

So, I have twin roles. As manager within an organisation, I'm often saying: Yes we can do this, yes we can take risks. In my role as a regulator, I'm usually saying "what on earth can go wrong", and I'm a professional worrier.

(Slide 2)

So am I interesting looking at disasters, and was really prompted by a range of different things that can happen simultaneously to create them. The things that I am focussing on are not the everyday occurrences where regulation doesn't quite work, but the kind of slow incremental smaller failures that can add up to be a bigger thing, that become quite significant moments of failure. And because these are quite significant moments, it's helpful from a research perspective because you've got often quite a lot of official and analytical reports that you can analyse as to what was identified as key elements that led to this event. Not all of these are relevant to the way the regulation system was operating, but often that was a contributing factor in different ways.

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Some things that I'm going to reference today will be quite well known to you, others are possibly not. I have deliberately not gone into those issues which are currently live, in that there are current investigations underway. The examples are historic for that reason. The first example is Deep Water Horizon; as we all well remember, this was the dreadful leakage into sea from the oil pipes in the US with that enormous explosion, which caused billion dollars workload of damage and environmental damage. That's one of my key examples.

The second key example is the global financial crisis, now ten or twelve years ago. We are still living through some of the shock waves of the crisis, and the regulatory systems have been strongly influenced from by financial crisis: They have been very much built on the understandings and learnings from that crisis, and that's still very much live and very current.

Some of this work I was doing when I was at New Zealand and Australia, hence a couple of Australian and New Zealand examples. The leaky homes example in New cost the New Zealand government about 15 billion dollars in compensation. What happened here was, we had a roll back of building regulations in New Zealand. As a result of that a lot of homes are built to Mediterranean standards, assuming that they were appropriate for Mediterranean climate. I don't know if you have ever been to New Zealand, but it doesn't have a Mediterranean climate. It's quite wet in New Zealand, it's quite damp. Basically, the building standards are completely unsuited to the environment and you ended up with a significant number of houses New Zealand literally perishing.

The fourth example is the Buncefield explosion which was in the UK. Fortunately, there were no lives lost in this one, but this was probably because it happened on a Sunday morning. Buncefield was a fuel farm with big storage tanks for aviation fuel. And there are big pipes running from here off to the major airports, notably Heathrow and Luton. The vapour escaped from the large tanks and caused an explosion. Completely unpredicted, it took a while to work out how that explosion has been caused.

The fifth example is Pike River mine, a mining disaster in New Zealand, one of the second biggest disasters that killed 29 people, caused by a methane explosion underground but then riffled through the chambers.

The final example is the UK Stafford Hospital where we had significant standards neglected.

So, we have got lots of different examples, deliberately chosen with that variety. I'm not going into any one of these in any detail, but I want to just call out different elements of what went wrong within the regulatory aspect of the system that it contributed to these disasters and how can we therefore learn from that in building our regulatory systems and in operating them as we continue with regulation.

(Slide 4)

There are a lot of different ways that regulation can fail: single events, systemic failures, you can have the low probability, high impact events, such as high probability and low impact events per individual, but which cumulatively have a high impact. All of these were high impact events, but with varying levels of probability.

In the hospital scenario we've got a quite low probability and quite high impact events effecting lots of individuals which are then making up to a bigger impact. I am looking at where there was regulation mostly in place to cover the activity, not where there where gaps.

(Slide 5)

Just again to zone in, we are looking at those catastrophic events or series of events, which have significant impacts on health and financial wellbeing of individuals or the environment. Where are the contributory elements from regulatory failure? That can be lower magnitudes. But what I excluded here, are political failures, so events which caused problems of politicians as such. Just to really zone in to what we're talking about.

(Slide 6)

Obviously, as I say, regulation can fail in less dramatic ways too. As we know you can have regulatory arbitrage, activity will go to the least regulated area; you can have avoidance and compliance with the letter not the spirit of the rules as in a lot of tax law, for example, and accounting regulation. You can have a lead to over-deterrence, something which is often one of the concerns with a management certification regime. When you overload individuals with too many responsibilities, you'll deter the very people you want from taking on those posts, those who are very concerned to comply.

You can create perverse incentives, as in rate of return regulation did in the US in the case of airline industry; any of those industries where there is rate to return regulation can prompt very strong investment, to investing in capital expenditure, that may or may not lead to operational efficiency.

You can create moral hazard, obviously in safety regulation a key issue is around moral hazard. In order to minimise risks, people are encouraged to take more safety precautions, but this can lead them feel safer and so undertake more risky behaviour. Failures can also arise from negative interactions of regulatory regimes, clashes of goals and trade-offs. So there are lots of normal sources of failure in regulatory regimes. I'm going beyond the normal, looking at the worst.

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Coming then to thinking about how can we analyse disasters more closely. Looking at these different situations of disaster and analysing them, I identified that these six factors came into play. Each of them I am going to go through now and each of which I will just draw out with one or two examples of some of those disasters in each case, just to give you an illustration of the points.

The first source are the organisational capacity and dynamics, both of the organisations of regulatees themselves, and also of the regulators. I think it's very important that we remember in thinking about how regulation is operating, that we need to focus as much on what is going on inside the regulator as much as we focus on what's going on inside the regulatees, in the firms that we are regulating.

The second source I would like to focus on is the strategy and the techniques of regulation: What kind of regulatory strategies were being deployed, where they the right ones, how did this disaster illustrate the weaknesses of different strategies in different contexts?

The third source links to the ideas and understandings of those who are regulating, including those of firms as well. What are the ideas and understandings of how the system is working or how the organisation is working or how the market is working? And what impact does that have on how they decide strategies how they behave?

Moving on to individual behaviour is the next source, thinking about different individual incentives within organizations. Coming down to the granularity of really getting inside of these disasters. Often the failures are really quite quotidian, quite day to day, or they were clashes of individuals. Therefore that makes it very difficult to think of what the silver bullet solution is going to be. But it is really worth going into these individual behaviours and incentives.

Coming back now: Communication failures. Again, we're focusing on communications between regulatory organisations and regulatees as to what's expected, what behaviours are, whether somebody is compliant or isn't compliant. Again, we are identifying that they can play quite a significant role as part of these wider issues. - Finally, the system design and operation.

(Slide 8)

Those of you who were there last year may remember this map. You may or may not remember this, since last year is a long time ago, and, let's face it, quite a lot has happened since. But these are the core elements to the regulatory systems:

- Purposes, goals and values
- Knowledge, ideas and understandings
- Tools and techniques
- Behaviours of individuals

- Behaviours of organisations
- Trust and legitimacy

Last time I was talking a lot about evaluation and so I focused a bit more on topics which I won't focus on so much today. But I'll be just bringing out the other elements of the system now.

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So, let us dive in to just analysing some of these elements of which role they play in these different disasters. The organisational capacities and dynamics: We see organisations' systems and processes as mechanisms which translate individual actions into collective action by enabling them to be sustained over time. That's a fairly classic definition of an organisation.

As I said, you've got to look at both, the internal dynamics of the regulator and what is going on within the regulatee. I haven't analysed Wirecard for example, because that's still in play. But I only need to mention the term and you can see why you need to be looking at both. - And then the significance of organisational powers within organisations.

So where is this coming into regulatory failure? Often quite fundamentally and it's often said and it's usually always true, that failure often starts at the top of an organisation, both the regulator and the regulatee. The structures and processes of both can be quite critical. As we've seen many times, those internal dynamics and power relations in undercutting or overriding those formal structures are notorious. In the Challenger disaster the engineers were saying 'No, no, this really isn't safe to go up into space', but they were overridden – ending with the disaster that then happened.

And culture: we often talk about within regulation. It's all about the cultures of an organisation. As we know, that is very hard to identify and to change, either from the outside or the inside, but is often incredibly important.

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So, some of these examples: The Care Quality Commission in the UK is the regulator for the hospital cases. The Care Quality Commission is the regulator responsible for overseeing quality of care across hospitals and care homes. In that case, you had a very new regulator at that time with relatively inexperienced staff who were not particularly used to regulating and certainly not regulating in that way that was being introduced. Which meant that in terms of the questions that are being asked, they weren't the right questions, and we don't get the follow-up. I am always saying, when you're going into to talk to a regulated organisation as an inspector or compliance person or a supervisor, asking the first question is very straightforward; it's actually knowing what to do with the answer and getting the follow-up correct which requires expertise.

In all of these different examples, the Financial Services Authority in the UK, the mining inspectorate in Pike River, you just didn't have enough people who were sufficiently specialists and experts in the areas that they were regulating. So, they didn't really know what to look for, and if they did find something, they didn't really know how to manage it and how to deal with it. Or you just had insufficient numbers of them. For the mining inspectorate in the Pike River disaster, I think there were only two inspectors for the whole of New Zealand for all their mining activities.

What you can often have also within the expertise both in organisations of the regulator and the regulatees are the conflicting experts, the conflict between the generalists and the specialists or between two sets of specialists. So, in Buncefield you had the environment regulator which was focused on one set of risks, which was the environment; health and safety regulators were focused on the health and safety risks to the individual staff members and employees who were working on that site. So, you had then different priorities as to where safety protocols should be put in place and where resources should be spent when you have a firm that is being regulated by both regulators. And you had clashes between them to what was the most appropriate way to proceed.

You had a similar thing in Pike River, which is the mining disaster in New Zealand, whereby you had the specialists who could see some of the risks there, but their bosses were more generalists who couldn't understand that this would be a problem and so why spend the resources on doing more inspections, etc. So what is happening is a series of internal clashes in dynamics.

And then operational failures can be quite pervasive. So this is really basic housekeeping stuff: poor inspection management, no follow-up, no follow-through, problems left hanging around to the next action - you know how these dynamics work.

Often, the data regulators are relying on is inappropriate, is inadequate. You haven't got the right data about the right things, you can't use it because it's coming in such an unstructured way, you don't have the analytics. This is still a problem actually; this is still a problem with financial regulation. You know, it takes weeks to get kind of a cross analysis, all these tedious reasons. We all know that data handling and data management is absolutely critical but is often a Cinderella within any organisation and regulatory system.

Linked to that basic things are inadequate IT systems, incompatibilities between data sets or IT systems, and information flows just dissipate as they go up the organisation. So, both of those managing the organisations, either as a regulatee or as a regulator, just don't have the information that they need, and those at the top don't always know that they don't have that information.

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Added to the soft power structures and conflicting frameworks are also failures to manage risks strategically. I think we can all recognise this in the organisations that we are in, and possibly even mistakes being made in managing the pandemic. Attention is often focused on the problems of the here and now, rather than things that might possibly happen in the future, so problems crowd out risks. You go to the things that have to be done right now rather than the things which might happen sometime down the track. That is obviously very significant when you're looking at low probability but potentially quite high impact events. But handling them just gets pushed out for varieties of reasons. Linked to that is weak board governance and oversight. The regulators and the overseers in the firm are just not paying attention and not recognising that these problems are all brewing and that there is something really rising here which is really about to go wrong -- worldwide.

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So those organisational failures are very critical, very difficult to design out of a system. But there is an element to regulation which is about design, which is about design our techniques and technologies of regulation. I call them here: The norms, the numbers and the nuts and bolts.

I'm switching now to the second area that I'm going to look at which is the strategies and techniques of regulation Norms are the rules and principles. How are they written, how are they framed, whether they are framed in very precise terms or framed in very general terms. Whether it's speed: you know you must drive at 30 km/h or whether you must drive at a reasonable speed appropriate to the circumstances and the road conditions at the time. Those are very different types of standards and regulation operates through those.

Often rules are based in numbers, calculations, models; in financial regulation the value at risk model is an example. Models can express understandings of where risk is, how is this likely to be dispersed: We've obviously got that in Covid right now, haven't we. In terms of epidemiology we are all focusing on the R number - that we never knew existed as a thing until last year. So numbers and those calculation absolutely drive regulatory policy, as we can see in the handling of Covid, the policy response.

Linked to that, and also as part of that, can be the IT systems, the software, kind of soft infrastructure which is relevant to regulation but is also quite interestingly becoming the vanguard of regulatory technique now, at least in the UK. I just had a conversation just this morning, for example, in the context of financial regulation, of digital first policy making. So, this is going to be a really interesting thing as we start to see this roll out, as we start to get 'smart' regulation in the technological sense. In the context of

implementing rules, for example, we've got discussions around smart contracting. So, there are developments in 'reg tech' which we hope won't part of a future analysis on regulatory disasters, but it's an interesting thing to think about in terms of the techniques of regulation. But other, more prosaic, failures can arise:

mismatches in problems and solutions, so inappropriate models or bad science. Looking at the financial crisis, one of the many issues there were was that the models that were calculating risk were inadequate, and the data that they were using was too truncated in the timespan. They only looked back the last ten years, which were a benign period in the markets, and so they were massively underestimating the risk that was building up in the system because of inappropriate models, mistargeted rules, and inappropriate processes and protocols in place. I come on to some of the examples of those.

But also, the logics of different regulatory strategies can conflict. If you have got, for example, PBR, principle-based regulation, which is using very general rules such as 'you must be fair to your clients', 'you must act reasonably, appropriately'. If the regulatees are getting rules which are open to interpretation, if a regulator backs those up with strong enforcement action, then this can create a conflict. Because the firm doesn't know what to do; for example take the compliant firm who really does want to comply, it may think: If I get it wrong, I'm going to get very heavy sanction, but I'm not entirely clear what things I have to do to get it right. Then as a regulator you are likely to encourage quite conservative behaviour from firms concerned to be compliant and to mitigate the risk of that enforcement. So, you can have a lot of conflicting dynamics that can go wrong in the way that those strategies pan out.

One of the interesting things to me, looking at all the regulatory theories which were around at the time leading up to the crisis and their application to different types of techniques: A number of them were in play in these systems at the time, somewhere, somewhat. But each one failed in a particular way; so it just makes it clear to me that each of these techniques has an Achilles heel.

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So, let us have a look at some examples here.

Deep Water Horizon: This is a fascinating case. If any of you in the room are at all interested in how regulatory systems work in practise, then I thoroughly encourage you to read the reports onto Deep Water Horizon. In Deep Water Horizon there was a very rigid regulatory regime. It was set forth in legislation. But it is the politics around deep-sea oil extraction which are of relevance. Lots of vested interests were sitting there in Congress, and unwilling to change the legislation in any way. The difficulty however was that the legislation was premised on particular techniques of extraction being used. But over time technologies moved on and so, in fact, what was being used in deep water oil extraction were completely different techniques. But they were not covered by the legislation. So, you basically have this gap between the rules and what was happening in practice.

So, what happened? The regulator has not been able to keep pace with the technology changes, and the method of extraction was in effect unregulated. So, after Deep Water Horizon they switched to a management-based regulatory system, which has been used in the regulation of deep-sea oil extraction certainly in the UK since our own disasters back in the 1980's. The management-based regulation system is focussed on the management systems of the regulatees and makes sure that they have appropriate systems and processes in place to ensure that the activity is being done safely. So that was a quite interesting shift from the very detailed rules to focussing on systems and processes.

In New Zealand in the leaky buildings case, what you'd had previously were very detailed rules. They were removed. But the structure of the industry is such that there is a lot of small players. And so, whereas in the oil industry you have mainly a small number of big players who can afford to invest in the management systems, and the regulator can inspect those at a relatively low cost. Across the building industry in New Zealand, there are lots of small players, with not really very strong management and governance systems. And once the detailed rules were removed, what was left was a void of understanding of what good practice looked like, and a bunch of sharks in the market who were in there for a quick profit: Build a building, then go out of business and set up another one. So, you have a very

different regulatory environment in the sense of the type of industry context which is able to cope with different types of regulatory strategies.

If you go to management-based regulation then it is flexible, it relies on management to do the right things and it works when incentives were aligned. In financial services it was very much the flavour of the month within the UK, focussing on the management systems assuming that incentives were aligned. That those at the top of the bank would not want their bank to go under. But senior management and regulators were not really then drilling down into that assurance function.

And this is still a live, topical debate. I talked to two different regulators in the last two weeks about the appropriate balance between management-based regulation and detailed, audit type assurance., in which regulators 'lift up the engine bonnet to find out what's going on. It's very difficult to prescribe that balance in practice. But again, not getting that balance in these individual cases led to, for example in Pike River, the management systems looking fine but actually what was happening in practice was something really quite different.

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I'm now shifting around to knowledge, ideas and understandings. How well do the regulators know the market, how well do those who are at top of an organisation know what's actually happening within that organisation? How is that knowledge being produced? What's being ruled in, what's being ruled out? What are the assumptions of the nature of the problem and the best fit solutions?

And again, to go back to the financial crisis, there was some academic writing as to relationship to between the financial markets and the real economy, and the potential for a financial crisis. But that that was screened out from the mainstream thinking. The orthodoxy was about market efficiency. And so it was quite interesting what was screened in and what was screened out. At the start of the crisis the Queen came to open a building at LSE and she said to the economists who were in the room: 'Why didn't anybody see this coming?'. And so they they they wrote her a letter which said: 'it was due to a collective failure of imagination, we never thought it could happen'. I think there is something very important there in how understandings are framed.

We can see this in the handling of the Covid pandemic. We need to wait for all this to pan out before we can really start to think and analyse the variety of policy responses we are seeing. But I was talking to some psychologists about how the early signs were being interpreted when they were coming out of Wuhan and how they were being differently interpreted in South Korea, for example, to the interpretation certainly in the UK and probably in other parts of Europe. One of them reminded me of the duck rabbit illusion. If you look at that, it's a wonderful picture. Some people look at it and think it is a duck. And some people look at it and say, it's definitely a rabbit. With respect to the early data that was coming out on Covid, the same data was being interpreted in different ways by different scientists, largely based on their own their own experience. In the UK we interpreted the virus as flu. In South Korea, in another context, they interpreted it something more similar to SARS.

So, what we have here is quite fundamental. It goes beyond the lack of information and data flows to inappropriate framing of problems and of states of the world, such as assumptions about how firms in the market are working, and therefore how we are going to analyse the problems and craft solutions.

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The financial crisis I have already referenced. - We are going to the example of the Buncefield explosion now. It was never envisioned that there could be this enormous gas explosion in the air. And it was never contemplated when the planning permission was given for this site, which was right by the junction of two very busy motorways in the South East of England. Had this taken place at rush hour, then the casualties and the lethality could have been significant. But that actually just wasn't seen as a risk. In this case, it was not a terrorist attack, but there was no conception in the planning regulation that you needed to think about these wider environmental risks in making planning decisions. And the main focus of health and safety regulation was on the risk about employees actually in the plant.

Deep Water Horizon, again, had different conflicting goals around the regime. But I think in Buncefield one of the significant features was the number of different areas where it just wasn't envisioned something like this could possibly happen. The other thing in the Buncefield case is the different risks being tolerated. Even the environmental risk, was seen as a very low risk.

A number of these risks are easier to see than others. But I think certainly it plays into me as a regulator, as I'm struck that we always have to ask: Do we understand this properly? Are we getting the right challenge? Are we getting enough cognitive diversity into this debate to be able to really challenge the way that we are thinking about things and seeing things?

(Slide 16)

Very quickly, a number of points about communication. I think, this is a lesser element, but it's still quite an important thing to pick up in terms of how standards of behaviour are being communicated. Often, they are being communicated through the regulatory rules. But also signalling by both regulator and regulatee of their stance to regulation is important. Is a regulator going to be quite open and negotiative, or very formal etc. For firms, it is often about how they position themselves in relation to the regulator and one another; therefore, it's about how that relationship is managed, very much on the ground, looking at the relationships between the inspectors, supervisors and their regulatees. There can also be a lack of communication through the rules, as in New Zealand's case: pulling back on the detailed rules but not really putting in place more general standards, and as a result a lack of understanding of what actually might be required, even by those who wanted to comply. Lack of understanding is to what's expected comes from confused or misappropriate signalling. Sometimes supervisors don't like confrontations, so they may say 'Just do it next time' rather than insist on change now; and the firm will think: 'Oh well, it's fine'. Whereas the regulator hasn't really communicated: 'Actually, this isn't fine, you do need to comply, and we do want these things changed'.

Furthermore, this type of conversation might be handled at the lower levels between inspectors and those on the ground. It can be quite different from those conversations going on at chief exec level and in the Board and C-suite level between senior levels within the firm and the regulator. And so there can be conflicting signals going across from regulator to the firm as to whether or not something is compliant or what needs to be done and how quickly it needs to be done.

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Also within the rules themselves it can be sometimes confusing, as it was in New Zealand or the hospital case, to wherever the rules are setting minimum standards or aspirational standards. Obviously, it's quite important to make that clear. These mixed messages are coming across as to really what needs to be done.

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Finally, system failures. I think, one of the things to pull out here is the interaction of all of this with resources, both for the regulatees in the industry and for the regulator. It can be a tendency to load down both with expectations and mandates with simply no resource to deliver. So, you have a number of failures building up. That was certainly the case with the Care Quality Commission; at the time it was a very new regulator, with lots of new responsibilities coming down before it had really got set up, and was totally under resourced. The capacity to do the job was not being given to it.

But there are also areas where there is a fundamental conflict in the regime. This actually was one of the causes of what was going on in Deep Water Horizon in the US and in the Minerals Management Service. The MMS had two responsibilities. One was, it gave licences for oil extraction and it collected royalties from those licences. And the second was that it was responsible for doing assessments of the environmental impact of having deep sea drilling in a particular area.

So, you've already got a tension between: 'we need to get royalties in from oil extraction' against 'we need to preserve the environment'. And the way its performance was measured and assessed was on the amount of royalties it brought in. That is also how its staff's performance was assessed on an

individual basis; your promotion, your performance bonuses etc. was linked to the royalties that came in. It's not therefore surprising that the environmental assessment became something that was gone through but really just to go through the motions, because the real driver was to get the royalties in. So, you had a fundamental conflict within the way the system was designed for those two goals that regulated the managing of the risks. And again, if you are in that situation you are most likely to going to get a system failure.

There can also be fragmented or inadequate regulatory scope. The risk just isn't within the scope or the regulation has become outdated. So, I have not included it formally here as an example, but we can look at for example Rio Tinto and the destruction of the aboriginal site. Just looking at that at the regulatory regime there, you had a regime that allowed for consent to be given at the state level. And the time the consent was given, the aboriginal site wasn't known about. As soon as it was known about, there is no system within the regulatory structure to require a re-permit or for either the firm or regulator to have to go back to re-visit the decision. The regulatory structure is split between the state level and the federal level. All the legislation is very old, it dates from the 1970s or early 1980s. At the time it required some engagement with the local aboriginal people but not their direct involvement or consultation, as would be required now if it would be formulated today. There is very little room for federal legislation to step in when it considers the state legislation to be inadequate. So, in other words, you have a regulatory regime that was designed a long time ago, that has not kept up with the times. It was never really going to pick up and be able to step in this particular instance; it wasn't easy for it to do so. So, you are going to get these system failures if you don't keep your regulatory system up to date and keep it mobilised and moving with times.

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Then going to resources and business model, Minerals Management Service report concluded it was conducting safety regulation on a starvation diet. In Pike River the inspection service had been merged with the Department of Labour, funding being reduced with just two inspectors for the whole of the South Island; the budget came from the NorthIsland who didn't want it spent it on the South Island: bureaucratic infighting that was all just so tedious.

And then of course disasters lead to the blame game for the 'who's blaming who' across the system when the failure comes out.

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It's quite sobering to look at regulatory disasters. It does - for me - keep me on my toes, as it were, in terms of thinking what could be going wrong. There are however some things that one can be focussing on when thinking about a regime or designing one.

First obviously conflicting goals. If as someone setting up a regulatory system you give it conflicting goals, then you are really going to be setting it up to have a very difficult time. And when one goal is favoured over the other then you may well get a disaster because of that conflict; it just can't do both.

The incentive effects on both individuals within regulators and regulatees and the organisational capacities and dynamics operate in are also quite an interesting dynamic. Again, we have been focussing quite a lot, and certainly in the UK in financial services regulation, on the senior management certification regime. We really try to make sure that the key individuals with key responsibilities are absolutely obligated, incentivised and made accountable for regulatory compliance in particular areas, and we are driving down that through the organisation. But every regulatory technique has its own strength and weakness. Just to follow that example through of the senior management regime: There's a concern there about whether it is deterring good candidates from applying whether it does have an impact on diversity etc. All of these concerns need to be monitored and assessed, but every technique has its strength and weakness. Fundamentally it is about knowing and understanding the risks and the operating environment, communicating clearly and effectively, being able to be very conscious of those overall system of dynamics and their interaction, and of changes across all of those. So, it is a very challenging agenda, but it's absolutely necessary if we are to keep the regulation as it operates in practice and as we design it absolutely perfect.

Prof. Dr. Roland Koch:

Thank you very much for that presentation. When you have a chance to look into the chat, you can see that they are sharing that position: To start to analyse from very various experiences is a common advice to those, who are regulators, who are talking about regulatory systems, implementing them in their own corporate world, is very fruitful and, as said, in Germany not very often done. Therefore, that is an extremely good example. Thank you very much for that.

There is a question in the chat whether you are willing to share the presentation. So, when you can accept that, we will organise with your support that we can share the presentation with the participants who are interested to get that.

Julia Black:

Yes, absolutely.

Prof. Dr. Roland Koch:

There was one question of Sandra Eckert in the chat. Perhaps she can ask it herself, please?

Prof. Dr. Sandra Eckert:

Hello Julia, hello from Denmark, it's really a pleasure that you join us again in these special times. I have a question how we move from what you now analyse, ex post, once we have seen these regulatory disasters, to ex ante anticipate. You gave us some hints at the end when you said, it's all in a way important. It's such a comprehensive agenda. How can we do this, and what would be the procedure, so institutional devices, do we need a watchdog of a watchdog, or do we need a sort of regulatory disaster department within the regulator or some early warning mechanisms?

I really like about your talk is that it takes such different types of crisis. We know from financial regulation, right then we focus on the last crisis, and then we design the institutional regime, and then we see, the next crisis is different. You also spoke about the failure of imagination which captures our approach and these unknown unknowns. But still I wonder, how, in practical terms, can we implement this?

Julia Black:

Absolutely. I think to speak about looking in different regimes, the first thing regulators can do is: Any regulatory disaster that happened anywhere, whether it is in health and safety or whether it's in food or whether it's in financial services, it shouldn't matter, they should look very closely at it. Just because it's not happening in their specialist domain doesn't mean there aren't things they can learn. I always find, in the UK for example, that any one of the regulators, whether it's aviation or health and safety or financial services, they'll be on very good terms and they'll know a lot of people abroad in other countries working in for instance health and safety etc. But they don't know the people working next door to them. Often, they are up and down the same road. Because they don't do that kind of cross learning. So, that would be my first point. These are things that everybody should be able to learn from, because there are these common elements.

The second thing in terms of building in mechanisms to assess how regulation is working: You mentioned a few actually, and I think all of the above are important. One thing that is coming up increasingly is sunset legislation. What would that do? That can keep your system up to date. I haven't done a deep dive on the aboriginal mining issue, the Rio Tinto issue with the Australian destruction of the aboriginal site. But if that legislation, which has been in place for 30 or 40 years, had been had to be looked at every five or possibly every ten years then some would have looked that and said: 'Our norms have changed a lot since the 1970, we would now expect much closer involvement of the

aboriginal communities. We changed our cultural understanding, significance and importance and we changed our acceptance in relation to how those are treated; we need to update our legislation accordingly'. So, that kind of legislation review keeps your system up to date, although obviously there has to be the political will to actually want to follow through and to amend it.

But then, if you go into the regulator themselves, there is a number of things they can do. For example, scenario planning - the 'what-if', 'if this happened, how would we adjust, how are people positioned'? But there can also be a kind of implementation drift. 'If we expected x performance a few years ago, where are we now in terms of what we do expect?' Regulators look at model drift in banking supervision, for example, asking how are the models changing, are they drifting away? Lots of supervisors are making lots of individual incremental decisions about model compliance on an individual basis; has the collective outcome over time been that the regulatory expectations have changed in practice, even if the formal policy has remained the same? So, periodically regulators can do a cross check to see what's the effect of all those individual decisions on how the system as a whole is operating.

But you must have that kind of conscious awareness by regulators that actually things could be going wrong which they are not picking up, so they have to be consciously aware. So, that might be having a professional worrier, the disaster person, who thinks 'what could be going wrong', or something else; but there need to be a number of different things at different levels, you have to be able to have that check in place.

I'll probably leave it there. Certainly, you have always got to think about what could go wrong and how are you able to spot that. You can never anticipate everything.

Prof. Dr. Roland Koch:

Julia, one provoking question: How did your colleagues in the board of the Bank of England cope with that? Do they accept to have that view to other industries, to do that analysis you do? Did you force it or did they ask you or how it is in a real life?

Julia Black:

That is a very good question. It depends on where you go in the world. But certainly, regulators are looking increasingly think I think at different industries. So, looking for example at digital and data collection and finding, actually, there is a lot that can be learned from oil and gas, where there have been dangers for years. So, there is a lot that can be learned from other areas. There is a recognition that you can learn from others. That said, I think it is still quite a challenge for some regulators to realise actually that there are people outside of us and outside of our industry. But I think you can convene that, for example as a university or as a government. So, in the UK, there is a competition regulators network to talk about common problems. Then they start to get to know each other, and then it becomes easier to pick up the phone or e-mail or zoom or whatever, to say: How are you handling this, what are you dealing about that? So, you can convene that, but it might not happen on its own. But when you do and you get the right people, then they are quite open to learning from others. But as I say it might not happen spontaneously.

Prof. Dr. Roland Koch:

Thank you very much. Further questions?

Prof. Dr. Sandra Eckert:

There was another question in the chat. I think, it was by Mr Häusler (?). I think it was about the blame game issue, if you are on the blame avoidance. It is also a question: How do we create willingness? Regulators might not be willing to admit regulatory failure or also to engage in this ex-ante mechanisms. That is also probably a lot of work. How do you see that?

Prof. Dr. Roland Koch:

A good example is Wirecard actually.

Julia Black:

I've been keeping myself a little bit out of Wirecard, as you can tell, obviously. And again, willingness has to come from the top of the organisations. So, you have to the top of the organisation, who are willing willing to say: 'We got it wrong', or open to the question: Did we get this wrong, and if so how and why? But you have to have quite an open culture through the organisation. This is very difficult to plan through, and there is a lot of research on how to cultivate a culture within your organisation where it's okay to say, 'we tried this and we got it wrong', and that person will not be sacked or necessarily leave their job. What often comes up here as an example is the Civil Aviation Authority which undertakes 'near miss' analysis of when planes nearly crash. They analyse each instance to ask 'What do we learn from that?' That learning is just built the whole time into their culture. Spilling that across organisation as we know is very difficult, it can only come from the top and it does require an honesty and openness, confidence to be honest, within an organisation to say, 'actually we got this seriously wrong, and this cannot continue'. It might sometimes come with quite a significant shock externally to make an organisation stand up and say, 'we have an issue here we need to deal with'. That can only come from the top.

Prof. Dr. Roland Koch:

I think there is a certain point where self-awareness is not enough pressure to be in the system.

Julia Black:

Yes, absolutely. Exactly, if the organisation is not doing it themselves then sometimes it requires that external shock to say, 'actually, you have to'. As I say to regulators: Every organisation is geared to survive. That is classic in the organisation. An ultimate sanction for a regulator is actually its abolishment.

So, in the case of financial regulation in the UK - I mean rightly or wrongly – the Financial Services Authority lost the responsibility for banking supervision. So, ultimately a regulator can be abolished, and quite often it is, certainly in the UK context possibly too often but we're quite ruthless.

Prof. Dr. Roland Koch:

Thank you very much. Now it's a bit difficult. I have to compete with the noisy announcement in our school here, because we are still in a hybrid world and therefore people are permanently informed that they have to take XX and things like that. I hope you can still understand me.

So you see as in an university organisator you can see what...

Julia Black:

I can, I am very impressed with your XX. ...

Prof. Dr. Roland Koch:

This is the only message in the loudspeaker we are not allowed to kill or we have no technical means to that. So, we depend on whatever happens in the conference for the three minutes two times a day.

Julia Black:

There is an issue culture within regulators and I think yes, I think that is a really interesting thing to look at across different regulators and their different cultures. I found this fascinating just working across the UK regulators and seeing the differences not only between them but within them. For example, you often find tensions between the policy and then the technical specialists. So for example in on regulator there can be the health and safety specialists, the you're the engineers, the security specialists, and then the generalist policy makers, and there can be quite distinctly different cultures between them.

So there can be different micro cultures within regulators. And then certainly across different regulators you have very different attitudes, both within and between countries, on some fundamental things, for example how prescriptive your rules need to be, whether risk based regulation and supervision is appropriate or whether an assurance approach is required, where everything is given equal attention regardless of the risks of non-compliance. We've seen this at the European level between different regulators with different traditions. It can also go to different legal traditions: the difference between the common law and civil law traditions can be over-stated, but they do have sort of different attitudes towards implementation and enforcement of regulatory rules. It's a really interesting question about different cultures within and between regulators, and it's fascinating.