



EUROPEAN RISK FORUM - POLICY NOTE 18

UNDERSTANDING BENEFITS – ASSESSING THE POTENTIAL IMPACT OF RISK MANAGEMENT DECISIONS

2010

European Risk Forum

The European Risk Forum (ERF) is an expert-led and not-for-profit think tank with the aim of promoting high quality risk assessment and risk management decisions by the EU institutions, and raising the awareness of the risk management issues at EU-level.

In order to achieve this, the Forum applies the expertise of a well-established network of experts to 'horizontal', cross-sectoral issues. In particular, it addresses regulatory decision-making structures, tools and processes, as well as the risks and benefits of new and emerging technologies, of climate change, and of lifestyle choices.

The Forum believes that:

- High quality risk management decisions should take place within a structured framework that emphasises a rigorous and comprehensive understanding of the need for public policy action (risk assessment), and a transparent assessment of the workability, effectiveness, cost, benefits, and legitimacy of different policy options (risk management).
- Risk management decision-making processes should ensure that outcomes are capable of meeting agreed social objectives in a proportionate manner;
- Risk management decisions should minimise negative, unintended consequences (such as new, unintended risks, economic losses, reduced personal freedoms, or restrictions on consumer choice);
- The way in which risk management decisions are made should be structured, consistent, non-discriminatory, predictable, open, transparent, evidence-based, legitimate, accountable, and, over time, subject to review.

Achieving these goals is, the Forum believes, likely to require extensive use of evidence (especially science); rigorous definition of policy objectives; clear and comprehensive description and assessment of problems and their underlying causes; realistic understanding of the costs and benefits of policy options; and, extensive consultation.

The Forum works with all of the EU's institutions to promote ideas and debate. Original research is produced and is made widely available to opinion-formers and policy-makers at EU-level. As an expert group, the Forum brings together multiple sources of evidence (such as the experience of practitioners and policy-makers; non-EU good practices; and academic research) to assess issues and to identify new ideas. Indeed, direct engagement with opinion-formers and policy-makers, using an extensive programme of conferences, lunches, and roundtables, is a feature of the Forum's work.

The ERF is supported principally by the private sector. The ERF does not seek to promote any specific set of values, ideologies, or interests. Instead it considers high quality risk assessment and risk management decisions as being in the public interest. An advisory group of leading academics supports the ERF's work.

EXECUTIVE SUMMARY

Public management of risk has become one of the most important ways in which governments meet the social and economic aspirations of their citizens. Good risk management decisions, along with other public policy interventions, occur when benefits justify costs. Evidence from work by the OECD and others suggests that in too many instances, risk management decisions are based on an incomplete or inadequate assessment of the potential benefits of government intervention.

The development of a thorough, evidence-based understanding of the benefits of government action, combined with rigorous measurement, is an essential pre-condition for making high quality risk management decisions. It helps improve effectiveness, highlighting “cause-and-effect” relationships, facilitating comparison of regulatory options, and ensuring that government interventions are likely to be successful. It strengthens legitimacy by providing credible evidence that the benefits of government action are likely to exceed its costs. Finally, it provides the basis for effective ex post evaluation of regulatory decisions, strengthening further the utility, transparency, and accountability of modern regulatory processes.

Since 2002, the European Commission has built an extensive and well-respected system of ex ante assessment of regulatory impacts. Successive improvements in the supporting guidance notes, combined with process and institutional reforms, have delivered higher quality regulatory decisions. Despite these advances, more needs to be done if to ensure that the benefits of all regulatory and legislative proposals are fully identified, quantified, and supported by robust, credible evidence. This could include a number of possible improvements:

- Strengthen the overall impact assessment policy by requiring regulators to only select policy options if benefits justify costs;
- Amend the impact assessment guidelines by requiring regulators to produce a formal statement of benefits;
- Revise the impact assessment guidelines by mandating regulators to quantify, and wherever possible monetise, the benefits of risk management rules designed to improve health, safety, or the environment;
- Improve the technical guidance for the monetization of health, safety, and environmental benefits;
- Require the IAB to verify that the benefits of regulatory proposals are fully identified, credible, measurable, and capable of being assessed ex post;
- Draw up new impact assessment guidance for risk management decisions;
- Recognise within the impact assessment process the need to base estimates of the benefits of risk management decisions on the weight-of-scientific evidence;
- Widen the scope of the guidance for assessing the costs of risk management decisions;

1. BACKGROUND

Public management of risk has become one of the most important ways in which governments meet the social and economic aspirations of their citizens. Removal, reduction and mitigation of a wide range of risks, including those posed by financial and industrial activity, lifestyle choices, and technologies, has become a core role of government.

Good risk management decisions, along with other public policy interventions, occur when benefits justify costs. When managing complex risks, especially those posed by technologies, this can be difficult to achieve. Scientific uncertainties, compounded by the role of social concern in stimulating political involvement, may exaggerate the scale of potential harms, overestimating potential benefits, and triggering poor quality decisions. Equally, the benefits of risk management action may be understated if government investment in science-based assessment of risks is inadequate.

Evidence from work by the OECD and others suggests that in too many instances, risk management decisions are based on an incomplete or inadequate assessment of the potential benefits of government intervention. In contrast, high quality decisions ensure that potential benefits, including the reduction of harms through government action, are assessed fully, supported by robust evidence, quantified, and, wherever possible, monetized.

The development of a thorough, evidence-based understanding of the benefits of government action, combined with rigorous measurement, is an essential pre-condition for making high quality risk management decisions. It helps improve effectiveness, highlighting “cause-and-effect” relationships, facilitating comparison of regulatory options, and ensuring that government interventions are likely to be successful. It strengthens legitimacy by providing credible evidence that the benefits of government action are likely to exceed its costs. Finally, it provides the basis for effective ex post evaluation of regulatory decisions, strengthening further the utility, transparency, and accountability of modern regulatory processes.

Quantification of the benefits of government action, where this is relevant and feasible, provides additional opportunities for improving the quality of regulatory decisions. Tools such as VSL (value of statistical life) and measures of environmental benefits provide policy-makers with the mechanisms for undertaking complex analyses of the cost effectiveness of different regulatory options. Used well, these analyses enhance risk governance, highlight the limitations of government action, promote the better use of social resources, and provide the basis for the re-design of regulatory options.

The process of fully understanding ‘benefits’, within the context of managing risk, is complex. Measuring the benefits of risk reduction, and the direct impact of government action, can be conceptually and technically challenging. Alongside this, regulators need to consider the social benefits of the continued use of technologies or substances that may be considered hazardous: a problem known as the risk-benefit trade-off. If there is an excessive focus on the risks posed by technologies, without due consideration of their wider benefits, then additional costs are created and regulatory failure occurs. Good analysis of benefits recognises this complex problem, as well as identifying the public benefits of reductions in the exposure of citizens and the environment to potential harms.

2. CRITICAL SUCCESS FACTORS

Over the past decade, governments have made significant progress in developing and applying quantified measures of selected regulatory impacts. At EU-level, for instance, the European Commission has developed a “standard cost model”, derived from tools used in The Netherlands, to measure administrative burdens.

In contrast, there has been less use of quantified techniques to measure the potential benefits of regulatory interventions, despite significant technical progress in the development of appropriate tools (including value-of-statistical-life and quality-adjusted life years as measures of health improvements and willingness-to-pay measures of environmental gains). There are a number of reasons for this, including the technical complexity of some of the tools, ethical concerns, and the cost of obtaining high quality information.

Despite the limited progress made by many governments, it is possible, using evidence from the OECD, leading countries, and academic research, to identify “success factors” for ensuring that benefits are properly considered when risk management decisions are made. Specifically:

- A political mandate, set out in a clear policy, requires all risk management decisions to demonstrate that benefits justify costs;
- Risk management decisions should ensure that government interventions mitigate the adverse effects of regulation on the environment, health, and safety, including taking full account of changes in any risk-benefit trade-off;
- Benefits of government intervention should be measurable, and quantified, with linkages between public policy and improved health or environmental outcomes clearly demonstrated;
- Evidence of the benefits of government action should be robust, credible, based, where relevant, on high quality science, and derived from the weight-of-evidence rather than worst case assumptions;
- Benefits should be monetized, wherever this is possible, with economic estimates based on willingness-to-pay methods;
- Process standards, methodologies, data quality standards, and technical assumptions for measuring the health or environmental benefits of proposed regulatory interventions should be set out in detailed, mandatory standards;
- Ex ante impact assessments of potential regulatory impacts should require officials to identify clearly, using quantified measures, the benefits of policy action, creating the basis for effective ex post analysis of regulatory decisions;
- Oversight mechanisms, designed to ensure that ex ante assessments are of high quality, should highlight deficiencies in measures of benefits, requiring rectification before final regulatory decisions are made;

3. EU INSTITUTIONS AND BENEFITS OF REGULATION

Since 2002, the European Commission has taken a series of steps to improve the quality of legislative and implementing decisions. These include the introduction of process standards for the consultation of stakeholders, and the creation of a comprehensive system of ex ante impact assessment. Alongside these, the Commission has set up an embryonic system of ex post analysis of regulatory decisions.

Over this period, progressive revisions of the Commission's internal guidance notes for ex ante impact assessment have improved the requirements for identifying and evaluating the benefits of government action. The latest revision, published in 2009, requires regulators to identify benefits clearly, and provides technical information about a range of methods, including willingness-to-pay for environmental benefits and value-of-statistical life (VSL), for quantifying and, in some cases, monetising benefits. Indeed, the latest guidance, unlike its predecessors, recognises the utility of trying to place a value on the costs of reducing statistical loss of life rather than taking a moral stance based on eliding VSL techniques with an ethical aversion to placing a value on a human life. This shift in approach, combined with greater technical information, encourages regulators to make greater use of quantified techniques when assessing the benefits of policy action.

Whilst formal policies for undertaking impact assessment, and for making legislative decisions, have been clearly established by the European Commission, a specific policy for managing risk has not yet been set out. In its absence, the only policy guidance available remains the Commission's communication on the use of the precautionary principle. Despite its limited scope, focusing on a narrowly-defined type of risk, this requires regulators to assess the costs and benefits of alternative policy options.

Although progress has been made to improve the way in which regulators identify and evaluate the benefits of government interventions, there is evidence of substantial gaps and weaknesses in the approach taken by the EU's institutions. Annual reports by the Commission's Impact Assessment Board consistently highlight the lack of quantification of regulatory impacts, especially benefits. A recent report by the European Court of Auditors, focusing on the Commission's impact assessment system, highlighted similar concerns. Specifically, it identified significant weaknesses in the "intervention logic" (the link between policy action and benefits) in too many impact assessments, and a consistent failure to quantify benefits.

A further weakness of the Commission's approach is the lack of a formal policy for making risk management decisions. Despite its importance as a core function of government, this area of public policy remains ill-defined at EU-level. No formal policy exists, for instance, that recognises the distinctive nature of risk management decisions, including the need for scientific evidence to identify potential harms and hence possible benefits, and the importance of assessing explicitly risk-benefit trade-offs. Without such a policy, there is no political context, other than that set out in the precautionary principle communication, within which technical guidance for the identification and evaluation of benefits from reducing risks can be properly utilised by regulators. Unintentionally, a policy framework may be created that seeks aspirational social benefits through avoiding risks, rather than assessing objectively the quantified improvements in health and environmental outcomes that may occur through targeted actions to limit risks and ensuring that benefits justify costs transparently.

4. RECOMMENDATIONS

Since 2002, the European Commission has built an extensive and well-respected system of ex ante assessment of regulatory impacts. Successive improvements in the supporting guidance notes, combined with process and institutional reforms, have delivered higher quality regulatory decisions. This is to be welcomed.

Despite these advances, more needs to be done if to ensure that the benefits of all regulatory and legislative proposals are fully identified, quantified, and supported by robust, credible evidence. This could include a number of possible improvements:

- **Strengthen the overall impact assessment policy by requiring regulators to only select policy options if benefits justify costs**, and to ensure that the final policy option chosen maximises overall net benefits;
- **Amend the impact assessment guidelines by requiring regulators to produce a formal statement of benefits**, basing the statement on robust, credible evidence;
- **Revise the impact assessment guidelines by mandating regulators to quantify, and wherever possible monetise, the benefits of risk management rules designed to improve health, safety, or the environment**, ensuring that any non-compliance with the requirement is explained explicitly and fully;
- **Improve the technical guidance for the monetization of health, safety, and environmental benefits**, requiring the use, wherever possible, willingness-to-pay techniques, including VSL;
- **Require the IAB to verify that the benefits of regulatory proposals are fully identified, credible, measurable, and capable of being assessed on an ex post basis**, creating a formal 'hurdle' before a regulatory proposal is allowed to be considered by the Commission;
- **Draw up new impact assessment guidance for risk management decisions**, recognising the distinctive nature of such policies, highlighting the importance of science and risk acceptance, placing the use of precaution in an appropriate context, and emphasising the need to assess risk-benefit trade-offs;
- **Recognise within the impact assessment process the need to base estimates of the benefits of risk management decisions on the weight-of-scientific evidence**, avoiding over-claiming through worst case scenarios;
- **Widen the scope of the guidance for assessing the costs of risk management decisions**, ensuring that any prospective loss of existing social benefits is recognised as an opportunity cost of government action;

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This policy brief was written by Richard Meads, the European Risk Forum's rapporteur, with help from members of the Forum. However, the views and opinions expressed in this paper do not necessarily state or reflect those of the European Risk Forum.