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FALSE CERTAINTY: JUDICIAL FORCING OF THE QUANTIFICATION OF RISK

By Diana R. H. Winters*

Associate Professor, Indiana University Robert H. McKinney School of Law. J.D., New York University School of Law; Ph.D., Harvard University.

Abstract:

Risk, which is by definition only the possibility of harm, is speculative and amorphous. To transform risk into something more concrete and measurable, courts reviewing risk determinations by agencies or individuals in certain contexts will insist that the parties quantify this risk. However, the quantification of risk does not fulfill its promise; beneath the veneer of objectivity and certainty is a messy and subjective process. Instead of ensuring that agencies adhere to their legislative mandates, quantifying risk may force agencies to contradict precautionary directives. Moreover, the quantification of risk leaves room for political and self-interested maneuvering by obscuring the role of policy in agency decision making. The quantification of risk becomes a proxy for reasonableness and a rhetorical reinforcement against the accusation of judicial overreach and extrajudicial action.

This Article analyzes the judicial forcing of the quantification of risk in two contexts: first, the review of agency action, and second, the determination of whether probabilistic injury satisfies the injury-in-fact standing requirement. By juxtaposing these two contexts, the Article illuminates the work expected of the quantification of risk and the flaws in the process. It then turns to proposals for improving the judicial review of risk determinations.

I. INTRODUCTION

The speculative nature of risk, which is by definition only the chance or the possibility of harm, makes it ill suited for adjudication by federal courts.
(pp. 315-316)

Nevertheless, federal courts confront risk often, notably in the disparate contexts of (a) reviewing agency action, and (b) assessing whether a party's alleged increased risk of harm constitutes sufficient injury in fact to establish standing to sue.1 In both of these areas, courts must negotiate the nature of risk with the judicial enterprise, managing the uncertainty of risk with the boundaries of judicial review. **Risk determinations, critical to the modern regulatory state, and ubiquitous in challenges to regulation, must coexist with the Article III requirement that courts can only hear cases or controversies involving actual or imminent injury,2 and with the need for courts to balance deference with a searching review in their review of administrative action.3**

It is for this reason that courts find the quantification of risk to be appealing. For the purposes of this Article, the quantification of risk happens in two ways. First, an agency charged with passing regulation to protect the public health and safety will initially assess the risk posed by a substance, activity, or event to the public, and this assessment will be communicated in numbers. When a regulation based on such an assessment is challenged in court, the court must determine the extent to which it will delve into the preliminary risk assessment. Second, a federal court confronted with a plaintiff claiming that he or she is at greater risk because of an agency decision must determine at what point the plaintiff's risk passes the point of mere speculation and suffices to become injury in fact. In this scenario, a court may ask the plaintiff to quantify his or her risk before allowing the case to

proceed. The act of quantifying risk transforms the concept from speculative and amorphous to definable and assessable. Moreover, quantification carries the implication of objectivity and can be easily communicated to the public.

Beneath the veneer of objectivity and certainty covering quantification, however, is a messy and subjective process. This process involves complex policy determinations, political conflict, and the negotiation of scientific uncertainty. The perceived benefits of the quantification of risk are therefore worth scrutinizing. **These perceived benefits include the ability to objectively measure risk, the availability of an instrument to bridge the expertise gap faced by a generalist judiciary, a method to clearly communicate risk to the public, and a way to keep the judiciary within its proper constitutional role**.

Unfortunately, however, **the quantification of risk does not fulfill its promise. To the contrary, it actually undercuts the purposes of judicial review. Instead of ensuring that agencies adhere to their legislative mandates, quantifying risk may force agencies to contradict precautionary directives by waiting for proof of harm before regulating.4**
(p. 317)

And instead of promoting legitimacy, the quantification of risk leaves room for political and self-interested maneuvering by obscuring the role of policy in agency decision making. Courts are cursorily reviewing, and giving their imprimatur, to agency science that comprises both scientific and policy decisions.5 Moreover, forcing parties to quantify increased risk to assess the existence of injury in fact actually forces courts, by making a determination on the acceptable amount of increased risk, to act legislatively—exactly the position courts were trying to avoid.

This Article juxtaposes these two contexts for the first time, discussing **the judicial forcing of the quantification of risk** in both the review of agency action and the determination of whether probabilistic injury satisfies the injury-in-fact standing requirement. **In regards to the former, courts often defer to agency treatment of quantitative risk assessment, which has been the dominant method used by federal agencies to determine the necessity for health and safety regulation for over three decades.6** Its dominance was, in fact, triggered by judicial opinion.7 The degree of deference given by courts to these quantitative risk assessments encourages agency reliance on quantification and can have an inhibitory effect on regulation.8

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5. *See* Wendy E. Wagner, *The Science Charade in Toxic Risk Regulation*, 95 COLUM. L. REV. 1613, 1661 (1995) (suggesting that judicial review exacerbates "the misrepresentation of policy issues as science").

6. *See* Lawrence A. Kogan, *The Extra-WTO Precautionary Principle: One European "Fashion" Export the United States Can Do Without*, 17 TEMP. POL. & CIV. RTS. L. REV. 491, 505 n.57 (2008) ("Over the last two decades, [now almost three decades] quantitative risk assessment has emerged as the dominant paradigm in the United States for including science in regulatory decisionmaking as the best way to manage threats to public health and the environment." (alteration in original) (quoting Gail Charnley & E. Donald Elliott, *Risk Versus Precaution: Environmental Law and Public Health Protection*, 32 ENVTL. L. REP. 10363, 10363–64 (2002)); *cf.* Thomas O. McGarity, *The Story of the* Benzene *Case: Judicially Imposed Regulatory Reform Through Risk Assessment*, *in* ENVIRONMENTAL LAW STORIES 141, 169 (Richard J. Lazarus & Oliver A. Houck eds., 2005) (concluding that quantitiative risk assessments will continue to be part of setting agency health and environmental standards considered by courts). See *infra* Part II.A.2.a for a discussion of courts' deference to agency risk assessments.