We very much appreciate the opportunity to comment briefly on Professor Brown's review of our book, *Regulatory Risk: Economic Principles and Applications to Natural Gas Pipelines and Other Industries* ("Regulatory Risk"). Professor Brown's review expresses concern that our book: (1) does not address a wider set of issues, (2) addresses issues that are rapidly becoming obsolete due to growing competition, and (3) offers analogies to matters such as "moral hazard" that needlessly create controversy.

In a sense, our book adequately speaks for itself regarding objections to the theory of asymmetric risk as it applies to regulated firms. However, we fear many will never get to those arguments if they rely upon Professor Brown's characterization of the relevancy of these concepts. Any potential inquiry into this important debate could be prematurely terminated for any who rely upon Professor Brown's view that our work evidences "narrowness and lack of timeliness."

With respect to Professor Brown's first concern, our book is definitely a monograph. If it succeeds in getting the basic idea across, as it evidently has done for Professor Brown, it has accomplished its chief purpose. (His review does demonstrate our failure to explain all of the details well enough so that they can be fully understood by all readers.) We certainly agree another book could have addressed many other issues, although we do not agree that the issues we do address are as narrow as Professor Brown appears to believe. Moreover, we strongly disagree that the issues we raise are no longer relevant.

As we attempted to convey in our book—perhaps not as successfully as we had hoped, if Professor Brown's is a representative response—"regulatory risk" is simply a special case of "asymmetric risk." We now use the more

3. See id. at 65-114. We will pass over responses to comments we have already adequately addressed in the book, such as those criticizing us for alleged "strong bias," Brown, supra note 1, at 411, as evidenced by the alleged "failure of the authors even to reference the possibility of symmetry in the changes in the rules of the game," id. at 410-11, favoring investors. See Kolbe, supra note 2, at 83 (discussing this concern as objection number ten). As we indicate, "these claims cannot be addressed except with a systematic study of the facts in particular circumstances." Id. at 106-107. In this spirit, we address this issue in detail in our analysis of the gas pipeline industry. Id. at 197-280.
4. Brown, supra note 1, at 404.
5. See Kolbe, supra note 2, at 115-36.

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general term to describe the generic problem.⁶ Such risks do not go away simply when regulators recede from the picture.

Firms previously subject to strict cost of service regulation (rate base/rate of return) are not going "cold turkey" to a new regime of competition.⁷ In the process of a transition to deregulation, asymmetric risk is at the heart of the dispute over the appropriate rules during the transition.⁸ Even where a transition to deregulation has been accomplished, there will likely be continued regulation of bottleneck facilities, residual obligations to serve, and other remaining obligations of incumbent firms. By nature, these issues are likely to involve asymmetric risks.

Examples of two problems encountered in these regulatory debates can serve to illustrate the point that the theory's application to a broad range of current issues is far from "exclusively theoretical" and "narrow." In a recent proceeding in Hawaii, regulators were asked to determine whether investors in an electric utility had previously been compensated for the risks of incurring hurricane restoration costs that amounted to 80 percent of the prior rate base. If so, a case might be made that the investors, and not ratepayers, should bear these costs. At the end of the proceeding, even a spokesperson for ratepayer interests agreed that the economic principles in Regulatory Risk demonstrate that no such compensation could possibly have occurred if regulators had previously set the allowed rate of return equal to the cost of capital. Unless regulators have found a way to banish hurricanes and environmental disasters, such regulatory problems are not going away.

The second example concerns assets or contract commitments that could be "stranded" by competition in areas where a deregulated price of electricity would be below the regulated price. The magnitude of such stranded costs is truly staggering.⁹ Some observers have argued that investors should bear those costs because they were previously automatically compensated for such risks

⁶ See id. at 27-41, where we define the problem as depending on the asymmetry of possible outcomes. See especially id. at 41, where we state: "[i]n actual situations, there may be asymmetry arising from economic forces as well as regulatory actions. For example, . . . the firm may be subject to both regulatory and competitive constraints . . . ." See also id. at 134, where we use the "asymmetry" terminology and note that "the source of the problem need not involve regulators at all." Thus, we are confused by Professor Brown's criticism that "[t]he risk is not regulatory at all, it is economic." Brown, supra note 1, at 406.

⁷ Indeed, some are questioning the commitment to competition in the first place. See Benjamin A. Holden, Power Plays: California's Struggle Shows How Hard It Is to Deregulate Utilities, WALL ST. J., Nov. 28, 1995, at A1.


when regulators equated the allowed rate of return to the cost of capital.\textsuperscript{10} The economic principles in \textit{Regulatory Risk} show that this argument cannot possibly be sound.

Any principled economic analysis that sheds light on this issue can go a long way towards resolving perhaps the most contentious issue facing regulators in developing a transition program towards more competition. As it turns out, the economic principles of asymmetric risk embodied in \textit{Regulatory Risk} imply that even if: (1) investors are fully cognizant of the risks, (2) capital market prices fully reflect such risks, and (3) regulators always set the allowed rate of return equal to the true cost of capital, it is mathematically impossible for investors to have been previously compensated for these risks.\textsuperscript{11}

This point is critical because Professor Brown’s focus on the issue of how the capital came to be invested in the first place\textsuperscript{12} makes it appear that the issue of proper compensation for asymmetric risk turns on the question of the reasonableness of investor “risk expectations.”\textsuperscript{13} As we explain, “the general principles apply even when the risk is perfectly perceived by investors.”\textsuperscript{14} Nor do the principles rely upon a switch in regulatory rules, although the \textit{Duquesne} case involved such a switch.\textsuperscript{15}

A full explanation of the application of the economics of asymmetric risk to the problem of stranded costs goes beyond the scope of the present discussion.\textsuperscript{16} However, the issue illustrates what we believe are important conclusions. First, it would be a grave mistake to consign the theory as a relic of a bygone era or simply a “theoretical justification for an added element of expert testimony on the cost of capital on behalf of a utility in a rate case.”\textsuperscript{17} The theory addresses significant issues facing regulated industries in a new and more revealing way. Nothing Professor Brown says challenges the economic principles set forth in the book, although as we point out in the book, there is a legitimate debate on a case by case basis as to the empirical significance


\textsuperscript{12} Brown, supra note 1, at 406.

\textsuperscript{13} Regardless of “how we got here” (and we believe our logic survives Professor Brown’s doubts on this point), Professor Brown’s discussion at this point could be relevant to today’s return requirements only if the return on equity were based on historical rather than current risk -- something like the embedded cost of debt.\textsuperscript{14}

\textsuperscript{14} See KOLBE, supra note 2, at 101-105.


\textsuperscript{17} Brown, supra note 1, at 411. In fact, we explain why such a step could be a bad idea for a utility to pursue. KOLBE, supra note 2, at 53-55.
of the concepts. Furthermore, the regulatory issues raised by stranded costs arise from the interaction of competition with regulation, a topic we review in the book and write about at length elsewhere. We therefore cannot agree with Professor Brown's bifurcation of the issues into "the regulatory days of yore" governed by "regulatory risks," versus the world of competition (allegedly the world of today and tomorrow) governed only by "market risks."

With respect to Professor Brown's last concern, we very much regret any misunderstanding our use of terms such as "moral hazard" may have created. In economics, "moral hazard" is a value-free descriptive term, not a pejorative label. It merely describes certain situations in which private and social costs and benefits diverge, and in our usage the term has nothing to do with the kinds of practices it evidently calls to mind for Professor Brown. We welcome the suggestion of alternative terminology, but this will not make the problem discussed in our book go away.

Indeed, we regret anything in the book that has contributed to Professor Brown's lament that "[t]he problem is that these traditional and profound dilemmas which constitute the regulatory conundrum go largely unrecognized in a book that seems doggedly determined to retain a narrow focus. . . ." Our broader experience has indeed given us some appreciation of the problems that regulators and former regulators such as Professor Brown have faced. We meant no disrespect to their function by pointing out that deeper economic issues than they had traditionally recognized are part of the overall problem. Evidently our choice of words gave offense we did not intend.

In summary, we must respectfully but strongly disagree with Professor Brown's review. Rate regulation will persist for many companies for years to come. Deregulation of electric distribution is not contemplated, and we are aware of no serious proposals to let electric utilities have unfettered control over their transmission systems. Gas distribution companies remain regulated, and now can be exposed to the gas contracting risks that so harmed the gas pipeline companies that serve as the case study in our book. Electric generation is not yet deregulated, and different approaches to such deregulation can and will allocate $100-$200 billion in potentially stranded costs for utility plant and overpriced purchased power contracts in very different ways. The principles

18. See KOLBE, supra note 2, at 115-22.
21. KOLBE, supra note 2, at 53-54.
22. Brown, supra note 1, at 409.
in our book are fully relevant today for all of these industries and will remain so for years, and perhaps decades, to come. Even in—no, especially in—a world of growing competition, it is far too soon to consign our book to history.