

A View from Behavioral Political Economy on Risk Management Strategies in an Uncertain World

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1 Introduction

My primary research interest is in what might be called behavioral political economy. In general, I am concerned with integrating insights from behavioral economics into models and empirical analysis of political decisions and institutions. In the context of catastrophic risk and security, my interests in this area fit roughly into two major categories. The first focuses on individual decision-making and the interaction between cognitive bias and strategic environment. I have explored some of these issues in the context of natural disasters risk and believe there are significant applications for catastrophic risk more generally. Second, I am concerned with the challenges of constructing effective and efficient political institutions for regulating catastrophic risk against this theoretical backdrop. Both are considered briefly below.

2 Bias and Strategic Environment

For several decades now, an active scholarly debate has sought to clarify whether rationalist assumptions are reasonable proxies for actual decision-making. The debate now has its parallels in law, economics, political science, and continues to be an area of active scholarship. There is little doubt that this debate has been healthy and productive. Yet as its duration passes five decades, integration is becoming a more central task. Recent innovations in behavioral finance and behavioral game theory have created new insights by integrating actors that exhibit certain forms of cognitive bias— now well known by behavioral economists and cognitive psychologists—into formal analysis of games, incentives, and market behavior. Part of my interests lies in a similar undertaking for

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political problems and political institutions. In certain real world decision-making arenas, we have a good sense that individuals tend to exhibit biases in the formation of their beliefs and behavior. Natural disaster risk is one such case and there are numerous extensions and applications to catastrophic risk more broadly. In these areas, we can productively use behavioral insights to better understand how individuals and organizations respond to incentives created by different public policies.

Traditionally, the challenges of risk perception and analysis of strategic environment using the tools of game theory have been studied separately. Work on risk perception has sought to develop a range of biases to which individuals are subject, while game theory has relied almost exclusively on the assumptions of rational choice. Nevertheless, a number of innovations have recently been advanced. However, things are starting to change on this front, and more research is needed for (1) understanding how to properly model such biases theoretically; (2) identifying adequate measures of various biases with empirical data; and (3) designing political institutions that take account of this reality of decision-making.

While modelling decisions with actors that are more cognitively realistic has a number of potential implications for the effective social management of catastrophic risk, I am particularly concerned with devising quantitative methods for adequate empirical tests for behavioral hypotheses outside the laboratory. The logic of market incentives and the assumption of rational actor models underlie a great deal of risk regulation in the United States. Yet, in many cases, citizens respond to selective incentives in ways contrary to theoretical predictions. Especially when the stakes are life, death, and financial losses in the billions of dollars, as is the case with catastrophic risk policy, we should ensure that the models that guide our policies are the most rigorous and accurate ones available. Though a plethora of theories about risk management behavior abound, more rigorous empirical testing about the way individuals respond to social, market, and government incentives is a must for the construction of effective legislation. To the extent that our policies on terrorist attacks are based on inaccurate assumptions about how either citizens or firms will respond to new incentives, these institutions are unlikely to have their desired effect. Thus, as we grapple with how to respond to these challenges, behavioral and empirical insights should remain a key component of the theoretical foundation.

3 Political Institutions

As a political scientist, I am fundamentally concerned not just with individual decision-making, but also with the ultimate structure of government institutions. To model individual decisions without an eye towards the structure of government policy is inadequate, as is ignoring the social and economic contexts that give rise to government risk institutions. In particular, I am interested in two major branches of research in this area. The first emphasizes the endogenous nature of the relationship between citizen or firm behavior and the development of political institutions for regulating risk. The second focuses on more traditional political economy issues in the regulation of the insurance

industry and the viability of legislative reform to alleviate such problems.

3.1 Endogenous Institutions

While scholarship has focused on the design of effective institutions to regulate risk, relatively little attention has been given to the underlying process of political decision making. However, the relationship between citizen behavior, interest group activity, and coalition-building within Congress is central to understanding which policies get passed and why they may yield unintended negative consequences. By way of example, in the natural disaster context, politicians delegated primary responsibility for disaster policy to the bureaucracy. This may have been a reasonable response to the inter-temporal challenges of dealing with at-risk populations. However, centralizing disaster policy in the bureaucracy also created new incentives for organized interests to seek rents with greater fervor. As more interest groups became involved in the policy arena, the range of benefits expanded to the point of largesse that is often criticized. Though the decisions that politicians made were reasonable, they also created unintended social consequences that may or may not have advanced the overarching policy goals. Although the challenges facing legislators as they deal with security and the possibility of future terror attacks are distinct, catastrophic risk policy is not exempt from the pressures of interest groups and other social actors. As we consider new policies for managing catastrophic risk, we should also focus on which institutional arrangements exacerbate and which alleviate these issues.

A related basic analytic point is that politicians should (and do) make strategic choices about institutional arrangements. It is not just citizens who respond strategically to public policy, but also politicians who reply strategically to citizen behavior. Indeed, rather than focusing solely on the way that actions of the State create incentives for citizens and firms, we should also ask how the behavior of citizens creates incentives for political actors. As academics and politicians turn directly to other forms of catastrophic risk, careful attention should be paid to the underlying political dynamics in the nexus of private decisions, social risk, and public policy.

3.2 Regulation and Legislation

Finally, treatments of catastrophic risk almost inevitably grapple with the proper role of the insurance industry and the Federal government in the management of risk. But, the public-private relationship in this arena faces a number of unresolved pitfalls that are not present in most other policy areas. First, much, if not most, insurance regulation takes place at the state rather than Federal level. Yet, only the Federal government is in a position either to deal with backstopping insurance losses or to regulate the industry in a systematic way. Partially because state-level involvement remains extensive, the mixed regulatory regime continues to challenge both government and industry officials. I am particularly interested in how statutory reform might alleviate some of the current regulatory problems.

Like the primary insurance market, instability in the reinsurance market has posed

challenges for insuring catastrophic risks. In the 1990's, we saw a number of reform proposals, but it is not clear that any yielded a stable and adequate alternative to the reinsurance market. As a result, I would like to explore the efficacy of recent attempts to create alternative market mechanisms for allocating catastrophic losses. Terrorist attacks that result in catastrophic losses will almost certainly result in direct Federal aid or relief, but if attacks are at all repetitive, we will need to design better mechanisms for allocating risk across the public and private sectors.