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Toward a Political Economy of Crisis Management:

Rational Choice, Ignorance, and Haste in Political Decision Making

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I. Introduction

A crisis typically has three characteristics. First, a crisis is unexpected, a complete surprise.[1] Second, a crisis is normally unpleasant in that current plans are found to work less well than had been anticipated. Third, a crisis requires an urgent response of some kind. That is to say, an immediate change of plans is expected to reduce or avoid the worst consequences associated with the unpleasant surprise.

These characteristics imply that not every public policy problem is a crisis, because many public policy problems are anticipated or long-standing. The present social security problem faced by most OECD nations is not a crisis, although it is a serious problem. Other policy problems are clearly worsened rather than improved when current policies are abandoned. This may be said of constitutional law, when minor problems arise from long-standing political procedures. Other policy problems lack immediacy, even when they are unanticipated. This might be said, for example, of global warming, which was unanticipated prior to 1990 yet is anticipated to take decades to emerge. Not every serious problem is a crisis.[2]

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[1] A previous version of this paper was presented at the 2004 meetings of the Japanese Public Choice Society, at Oxford University, and at the ICBME conference in Cesme, Turkey. The current version of the paper benefits from comments made by Professors Harada, Kurokowa, Mclean, Schneider, and Yokoyama and those of several other participants—although they bear no responsibility for the use to which I put their good advice.

[2] The word crisis tends to be overused in public policy debates for many reasons. For

Crises are, nonetheless, common events for most people, most organizations, and most political systems. Recent public policy crises include terrorist attacks, unexpected environmental catastrophes, outbreaks of new deadly contagious diseases, and natural disasters such as major floods and earthquakes. Although not every unpleasant surprise is a crisis, many are genuine emergencies.

This paper provides an overview of the politics of crisis management using a minor, but significant extension of the core rational choice models of political decision making. The focus of analysis is crisis management within democratic polities, although much of it will also apply to crisis management within private organizations and indeed for personal crises. The analysis has several general implications for designing routine procedures for crisis management. As demonstrated below, an important and unavoidable property of crisis management is an unusually high propensity for making policy errors. Standing procedures for dealing with crises should be designed with such mistakes in mind.

A. Can There Be Crisis Management in a Rational Choice Model?

The political economy of crisis management has been neglected by the rational choice community. There is, for example, no reference to crisis management in Mueller (2003) or in Persson and Tabellini (2002) thorough overviews of the political economy literatures, nor is there an entry for crisis management in Rowley and Schneider's (2004) *Encyclopedia of Public Choice*. This is perhaps best understood as a limitation of modern models of rational choice, although not of the rational choice approach itself. Neither urgency or surprise is normally included in rational choice models.

To analyze crisis management using our standard tools, it is first necessary to overcome a significant methodological problem. There is a sense in which "crisis management" is impossible within the most commonly used economic models of decision making. The usual model of rational decision making assumes that individuals possess sufficient information and imagination to evaluate every alternative course of action in every conceivable combination of circumstances. Preference orderings are complete and transitive for the full range of possible events and opportunities. Individuals know the full dimensionality of their opportunity sets and the conditional probability functions associated

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example, advocates of reform often use the term “crisis” to encourage the rapid adoption of their preferred policies, whether circumstances are dire or not. See section V below.

with them. Although random shocks of one kind or another may exist, there can be no surprises, no truly unanticipated circumstances calling for immediate decisions. Decision makers may not know the result of a given roll of the dice, but they know all the possible numbers that can turn up on top, and can make plans contingent on each possibility. Individuals in such models, consequently, always perfectly optimize. They adopt the best possible plan of action, a plan that takes account of all possible alternatives in all possible circumstances.

The standard assumptions thereby rule out crisis and crisis management, because they rule out unpleasant surprises calling for urgent responses. All circumstances are "ordinary" in the standard rational choice model. There are no emergencies, no sudden requirements to adapt to new and unforeseen circumstances. Given this, it might be reasonably concluded that crisis management is beyond the scope of rational choice models of decision making, but such a conclusion would be incorrect. Analysis of crisis management from the rational choice perspective simply require us to move beyond the usual assumptions of full information and Bayesian models.

Several approaches could be used to escape from the limits of the standard model. For example, one could introduce planning costs or arbitrarily assume that individuals are rational only within narrow limits. The approach taken in this paper is to focus attention on a form of imperfect information that is neglected in most economic models of human decision making.

B. The Search and Ignorance Characterizations of Imperfect Information

Economists have traditionally assumed that imperfect information takes the form of finite but complete data sets. That is to say, information is assumed to consist of data points, and each data point includes information about all relevant dimensions of the phenomena of interest. This characterization of information implies that decision makers can make unbiased estimates of all the parameters of their choice settings even with very limited data, although the precision of those estimates can always be improved by increasing the sample size of their data sets (Stigler 1961). Modern Bayesian analysis reaches essentially similar conclusions from essentially similar assumptions about information, although Bayesian analysis also specifies the process by which priors are updated as new data points become available (Hirshleifer and Riley 1992). The "finite data set" approaches can be easily incorporated into the standard rational choice methodology, because decision makers remain perfect optimizers—at least on average.

The approach taken in the present paper is to acknowledge the existence of another form of imperfect information, namely, ignorance. Ignorance is not caused by having too few data points in one's sample, but rather by observing too few dimensions (characteristics) from the data points that are available. That is to say, the existence of ignorance implies that information about some dimensions of choice is simply unavailable to individuals at the time that they adopt their plans of action. In effect, individuals have a sample of size zero for such "missing" variables (Congleton 2000a and 2000b).

Most ignorance is "natural," because most missing dimensions or possibilities have never been imagined or confronted by the individual. We are born into the world knowing almost nothing. Our ignorance is gradually reduced by personal experience and as knowledge is imparted to us by our families, friends, and teachers. However, a penumbra of ignorance always remains, some of which is the result of conscious decisions to remain uninformed.[3]

C. Ignorance, Mistakes, and Surprise

Although finite samples and ignorance have many similar behavioral implications for rational decision making, important differences between these two types of imperfect information also exist. Two of these are relevant for the analysis of crisis management.

Given even a small sample of complete information, individuals can make the "right" decision (the expected utility- maximizing ones) on average. There can be unlikely events, but not complete surprises, because there are no "unknown" possibilities in the search or Bayesian representations of imperfect information.

In contrast, ignorance implies that "unknowns" are associated with every decision. Ignorant, but rational, individuals can make the right decisions in the areas in which they have sufficient data (observations) to make unbiased estimates, but they cannot avoid making systematic errors in areas in which missing variables are important. For example, individuals and groups may adopt plans or policies that are less effective at advancing their aims than

[3] Only part of the ignorance that remains is the result of individual decision making. Individuals are "rationally ignorant" when they realize that unknown dimensions or parameters exist, but decide not to learn anything about those unknown dimensions or parameters. Continued ignorance might be chosen for dimensions thought to be unimportant or too complex to be understood at a tolerable cost, as might be said of modern tax laws, trade regulations, most foreign languages, Chinese cooking, economics, and many scenarios that lead to unpleasant policy surprises. Much of our ignorance, however, remains unconsidered, a natural residual of our initial ignorance.

other possibilities about which they are partly or totally ignorant. Consumers may, consequently, choose the wrong products, vote for the wrong candidates, and well-meaning elected representatives may adopt the wrong policies. Ignorance does not rule out rational behavior during ordinary times or during times of crisis. It simply rules out perfect optimization. Rational choices remain possible in the sense that all the information available to decision makers is taken into account and the best of all known possibilities is chosen.[4]

Ignorance, however, does imply that entirely unforeseen events may arise that call for immediate attention, which is what we normally mean by the term "crisis management." Ignorance implies that the list of possibilities considered is incomplete and that the understanding of causal relationships (the conditional probability distributions between current actions and future events) may be erroneous in many respects. Together, these imply that systematic mistakes will be made by even the most careful and forward-looking decision makers. When individuals are ignorant about relevant possibilities or causal relationships within their decision environment, clearly both systematic errors and surprises are possible.[5]

II. An Illustration: Optimization with Missing Variables

Some essential features of crisis management can be illuminated with the following model. Consider a setting in which individuals maximize a strictly concave utility function defined over their own private consumption, *C*, and personal health, *H*,

$$U = u(C, H) \qquad (1)$$

Suppose that an individual's health is affected by his or her own private expenditures on health care, *E*, and government public programs that reduce known health risk, *R*. In addition to these two readily observable control variables, suppose that an individual's health is also affected by risk factor *Z*, which is initially unobserved. *Z* could include such factors such as contagious

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[4] The quality of individual decision making may also be affected by intense emotions, such as fear or anger, that reduce the quality of rational decision making, but these effects are neglected in the present analysis.

[5] Such decisions might be said to be instances of "bounded rationality" in the sense that they are informationally bounded. However, they are not "bounded" because of lack of computational power or systematic failures of the mind, as is sometimes implied by the researchers who employ the bounded rationality concept (Conlisk 1996), but rather because much is unknown to decision makers at the moment that choices are made.

disease, diet, environmental pollution, terrorist attacks, and earthquakes,

$$H = h(E,R,Z) \qquad (2)$$

Private income Y is assumed to decline as government regulations increase or as other health-improving programs increase at the margin because of increases in regulatory or tax burden.[6] An individual's personal opportunity set for private consumption and health care in this case can be written as $C = Y(R) - E$.

In their roles as private citizens, individuals select their health-care expenditures to maximize utility,[7] which can be written as

$$U = u(Y(R)-E, h(E, R, Z)). \qquad (3)$$

Differentiating equation 3 with respect to E and setting the result equal to zero allows the utility-maximizing level of private health care expenditures to be characterized as:

$$U_H H_E - U_C = 0 \qquad (4)$$

Equation 4 in conjunction with the implicit function theorem implies that the private demand for demand for private health care can be written as

$$E^* = e(R, Z) \qquad (5.0)$$

with

$$E^*_R = [U_H H_{ER} + U_{HC} Y_R - U_{CC} Y_R] / -[U_{HH} H_E^{\,2} + U_H H_{EE} - 2U_{HC} H_E + U_{CC}] < 0 \qquad (5.1)$$

$$E^*_Z = [U_H H_{EZ}] / -[U_{HH} H_E^{\,2} + U_H H_{EE} - 2U_{HC} H_E + U_{CC}] > 0 \qquad (5.2)$$

The government demand for the regulation of health risks can also be determined from

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[6] Across some range, personal income may increase as R increases, insofar as improved health improves productivity in the workforce. However, when R is set at approximately the level that maximizes median voter utility, R will be increased until it is in the range in which R decreases personal income (see below); thus, for expositional and analytical convenience, Y_R is assumed to be less than zero across the range of interest.

[7] Sufficient conditions for strict concavity are UC > 0, UH > 0, UHC > 0, UCC < 0 and UHH < 0. In addition to the strict concavity of U, it is assumed that the marginal return from private health care is reduced by effective regulations, HER < 0, and increased by risk factor Z, HEZ > 0.

the same model. Within a democracy, citizens also affect public policy parameters, at least indirectly by casting votes for politicians who may propose alternative policies for affecting health. A typical voter will favor the level of regulation that maximizes

$$U = u(Y(R)-E^*, h(E^*, R, Z)) \quad (6)$$

which requires:

$$U_C (Y_R - E^*_R) + U_H (H_E E_R + H_R) = 0 \quad (7)$$

Recall that $E^*_R (U_H H_E - U_C) = 0$ at E^* ; thus, equation 7 can be simplified to:

$$U_C Y_R + U_H H_R = 0 \quad (8)$$

Together with implicit function theorem, equation 8 implies that the political demand for regulation is a function of the unknown variable, *Z*,

$$R^* = r(Z) \quad (9)$$

The individuals of interest, however, are assumed to be naturally ignorant about risk factor Z, so $r(Z)$ cannot directly determine policy in this case. *Z* can only indirectly affect the public demand for health care by its observed effects on the marginal returns to private and public health expenditures, H_E and H_R. These returns may be known with certainty as long as *Z* remains at a steady state, $Z = Z^o$, and policy $R^* = r(Z^o)$ might be adopted without any knowledge of *Z*. In such cases, ignorance does not reduce the effectiveness of private or public plans.

A. Policy Crises from Changes in Unknown Variables

Ignorance of *Z*, however, can be a significant problem that leads to systematic errors in both public and private decision making if *Z* is not completely stable. For example, suppose that *Z* increases from Z^o to Z' and produces an *unobserved* increase in the marginal returns from government policies to control health risks and to private health expenditures. Such changes might go unnoticed if data on H_E and H_R are collected infrequently or if function *H* is considered to be stochastic and thus minor fluctuations in the effectiveness of health policies are discounted as unexplainable random effects. As long as the changes generated by the new level of *Z* are not recognized, the original policy remains "optimal" given the information

available to decision makers.

A change in Z, however, implies that equations 4 and 8 are no longer be satisfied at E^* and R^*. Losses accumulate, but there is no crisis because no urgent attention is focused on policy reform. People are less healthy and/or comfortable than they would have been with more complete information, but they do not yet realize this. The unnoticed losses that accumulate under the existing public policies can be characterized as:

$$U = u(Y(R')-E', h(E')) - u(Y(R^*)-E^*, h(E^*, R^*, Z^o)) \qquad (10)$$

$$\text{where } R^* = r(Z^o),\ E^* = e(R^*, Z^o),\ R' = r(Z'),\ \text{and } E' = e(R', Z').$$

Consider now the consequences of a scientific breakthrough that allows data on *Z* and the relationship between *Z* and *H* to be collected for the first time. Three related crises can be generated by the discovery of *Z* as a risk factor. First, there is the immediate policy crisis. Previous private plans and public policies are now revealed to be suboptimal. New plans and new policies become necessary. Adopting an effective new policy, however, may be a nontrivial matter, both because major policy changes may be required and because it may take time before the effects of *Z* are completely understood.[8] The "urgency" of the policy crisis varies with the perceived magnitude of the losses (suboptimality) that accumulate because of improperly accounting for *Z*. The higher the rate of perceived loss is, the greater is the urgency of policy change.[9]

B. Knowledge Crises

Second, unpleasant surprises often create a variety of "knowledge crises." Policy makers become more aware of their own ignorance and suddenly demand new policy-relevant information. For example, the effect of *Z* on the marginal productivity of private and public expenditures will not immediately be understood, because previous experience involved only changes in *E* and *R*. New data and new analysis will be necessary to understand the effects of

[8] For example, Bayesian adjustment converges on the true underlying distribution of Z in the long run, but remains inaccurate, indeed biased, in the short run for cases such as the one postulated here.

[9] Urgency may exaggerated in cases in which panic or terror is generated by the sudden changes in perceived health risks associated with disease or attacks. In effect, Z' may be mistaken for Z", with Z" >> Z, or relationship $H_Z < 0$ may be misestimated because of the scarcity of information about current and past values of Z.

Z on health.

Moreover, the future time path of *Z* necessarily becomes a topic of research if capital investments are necessary to address risks associated with changes in *Z*. If *Z* simply moves to a new steady state, $Z = Z'$ and the new relationship between *H* and *Z* comes to be fully understood, the new optimal steady state patterns of regulation and private expenditure can be determined as above, $R' = r(Z')$, and $E' = e(R', Z')$. Unfortunately, neither scientists nor policy makers can initially be sure that *Z* has simply moved to a new steady state. Has *Z* temporally increased, moved to a new steady state, or begun a new process of increase? Perhaps *Z* is a stochastic variable. If so, how is it distributed? The initial temptation will be to ignore the change in *Z* or extrapolate from the two available observations, $Z = 0$ and $Z = Z'$. Either approximation, however, may imply future levels of *Z* that are very wide of the mark. Having neither observed nor studied *Z* through time, little will be initially known about *Z*'s behavior through time.

Once the risks and time path of *Z* are understood, there may be subsequent efforts to control or influence the future course of *Z*. In such cases, completely new dimensions of policy may be added to the political agenda, which may, in turn, require new "crisis" research on *Z* policy to be produced and evaluated.

Whether *Z* can be controlled or not, policy mistakes are likely to continue until both *Z* and policies for addressing *Z* are well understood, and this may take a long time. Here, one might consider the wide range of public health problems that have plagued mankind for most of human history. Many solutions were tried and much analysis was undertaken, but truly successful policies were adopted only in the past century or so as knowledge of bacteria, viruses, and other hazardous materials improved. Few plagues occur in developed countries these days, but this is a fairly recent state of affairs. Similarly efforts to control crime and fire, which are as old as civilization itself, have become increasingly effective as better organizations, equipment, and materials became available.

Consequently, crisis managers might honestly regret their past policy decisions in light of knowledge that becomes available after a crisis is over, but insist that their mistaken choices were the best that could be made, given what was known at the time of the crisis.

C. Crisis Cascades

Third, mistaken policies can generate new crises as unanticipated effects emerge. In

the model above, secondary crises might arise in the period in which the relationships between *R* and *Y* or between *Z* and *H* are not fully understood. For example, increases in *R* beyond the range of experience might reduce *Y* by far more (or less) than initially believed, requiring a new round of emergency policy formation, hasty scientific research, and policy analysis. In this manner, urgency in combination with ignorance implies that one policy crisis may generate many others.

Urgency would not generate future policy problems without knowledge problems, but knowledge problems are an essential feature of all surprises and, therefore, all efforts at crisis management are prone to mistaken decisions.[10]

III. The Politics of Crisis Management in a Well-Functioning Democracy

The mistake-prone nature of crisis management does not decrease when problems are addressed by governments rather than individuals. Indeed to the above informational sources of error, several others must be added. One new problem arises in very well operating democracies, and at least two others arise in somewhat imperfect democracies in which informational asymmetries and agency problems exist.

In well-functioning democracies, policy decisions are ultimately made by representatives elected by eligible voters. Because those elected to public office generally wish to stay in office and remaining in office requires broad electoral support, policy makers in democracies tend to favor polices that advance the interests of a broad cross-section of voters. In a “first-past-the-post” electoral system, electoral competition induces policy makers to adopt policies that maximize the welfare of the median voter (within the limits of their information).[11] Within a proportional representation (PR) system, electoral incentives are less

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[10] This is not to say that crisis cascades necessarily escalate out of control. Long-standing political systems have faced many crises, and their survival implies that policy-induced crises and corrections eventually "damp out" rather than explode. Within a democracy, this dampening process is a joint consequence of voter responses to new information and constitutional design. In those rare cases in which crisis escalation occurs, however, a polity's constitutional design may itself become an area of crisis management.

[11] Many economists argue that public policies should address public goods and externality problems. Electoral competition only assures that relatively broad policies of interest to a large number of voters will be addressed. These may or may not involve public goods.

(Narrower policies may also be adopted in cases in which politicians require resources to

sharp, but majority coalitions necessarily include the representatives favored by the median voter. Consequently, democratic policy formation within both first-past-the-post and PR electoral systems tends to move toward the middle of the distributions of voter demands for government services and regulation. In either case, electoral competition constrains the policy options of elected officials who wish to be reelected.

The existence of a crisis does not usually change fundamental political incentives within a well-functioning democracy. That is to say, an "ordinary" crisis such as a new disease, major storm, accident, earthquake, or terrorist attack does not directly affect the balance of power within government, nor the incentives for choosing some policies over others. Elected officials remain principally interested in broad policy issues that advance majority interests, especially those of moderate voters; thus, democratic crisis management tends to focus on relatively severe and broad crises, because only those affect enough voters to influence future electoral prospects. The median voter remains interested in maximizing his or her lifetime utility, whether in a crisis or not, and will vote for politicians and parties whose crisis management most advances his or her interests, given his or her own understanding of the policy alternatives and problems at hand.

Nor, does democracy, per se, reduce knowledge problems associated with crisis situations. Surprise implies that the policies in place before a crisis were based on incomplete knowledge of the consequences or the full range of circumstances in which those policies would be applied. The surprise and urgency of policy decisions during times of crisis imply that voters may fail to assess their long-run interests accurately.

In addition, surprise implies that elected officials will not have an electoral mandate to address a crisis with specific policies, but rather have to discern hurriedly the interests of his or her electoral majority. This introduces another source of error not present in ordinary private efforts to manage crises. Urgency requires new policies to be adopted without the benefits of a thorough public and private debate, or the informational aggregating advantages of majoritarian elections.

Democratic crisis management is more error prone than normal democratic policy making is, because it is based on less information, less analysis, and lacks a clear mandate from the electorate. It is also more error prone than otherwise similar private crisis

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run their campaigns and significant asymmetries exist. Information asymmetries are addressed below in section V.)

management, because "the citizen-principals" cannot be consulted. Although political decision makers remain interested in advancing the interests of pivotal voters, the urgency of crisis management implies that new policies are less likely to advance those interests than policies adopted in less urgent times.

Policy mistakes will be more obvious after new policies are put into place than at the time they were adopted, because more information becomes available as experience and research accumulates. This implies that incumbents are more likely to lose elections following a crisis than in less urgent times, insofar as voters punish politicians for their past policy mistakes. (Here one may consider the recent German and Spanish elections, in which quite different types of crises, floods and terrorist attacks, contributed to defeats of incumbent parties.)

The policy decisions adopted during times of crisis, however, are not less legitimate than ordinary decisions if they are made using procedures that satisfy constitutional constraints. Government officials will simply appear to be less competent after periods of crisis than in ordinary times. Indeed, the logic of crisis management implies that this is necessarily the case!

V. Agency Problems: Crisis Management with Asymmetric Information

The above problems are properties of crisis management that will be present in every well-functioning democracy. More serious problems are associated with crisis management in settings in which policy makers and voters have substantially different information available to them. Information asymmetries allow elected governments to adopt policies that are not in the general interest or those of electoral majorities, because voters will not know every policy adopted. In the "fog of crisis management," the usual review processes will be less thorough, and governmental agenda setters will be able to use urgency to advance their own narrow interests on matters unrelated to the crisis at hand. This allows governments to adopt policies that favor campaign contributors, friends, or favored regions of the country with little fear of electoral consequences. Political agency problems tend to be larger during times of crisis, because most crises increase the knowledge asymmetries between voters and government experts.

Crisis tends to increase voter demands for policy-relevant information, which, as usual, will be supplied by organizations with relatively more information and expertise

available to them. However, because voters have little direct experience with the problems and solutions analyzed during times of crisis, they are less able to judge the quality of the information supplied. Their relatively greater reliance on secondhand information also makes them more susceptible to manipulation than in long-standing policy areas in which voter assessments of policy are more firmly rooted in their own independent observations and judgment.[12] Being aware of their own relatively greater ignorance, voters also tend to be more willing to defer to governmental and other experts during times of crisis. All these effects alter the informal balance of power between voters and elected officials in a manner that reduces voter control of public policy—at least in the short run.

Bureaus may secure larger budgets and interest groups may be able to secure more favorable tax or regulatory treatments than possible during ordinary times, because voters and their elected representatives are more willing to accept the arguments and assertions of agency experts in times of crisis than in ordinary times and less able to monitor policy decisions. "Ideological shirking" may also increase as elected politicians may advance policy agendas of their own with less fear of voter retribution (at least in the short run) (Kalt and Zupan 1984). Increased dependence on secondhand information tends to reduce the ability of majority rule to function as an efficient information aggregation process (Congleton 2004).

Increased reliance on secondhand information also introduces another potential source of errors in crisis management in governments with significant agency problems. Namely, politicians and government agencies can "manufacture" public policy crises, by proclaiming new emergencies grounded in "facts" that are unavailable to those outside government.

The election cycle implies that political crisis management will be more mistake prone than ordinary policy formation, because policy has to be made without an electoral mandates

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[12] Times of crisis, thus, present interest groups inside and outside government with unusually great opportunities to profit by influencing the details of the policies adopted privately within the legislature and publicly through media campaigns.

Of course, voters realize that secondhand information is not always accurate or unbiased and take this into account as much as possible. The lack of direct experience on the policy issues at hand, however, limit the extent to which this is possible. To the extent that disseminating information has any systematic effect on voter knowledge, it can be used to influence voter assessments of the relative merits of policy. Such effects are very evident in new areas of environmental regulation and in recent responses among nations to the threat of international terrorist attacks.

or full debate. To the extent that informational asymmetries are increased during times of crisis, political agency problems also tend to increase relative to those associated with ordinary policy formation. Together these effects imply that policy formation tends to be both more mistake prone and more likely to systematically deviate from those that advance the median voter's long term interests in times of crisis than in less urgent times.

IV. Crisis Cascades and Constitutional Crises

In cases in which policy errors cause new crises, voters may reasonably come to question the competence of their leaders and the performance of their fundamental political institutions. It is often difficult to distinguish among bad luck, incompetence, and institutional failure. Political crisis cascades can, thus, easily lead to constitutional crises as routine governmental procedures fail to produce satisfactory policy decisions for the crises at hand.

When lawful amendment procedures are used to resolve a constitutional crisis in an otherwise well-functioning democracy, crisis management is again simply "politics as usual" in a more mistake-prone decision environment. Proposed reforms will reflect voter interests—at least as they are currently understood by voters and their representatives. Agency problems may also exist, which allows the partie in power to secure political advantages during such times as well.[13]

There are, however, significant differences between constitutional reform and ordinary policy reform. Constitutional reforms are among the most consequential choices that a democracy can face, because losses from mistakes can be very large. Changes in the fundamental procedures and constraints of governance affect all subsequent policy decisions. Moreover, the losses associated with constitutional mistakes are also likely to continue for longer periods than ordinary policy mistakes, because constitutional mistakes are inherently more difficult to reverse than ordinary policies.

It is largely for this reason that procedures for revising constitutions are generally more

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[13] Consider, for example, the hastily adopted constitutional revisions adopted within Italy and Germany between the World Wars I and II and the many coups d'état in South America and Africa during the 1970s and 80s.

This is not to say that every hastily adopted reform is problematic, only that the likelihood of problems is high relative to those adopted during normal times. Indeed, some hastily adopted constitutional reforms have proven themselves to be beneficial in the long run, as with the emancipation of Southern slaves during the American Civil War.

demanding than are procedures for adopting ordinary legislation. A series of legislative decisions separated by an election may be required, a national referendum might be called for, or supermajority approval by several elective bodies may be necessary for adopting constitutional reforms. Such procedures are designed to reduce the likelihood of constitutional mistakes by subjecting proposed reforms to repeated analysis and decision points. Constitutional reforms adopted during times of crisis, however, may pass rapidly through this process, eliminating the careful deliberation and debate of reforms adopted during less urgent times.

After the crisis has ended, constitutional mistakes will be difficult to correct both because of the requirements of the amendment process and because constitutional reforms often create a new balance of political power. The latter implies that the coalition that adopted a constitutional reform cannot always repeal it if the new procedures or constraints perform less well than anticipated. The problem of irreversibility is increased by requirements of supermajority support in that reversion to previous rules can be blocked by a minority. (Here, the American experience with prohibition is instructive.)

The essential problem of constitutional crisis management is not irreversibility, however, but rather the mistake-prone nature of rapid decision making in circumstances of limited information. The irreversibility of constitutional amendments simply increases the downside risk of policy mistakes.

VI. Constitutional Routines for Crisis Management

Although all crises are surprises, this does not mean that routine procedures for handling crises cannot be designed and implemented. Although every crisis has unique features, crises also tend to have many common features that can be addressed through institutional design. The mistake prone nature of urgent responses to surprise events has several clear implications for "routinizing" crisis management.

First, it is sensible to investigate and plan for crises before they happen. Although surprise is a fundamental characteristic of crises, ignorance of crisis scenarios and policy responses to them can be reduced by creative analysis and planning. One can never fully anticipate the exact time and place of an earthquake, contagious disease, or terrorist attack. However, many of the policy responses to individual crises are similar regardless of specific details. In such cases, many, perhaps most, policy responses to a new crisis can be chosen

from a menu of well-understood policy options. For example, an individual crime or fire remains a crisis in the sense that each case is a surprise and calls for an immediate response. However, responses to individual crimes and fires have been long routinized, and, thus, “crime” and “fire” are no longer regarded to be "true" policy crises In this manner, policy research can reduce losses associated with mistakes made during times of crisis; although it cannot entirely eliminate crises or mistakes, because such menus will necessarily be incomplete.

Second, because policy mistakes are unavoidable during times of crisis, the standing procedures for dealing with crisis should allow policy mistakes to be discovered and corrected at relatively low cost. This is, of course, one reason for having regular and routine popular elections rather than electing persons for lifetime terms of office. It is also the reason why emergency policies should have "sunset" provisions so that they expire or are carefully reviewed after the immediate crisis has passed and better information becomes available.

Third, a well-designed constitution should be crisis proof. It should be designed to handle the urgent unforeseen problems in a manner that does not threaten its fundamental decision procedures and constraints. This does not necessarily mean that extraordinary decision making procedures should never be used, but streamlined decision making should be narrowly focused on the crisis at hand to reduce agency problems and the magnitude of policy mistakes. There should be clear lines of responsibility so that mistakes, malfeasance, and incompetence can be readily identified and punished. The standing procedures of crisis management should also specify persons (other than those charged with crisis management) to determine when the crisis has ended so that the normal decision processes are reinstated. Moreover, fundamental constitutional procedures should never be suspended: for example, elections and procedures of constitutional should take place as usual. (Emergency powers are less likely to threaten the constitution in this case.) Constitutional amendments during times of crisis should be avoided to the extent possible, because changes in the fundamental procedures and constraints of governance are difficult to reverse and, consequently, constitutional mistakes tend to be far more costly than ordinary policy mistakes.

Fourth, procedures of error correction should be routinized. Two such procedures are noted above: sunset provisions and external review by those not actively engaged in the crisis management. To avoid fundamental mistakes, error-correction procedures for dealing with crises should be designed, implemented, and revised during times that are relatively free of

crisis. Even during an extraordinary crisis in which constitutional procedures fail, temporary rather than permanent changes to decision-making processes are preferable to constitutional reforms to avoid costly mistakes that tend to be very difficult to correct.

VII. Conclusions: Crisis Management in Perspective

Both large and small unpleasant surprises happen every day to individuals, private organizations, and governments. Many require urgent responses. This paper has addressed both the difficulties of rationally dealing with true emergencies and the opportunities for politicians and interest groups to exploit such crises to advance their own interests. Most of these difficulties arise because of informational problems implicit in surprise events. Surprise implies substantial ignorance about the nature of the problems faced and of the effects associated with alternative policies for addressing those problems.

The fact that urgency and ignorance are essential features of crisis management has important implications for policy making during times of crisis, some of which have been explored above. Urgency implies that a rapid policy response is necessary. Ignorance implies that rapid responses to crises are more error prone than are responses to less urgent and better understood policy problems. Ignorance also allows interest groups inside and outside government to use information asymmetries to advance their own agendas in a manner that may or may not address the crisis itself. The failures of one round of crisis management may also generate subsequent emergencies that have to be dealt with rapidly. In this manner, ordinary policy crises may escalate to constitutional crises that threaten a nation's fundamental procedures and constraints of governance.

Although crisis management is inherently mistake prone, this does not mean that nothing can be done to reduce policy errors or the losses associated with those errors. Errors are unavoidable, but a variety of procedures for reducing the cost of policy mistakes can be adopted. The cost of policy mistakes can be reduced by conducting conceptual and empirical research on crisis management. It can also be reduced by making emergency decisions narrow, temporary, and easily reversible as new knowledge becomes available. The analysis of this paper suggests that all routines for dealing with crisis should acknowledge the prospect of error and be designed accordingly.

REFERENCES

Breton, A and R. Wintrobe (1975), "The Equilibrium Size of a Budget-Maximizing Bureau," *Journal of Political Economy* 83: 195–207.

Congleton, R. D. (1986), "Rent-Seeking Aspects of Political Advertising," *Public Choice* 49: 249–65.

Congleton, R. D. (1991), "Ideological Conviction and Persuasion in the Rent-Seeking Society," *Journal of Public Economics* 44: 65–86.

Congleton, R. D. (2001a), "Rational Ignorance and Rationally Biased Expectations: The Discrete Informational Foundations of Fiscal Illusion," *Public Choice* 107: 35–64.

Congleton, R. D. (2001b), "In Defense of Ignorance," *Eastern Economic Journal* 27: 391–408.

Congleton, R. D. (2002), "Terrorism, Interest Group Politics, and Public Policy: Curtailing Criminal Modes of Political Speech," *Independent Review* 7: 47–67.

Congleton, R. D. (2004), "Informational Limits of Democratic Public Policy," mimeo, George Mason University.

Conlisk, J. (1996), "Why Bounded Rationality?" *Journal of Economic Literature* 34: 669–700.

Fremling, G. and J. Lott (1996), "The Bias Towards Zero in Aggregate Perceptions: An Explanation Based on Rationally Calculating Individuals," *Economic Inquiry* 34: 276–95.

Hayek, F. A. (1945), "The Use of Knowledge in Society," *American Economic Review* 35: 519–30.

Hirshleifer, J. and J. G. Riley (1992), *The Analytics of Uncertainty and Information*. New York: Cambridge University Press.

Kalt, J. P. and M. A. Zupan (1984), "Capture and Ideology in the Theory of Politics." *American Economic Review* 74: 279–300.

Lupia, A. and M. D. McCubbins (1998), *The Democratic Dilemma : Can Citizens Learn What They Need to Know?* Cambridge, U. K.: Cambridge University Press.

Mueller, D. C. and T. Stratmann (1994), "Informative and Persuasive Campaigning," *Public Choice* 81: 55–77.

Mueller, D. C. (2003) *Public Choice III.* New York: Cambridge University Press.

Persson, T., G. Roland, and G. Tabellini (1997), "Separation of Powers and Political Accountability," *Quarterly Journal of Economics* 112: 1163–202.

Persson, T. and G. Tabellini (2002) *Political Economy, Explaining Economic Policy*. Cambridge: MIT Press.

Puviani, A. (1903), *Teoria della Illusione Finanziaria*, Palermo.

Rubinstein, A. (1998), *Modeling Bounded Rationality*. Cambridge: MIT Press.

Shackle, G. L. S. (1969), *Decision Order and Time in Human Affairs*. London: George Allen and Unwin.

Stigler, G. (1961), "The Economics of Information," *Journal of Political Economy* 71:213-225.

Tollison, R. D. and Congleton, R. D. Eds. (1995), *The Economic Analysis of Rent Seeking*. Cheltenham Glos. UK: Edgar Elgar Publishing Ltd.

Wittman, Donald (1995), *The Myth of Democratic Failure*. Chicago: University of Chicago Press.